Competition *merger brief*

Issue 1/2015 - February

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KD-AL-15-001-EN-N
doi 10.2763/257693
ISBN 978-92-79-46035-7
ISSN 2363-2534

Foreword by Alexander Italianer

This second issue of the Competition merger brief covers a number of decisions adopted by the Commission in the second half of 2014. This has been a busy year for merger control. Since June, the level of filings steadily increased, reaching 303 notifications by the end of the year.

Thanks to recent reforms aimed at streamlining procedures, close to 70% of merger cases are now being treated in a simplified manner, reducing red tape and enabling DG Competition to focus on the complex cases which matter most for competition and the markets.

In 2014, we cleared a total of seventeen cases with remedies, the highest number since 2008. This amounts to 6% of merger cases last year. We did not prohibit any merger. We resolved twelve of those remedies cases in phase I of the proceedings, and five after an in-depth investigation. We cleared two other phase II cases unconditionally.

Most of the cases requiring remedies could have led to anti-competitive horizontal unilateral effects, which in 2014 was the predominant theory of harm in our investigations, although we also investigated coordinated effects. The Commission also intervened in two vertical cases and examined a number of conglomerate cases. Some procedural decisions are also worth mentioning, including the imposition of fines for early implementation of a merger (explained in the first issue of the *merger brief*) and a declaration of incompleteness of a merger notification.

With nine open phase II cases already in February and dozens of notifications in the pipeline, this year promises to be at least as challenging as the last one.

In this issue of *merger brief*, the authors cover four interesting recent cases. The articles on *Facebook/Whatsapp* and *Liberty/Global* deal with mergers in fast-moving technology markets. The article on *Huntsman/Rockwood* provides interesting lessons for the chemical industry, and *Holcim/Lafarge* is an example of an exceptionally big case, both in terms of the merger itself and the remedies package, which was concluded in phase I thanks to clear-cut upfront remedies.

The *merger brief* covers the Commission's merger cases straight from the source: the case handlers who conducted the investigation.

Here the authors outline in detail the significance of their cases and the intricacies of their investigations.

A retrospective like this is valuable for us, to contemplate the meaning of cases before we move on to the next ones.

I am sure the detailed discussion of these cases will also be of use to other readers interested in EU merger control.

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European Commission

Competition merger brief 1/2015 – Article 1

Competition *merger brief*

What's Up with Merger Control in the Digital Sector? Lessons from the *Facebook/WhatsApp* EU merger case

Eleonora Ocello, Cristina Sjödin and Anatoly Subočs

In a nutshell

The *Facebook/WhatsApp* decision provides an insight into how the Commission tackles novel issues in the application of merger control rules to the digital sector, in particular to free consumer communications services.

These issues range from the Commission's jurisdiction and the definition of the relevant market, to the relevance of market shares, the role of network effects and the significance of user data in the competitive assessment.

1. Introduction

On 3 October 2014, the Commission unconditionally approved in first phase the acquisition of WhatsApp by Facebook. Facebook (via Facebook Messenger) and WhatsApp both offer applications for smartphones (apps) which allow consumers to communicate with each other by sending text, photo, voice and video messages over the Internet. Facebook also operates the well-known social networking website, which is also available as an app. Both parties boast very large user bases. At the time of the Commission's decision, Facebook's social networking platform had 1.3 billion users worldwide, 250-350 million of which were also users of the Facebook Messenger app. WhatsApp had 600 million users worldwide, and is particularly popular in Europe.

The *Facebook/WhatsApp* decision was adopted only three years after the *Microsoft/Skype* decision[1], which also concerned the market for consumer communications apps, and less than one year after the General Court's judgment upholding that decision[2]. As a sign of the fast-moving nature of the consumer communications apps sector, most of today's key apps – including WhatsApp itself – were either much smaller or did not even exist at the time of the *Microsoft/Skype* decision.

The *Facebook/WhatsApp* transaction attracted considerable media attention, in part because of the prominence of the parties involved, in part due to the USD 19 billion paid[3] for a company with a turnover of only around ten million euros.

Unless there are any other circumstances indicating competition concerns, purchase price is not a parameter for determining the likely effects of a transaction on competition. In any event, as reflected in Facebook's internal documents, the valuation of WhatsApp on a value-per-user basis[4] did not appear inconsistent with the valuation of other target companies in comparable transactions [5] taking into account WhatsApp's 450 million user base at the time the price was made public – a user base which is even larger today[6].

The *Facebook/WhatsApp* case raised a number of interesting issues related to the special features of the market for consumer communications apps, which is characterised by fast evolution and provision of services mostly for free. These issues ranged from the Commission's jurisdiction and the definition of the relevant market, to the relevance of market shares, the role of network effects and the significance of user data in the competitive assessment. These issues are the focus of this article.

2. Commission jurisdiction over mergers in the digital sector

The Merger Regulation relies on a bright-line test based on turnover thresholds to identify the transactions to be reviewed by the Commission. Facebook's proposed acquisition of WhatsApp

[1] Case M.6281 – *Microsoft/Skype*, 7 October 2011.

[2] Case T-79/12 – *Cisco Systems and Messagenet v Commission*, judgment of 11 December 2013, n.y.r.

[3] Of which USD 4 billion in cash, approximately USD 12 billion worth of Facebook shares and additional USD 3 billion in restricted stock units to be granted to WhatsApp's founders and employees post-closing of the transaction.

[4] I.e. the ratio of WhatsApp's enterprise value to the number of WhatsApp monthly active users.

[5] For example, Rakuten's 2014 acquisition of Viber for USD 905 million, Facebook's 2012 acquisition of Instagram for USD 1 billion and Microsoft's acquisition of Skype for USD 8.5 billion. Also, in July 2014 it was reported that the consumer communications app LINE filed for an IPO with a potential valuation between USD 10 and 20 billion.

[6] Another Facebook internal document also showed that Facebook compared the Average Revenue Per User (ARPU) for WhatsApp and several other competing consumer communications services. The analysis concluded that the purchase price of the transaction could be recouped based on realistic scenarios as to the future evolution of WhatsApp's user base and of its ARPU.

The content of this article does not necessarily reflect the official position of the European Commission. Responsibility for the information and views expressed lies entirely with the authors.

The authors would like to thank Sophie Moonen and Lucrezia Busa for their valuable comments and suggestions.

did not meet the turnover thresholds of the Merger Regulation given WhatsApp's limited turnover.

It follows from the thresholds set out in Article 1(2) and 1(3) of the Merger Regulation that a transaction involving two parties, one of which generates less than EUR 100 million in the EU, will automatically fall outside the Commission's jurisdiction. Consequently, transactions involving products that are offered to consumers for free or quasi-free will typically fall outside the Commission's jurisdiction, unless the parties generate turnover in other ways so as to meet the EU merger thresholds. This may occur, for example, if the party or parties operate in two-sided markets where their free services are monetised through advertising, as in the case of online search or social networking services. Another example is if the party or parties are active in other revenue-generating activities in other markets, in addition to their free activities. Several high-profile transactions involving free IT products that were reviewed by the Commission fall into one and/or the other example. These transactions include *Microsoft/Skype* and *Microsoft/Nokia* (consumer communications services), *Microsoft/Yahoo! Search Business* (online search services) and *Oracle/Sun* (open source databases)[7].

Other transactions in the digital sector may not meet the EU turnover thresholds because they involve one or more companies that only offer free or quasi-free services generating little or no revenues. Facebook's acquisition of WhatsApp is a case in point. WhatsApp's mobile app is currently offered for free (except in a few countries, where it is subject to limited subscription fees)[8] and is not monetised through advertising.

In light of the growing importance of digital services for the EU economy, the large user bases of the merging parties across the EU and the scope of the relevant market being at least EU-wide, an investigation of the *Facebook/WhatsApp* transaction by the Commission appeared appropriate. The Commission did ultimately review the transaction following a pre-notification referral request by Facebook to benefit from the one-stop-shop review afforded by Article 4(5) of the Merger Regulation. The mechanism of case referral from the Member States to the Commission has worked as an effective 'correction' mechanism in the *Facebook/WhatsApp* case and some other previous cases[9], but the effectiveness of the referral mechanism depends on a number of criteria[10] which may not be met in all cases[11]. The same applies to the post-notification referral system under Article 22.

The question therefore arises whether turnover-based thresholds are still an appropriate yardstick for identifying mergers with an EU dimension in the digital sector, as opposed to thresholds mainly based, for example, on the value of the transaction (as applied in the US)[12]. One could take the view that turnover-based thresholds do not properly reflect the future market potential of an IT company, which may have limited revenue today but may be expected to expand quickly, as is common in the IT sector. Another argument goes that turnover-based thresholds overlook the fact that personal data – as opposed to money – can be seen as the new 'currency' with which consumers pay for the free services they receive via the Internet (see Section 6 of this article). Following either of these lines of argument, the value of turnover as a proxy for a company's competitive importance appears questionable.

In the last public consultation where the Commission specifically investigated whether the EU turnover thresholds are suitable in particular economic sectors (dating from 2008), no particular concerns were raised concerning the application of the EU turnover thresholds in the digital sector[13]. However, there are signals that views may have evolved over the last years. For example, in a letter addressed to the new Commissioner for Competition, Margrethe Vestager, and other European Commissioners, four German ministers asked whether the EU turnover thresholds set out in the Merger Regulation should be complemented by a test that takes the value of the transaction into account, in order to catch transactions such as Facebook/WhatsApp.

The issue remains open and it is yet to be seen whether stakeholders and national competition authorities will propose

[7] Cases M.6281 – *Microsoft/Skype*, 7 October 2011; M.7047 – *Microsoft/Nokia*, 4 December 2013; M.5727 – *Microsoft/Yahoo! Search Business*, 18 February 2010; M.5529 – *Oracle/Sun Microsystems*, 21 January 2010.

[8] At the time of the decision, WhatsApp was offered against an annual subscription fee of around EUR 0.89 in the United Kingdom and in Italy, and, outside the EU, in the US and Canada. WhatsApp was previously charging subscription fees in additional countries, such as Germany and Spain.

[9] E.g. Case M.4731 – *Google/DoubleClick*, 11 March 2008, which was also referred to the Commission under Article 4(5) of the Merger Regulation.

[10] I.e. on the national merger requirements of at least three Member States being met, on the merging parties taking the initiative to request a referral and on the agreement of the relevant Member States.

[11] Examples of transactions in the IT sector that did not meet the EU turnover thresholds and were not referred to the Commission include Facebook's acquisition of Instagram and Google's acquisition of Waze (both of which were reviewed and cleared by the OFT on 14 August 2012 and on 11 November 2013, respectively).

[12] A transaction is reportable to the US authorities if it satisfies three conditions: (i) either of the parties is engaged in commerce or in any activity affecting commerce (the 'commerce test'); (ii) as a result of the transaction, the acquiring person will hold an aggregate amount of voting securities, non-corporate interests (NCI) and assets of the acquired person valued at more than USD 76.3 million (the 'size of transaction test'); and (iii) one of the parties has sales or assets of at least USD 152.5 million and the other party has sales or assets of at least USD 15.3 million (the 'size of person test'). The size of person test is not applicable if, as a result of the transaction, the acquiring person will hold an aggregate amount of voting securities, NCI and/or assets of the acquired person valued in excess of USD 305.1 million.

[13] See staff working paper of 30 June 2009 accompanying the communication from the Commission to the Council – Report on the functioning of Regulation 139/2004, COM(2009) 281 final.

alternatives to the current EU turnover thresholds for transactions in the digital sector.

3. Market definition in fast-moving markets

Defining the relevant market is the first step in the competitive assessment of any merger. Irrespective of the level of maturity and technological innovation of the market, this is often a delicate exercise that requires a sophisticated investigation. When a transaction involves products and services that are new or subject to continuous technological development, defining the relevant markets can prove even more challenging[14], as the traditional tools for market definition, such as the SSNIP test, may not be appropriate[15].

In the *Facebook/WhatsApp* case, one major issue of market definition concerned the interaction between consumer communications apps and traditional electronic communications services offered by mobile telecoms operators (such as SMS, phone calls, etc.). In recent years, the increasing penetration of smartphones and the inclusion of data in standard mobile phone subscriptions, combined with changing consumer habits, have boosted the growth of consumer communications apps for smartphones, which offer functionalities that are increasingly similar to those offered by traditional mobile telecoms services.

In its assessment of the appropriate market definition, the Commission looked beyond substitutability between consumer communications apps and mobile telecoms services based on their general purpose (communication). The Commission's investigation examined the specific product features and the (added) value communications apps can provide to customers. It found that apps offer a much richer overall experience than mobile telecoms services. For example, apps allow users to see when their contacts are online, when they are typing or when they last accessed the app. The investigation also found that there was a significant price difference between consumer communications apps and telecoms services. Apps are usually offered free of charge and, if not, they don't charge per message, regardless of the type of message (text or multimedia) and the location of the recipient. By contrast, telecom operators still usually apply different tariffs for SMS and MMS, and for messages to other countries or messages from abroad (while roaming). These elements suggested that the relationship between consumer communications apps and traditional telecoms services was one of complementarity or one-way substitutability (i.e. apps being substitutes to telecoms services but not vice versa).

Despite these observations, the Commission assessed the impact of the transaction concerning consumer communications services in the narrowest possible market (excluding traditional telecoms services), where the parties' market positions were stronger, and therefore the effects of the transaction would be the strongest.

Another market definition issue that arose in *Facebook/WhatsApp* concerned the boundaries between consumer communications apps and social networking services, such as Facebook. There are undoubtedly some overlaps between these services, for instance in the functionalities offered, as both enable users to exchange text and audio messages, photos and videos. However, the Commission's investigation revealed significant differences between social networking services and consumer communications services in terms of richness of the social experience (users can create extensive online profiles on social networks), speed of communications (apps tend to be used for instant real-time conversations to a greater extent than postings on social networks) and size of the audience (which is typically broader on social networking services).

However, ultimately, because these services are constantly evolving the Commission chose to leave open the question of a possible distinction between consumer communications apps and social networks. Therefore, the Commission assessed the effects of the transaction both assuming a wider market where WhatsApp would be considered a social networking platform and assuming separate markets for consumer communications apps on the one hand and social networking services on the other.

4. Market shares in fast-moving markets concerning free products and services

In novel and fast-moving digital markets even the basic exercise of determining market shares is usually more complex than in mature markets. In *Facebook/WhatsApp*, this exercise proved particularly difficult for at least three reasons.

First, most consumer communications apps and social networking services are offered to customers for free or almost for free. Most of these services are monetised in other ways than by charging fees to customers. Monetisation models vary greatly between market players, including, for example, advertising, stickers and in-app purchases. As a result, market shares based on revenue from sales do not provide an appropriate yardstick for measuring the market positions of Facebook, WhatsApp and their competitors.

[14] These challenges have been recognised by competition authorities on several occasions. See, e.g. papers from the Organisation for Economic Co-operation and Development (OECD), "Market Definition", DAF/COMP(2012)19 (http://www.oecd.org/daf/competition/Marketdefinition2012.pdf); "The Digital Economy", DAF/COMP(2012)22, (http://www.oecd.org/daf/competition/The-Digital-Economy-2012.pdf); and "Merger Review in Emerging High Innovation Markets", DAFFE/COMP(2002)20 (http://www.oecd.org/daf/competition/mergers/2492253.pdf).

[15] For example, the SSNIP test – which is designed to assess to what extent products and services are currently substitutes to each other – is unlikely to capture the changes in substitutability brought by technological developments that may occur in the next two to three years (i.e. the time span relevant for the assessment of a merger). Also, the SSNIP test cannot as such be applied with respect to digital products or services that are offered for free to users.

Second, there is currently no consolidated industry practice for measuring market performance in terms of volume in consumer communications apps and social networking services. The Commission consulted third parties even in the pre-notification phase, to identify possible volume-based metrics to measure the competitive importance of providers of consumer communications services. However, all proposed metrics (e.g. number of messages sent/received, time spent on the app) were either flawed or not sufficiently meaningful. Facebook had proposed to use metrics based on 'reach' data, which measure the penetration rate of an app among users (i.e. the percentage of panelled users who have used a certain consumer communications app over 30 days). The Commission ultimately found that, all in all, this metric represented the best available tool for measuring market positions, even though it also had some shortcomings. (For instance, it overestimated the shares of smaller market players and did not take into account that most users 'multi-home').

Third, due to the fast-moving nature of the markets concerned by the transaction, market shares fluctuate very frequently, sometimes even within weeks or months. Such fluctuations can be explained by a variety of factors, including, for example, changes in the perceived 'trendiness' of an app among users, emerging concerns about privacy, or even temporary service outages. This means that past market shares do not necessarily truly represent the effective competitive force of market players at the time of the Commission's decision, nor may they be valid for the two- to three-year time period normally considered by the Commission to assess the future effects of a merger[16]. The lower informative value of market shares in these markets due to their volatility was also recently recognised by the General Court in its judgment in *Cisco v. Commission*: "the consumer communications sector is a recent and fast-growing sector which is characterised by short innovation cycles in which large market shares may turn out to be ephemeral. In such a dynamic context, high market shares are not necessarily indicative of market power and, therefore, of lasting damage to competition"[17].

5. The role of network effects in consumer communications apps

A critical aspect of the competitive assessment of the *Facebook/WhatsApp* transaction was the issue of network effects. Network effects cause the value of a product or service to increase with the number of users. While several types of network effects can be distinguished, the *Facebook/WhatsApp* case mainly concerned so-called *direct* network effects, where the increase in the number of users of a service directly benefits the same users (as, for example, in a telephone network)[18].

Many digital services are prone to network effects because they are based on the interaction of users (or different sets of users) through a platform. In *Facebook/WhatsApp*, the Commission examined network effects in consumer communications apps, the main market affected by the merger.

The market investigation revealed that the size of a communications app's user base is important for consumers. Consumers value the inclusion of their friends and relatives in an app's network - the people they communicate with most frequently. In addition, the overall size of the app’s network is also important for consumers, because it determines their chances to reach people with whom they may communicate occasionally (for example, colleagues or new acquaintances). Consequently, the Commission's investigation confirmed the existence of network effects in the market for consumer communications apps.

The next and more challenging question for the Commission was to determine the likely impact of these network effects on competition post-merger.

While network effects by definition create certain value for users, they can also make competition more difficult. For example, they may entrench the position of a strong market player and can prevent competitors from gaining customers. As the number of users of a particular service grows, more new users are attracted to the same service, in a positive feedback loop. Once a product reaches a 'tipping point' in the number of users, its network may make it the most attractive alternative to consumers, and it may end up dominating the market. This is why some companies offer digital services for free - to generate a critical mass of users. Competitors with smaller networks may find it difficult to grow or even to protect their existing customer base from migration to the largest and most attractive network. The negative impact of network effects on competition can be aggravated by the lack of interoperability with the products of competitors (i.e. resulting in a ‘walled-off’ network of the winner) and by high customer switching costs (monetary, contractual, know-how, etc.).

The Commission found, in several past merger and antitrust cases in the telecommunications[19] and IT[20] industries, that

[16] These issues have also been acknowledged by several competition authorities. See, e.g. the OECD papers cited above at footnote 14.

[17] Case T-79/12 – *Cisco Systems and Messagenet v Commission*, judgment of 11 December 2013, n.y.r., paragraph 69.

[18] Another type of network effect is indirect network effects, which arise when increases in usage of one product result in increases in the value of a complementary product, which can in turn increase the value of the original product. For example, as explained by the Commission in Case 37792 – *Microsoft (I)*, 21 April 2004, "*the more popular an operating system is, the more applications will be written to it and the more applications are written to an operating system, the more popular it will be among users*" (paragraph 449).

[19] Cases M.1069 – *WorldCom/MCI (II)*, 8 July 1998 and M.3752 – *Verizon/MCI,* 7 October 2005.

network effects contributed to competition concerns. In *Facebook/WhatsApp*, the Commission devoted significant time to analysing the impact of network effects, especially because of the vast user bases of both WhatsApp and Facebook Messenger (at the time of the decision, approximately 600 million and 250-350 million users, respectively) and the lack of interoperability between the parties' communications apps and those of their competitors. The Commission's analysis showed that a number of factors mitigated the negative impact of network effects on competition.

First, as mentioned above, consumer communications apps are an extremely dynamic and fast-moving market. They began developing less than ten years ago with the emergence of smartphones. The market continues to expand rapidly, with communications apps being one of the fastest growing types of apps for mobile devices.

The Commission's investigation revealed that traditional barriers to entry, in terms of entry time and costs, are relatively low for communications apps. This was confirmed by developers of such apps. Even though WhatsApp is already the largest player in the EU, new apps constantly enter the market. Some of these entrants succeed in building up considerable user bases. This is particularly true of the apps offering innovative features, for example encryption (Telegram, Threema) or automatic deletion of messages (Snapchat). Moreover, consumers switch almost instantaneously if an app fails to fulfil their needs. Following WhatsApp's four-hour service outage on 22 February 2014, in the course of 24 hours competing communications apps Telegram and LINE reportedly gained five million and two million new users, respectively. The Commission considered that the threat from existing and new disruptive players is likely to constrain the parties post-merger as well, despite the existence of network effects. The merged entity's position would not be unassailable[21].

Second, consumer communications apps are characterised by extensive multi-homing, i.e. customers using more than one app on a daily and monthly basis. The market investigation produced extensive evidence of consumers switching between different communications apps on a regular basis, for example depending on the addressee or type of communication. According to the data on the file, approximately 80-90% of EEA users of consumer communications apps use more than one service per month, and approximately 50-60% of them use more than one such service on a daily basis.

Multi-homing and switching between communications apps are facilitated by particular features of these apps, such as easy availability and installation, no or symbolic monetary charge, limited space on a smartphone, 'push' notifications that don't require a user to actively launch an app, etc. This makes the costs of joining a competing 'network' very low or non-existent. This is in contrast to some other products characterised by network effects, which require a more durable commitment and investment, for example a computer's operating system. Also, the fact that communications apps are highly differentiated stimulates their simultaneous use because customers value specific features in apps and choose the one which best fits their need at a given point in time.

According to the Commission, active multi-homing in communications apps ensures that the merged entity will not become an exclusive provider to its users. Competitors will be able to gain users even though those users don't abandon the merged entity's network.

Third, neither Facebook nor WhatsApp control any mobile operating system, mobile phones or other essential parts of the network. Users remain in control of their smartphones, email addresses and phone numbers, which they can use for joining other communications apps. The merged entity would not be in a position to foreclose access to the final user of the consumer communications service. For example, competitors would be able to offer to recreate a user's network of contacts on WhatsApp simply by having access to his/her phone book.

The Commission concluded that, on balance, network effects do not constitute an insurmountable barrier for competitor entry or expansion post-merger. This conclusion is in line with the Commission's findings and the General Court's judgment in *Microsoft/Skype*, which also concerned digital communications services. Nevertheless, it is worth stressing that the analysis of network effects in these two cases was based on specific facts and characteristics of the companies and markets involved and should in no way be interpreted as a general line of the Commission ruling out the possible negative impact of network effects on competition in all digital markets. The Commission will carry out a case-by-case assessment of network effects in future merger and antitrust cases.

6. The role of data in the competitive assessment of IT mergers

There are two main ways in which data may come into play in the competition law assessment of mergers in the IT sector: either as a competitive advantage of the merged entity, or, in the context of privacy, as a non-price parameter of competition in the market.

First, data can be relevant in competition law cases as an 'asset', i.e. a competitive advantage enjoyed by the merged entity post-

[20] Cases 37792 – *Microsoft (I)*, 21 April 2004, 39530 – *Microsoft (II)*, 16 December 2009, M.5984 – *Intel/McAfee*, 26 January 2011 and M.5669 – *Cisco/Tandberg*, 29 March 2010.

[21] Examples of the decline of once popular services in fast-moving IT markets characterised by network effects are numerous, including the downfall of the communications service Blackberry Messenger or the social network MySpace.

transaction[22]. In the digital economy, large sets of data (so-called 'big data') are becoming increasingly valuable as they reveal patterns of information that enable companies to understand user behaviour and preferences and improve (or target) their products and services accordingly. This makes the availability of 'big data' a significant competitive advantage for companies active in, for instance, targeted online advertising, online search, social networking services and software products. From a competition law perspective, a possible theory of harm is that combining the merging parties' datasets could provide them with a competitive advantage, by helping them to improve the merged entity's product or service post-merger in a way that competitors are unable to match[23].

In the *Facebook/WhatsApp* case, the Commission explored a theory of harm along those lines. Facebook provides online targeted advertising services, which are based on the analysis of data collected from Facebook users (concerning age, gender, activities, and other characteristics valuable for advertising purposes). Although WhatsApp does not currently collect data valuable for advertising purposes, the Commission analysed whether, post-transaction, Facebook would nevertheless start collecting data from WhatsApp users in order to improve the accuracy of targeted ads served on Facebook's social networking platform (or on its photo sharing platform) to Facebook users who are also WhatsApp users.

The Commission found some indications that there may not be an incentive for the merged entity to use WhatsApp as a source of user data for advertising on Facebook in part because of the risk of users switching to a consumer communications app perceived as less 'intrusive'. However, the Commission concluded that, even if Facebook were to collect and use data from WhatsApp for advertising purposes, the transaction would not raise competition concerns because large amounts of valuable user data would remain available to competitors beyond Facebook's exclusive control.

The Commission has relied on similar reasoning in the past when scrutinising other mergers involving 'big data', such as *Google/DoubleClick*, *Telefónica/Vodafone/Everything Everywhere* and *Publicis/Omnicom*[24]. In these cases, the Commission concluded that the combination of the merging parties' data would not provide them with a unique, non-replicable advantage, because competitors would be able to obtain large amounts of data or data analytics services in other ways, for instance, from data brokers or data analytics services providers, or by collecting and analysing data themselves. In *Microsoft/Yahoo! Search Business*[25], access to 'big data' was also regarded as a competitive asset, although it was not assessed as part of a theory of harm but rather as a possible beneficial effect of the merger[26]. While the Commission accepted that data scale would be a competitive advantage in online search and search advertising, it also noted, based on evidence submitted by the notifying party and input from the market investigation, that benefits from additional data scale tend to increase at a decreasing rate. This suggests that there may be limits to the relevance of data as a competitive advantage for the merged entity.

A second way in which data may be relevant in the competitive assessment of mergers relates to privacy. Privacy could be regarded as a non-price parameter of competition which may be degraded by the merged entity post-merger. In two-sided markets, where products are offered to users for free and monetised through targeted advertising, personal data can be viewed as the currency paid by the user in return for receiving the 'free' product, or as a dimension of product quality. Hence, a website that, post-merger, would start requiring more personal data from users or supplying such data to third parties as a condition for delivering its 'free' product could be seen as either increasing its price or as degrading the quality of its product. In certain circumstances, this behaviour could arguably amount to an infringement of competition law (irrespective of whether or not it also constitutes an infringement of data protection rules). However, while technically viable, this theory of harm could only be relevant in those cases where privacy is an important factor in the decision to purchase a product or service, i.e. a key parameter of competition.

This theory of harm was not applied in the *Facebook/WhatsApp* case, or in any of the other merger cases concerning personal data mentioned above. In *Facebook/WhatsApp*, the Commission regarded privacy as one of many parameters of competition between consumer communications apps, the others being price, reliability of the service, functionalities offered, size of the underlying network, trendiness, etc. While the Commission recognised that an increasing number of users value privacy and security (as shown by the growing popularity of apps that offer increased security of communications, like Threema or Telegram), the majority of the consumer communications apps currently on the market do not compete (mainly) on privacy features (e.g. Facebook, Skype, WeChat, Line, etc.).

[22] See also Joaquín Almunia's speech of 26 November 2012, "Competition and personal data protection".

[23] In addition, another possible theory of harm is that the merged entity could increase the price at which it sells its data post-merger or refuse to supply such data altogether (e.g. to foreclose competing providers of data analytics services, who rely on data as an input for providing their services). This theory was not relevant in the *Facebook/WhatsApp* case. At the time of the decision, Facebook did not sell any of the user data it collected, nor did it provide data analytics services to advertisers or third parties as a stand-alone product separate from the advertising space itself.

[24] Cases M.4731 – *Google/DoubleClick*, 11 March 2008; M.6314 – *Telefónica UK/Vodafone UK/Everything Everywhere/JV*, 4 September 2012; M.7023 – *Publicis/Omnicom*, 9 January 2014.

[25] Case M.5727 – *Microsoft/Yahoo! Search Business*, 18 February 2010.

[26] Access to additional data was, according to the notifying party, the primary rationale behind the merger, as it would allow Microsoft to improve its search and search advertising services, thus better competing with Google.

The Commission's clearance of the *Facebook/WhatsApp* transaction was granted under the Merger Regulation and is, therefore, without prejudice to the application of the data protection rules, as the decision makes clear. A fairly similar approach to the *Facebook/WhatsApp* merger was adopted in the United States. While the US Federal Trade Commission (FTC) did not object to the transaction on antitrust grounds, it sent a letter to Facebook and WhatsApp urging them to continue to honour the promises made by WhatsApp to its users in terms of privacy, regardless of the merger[27].

The Commission's decision in *Facebook/WhatsApp* is consistent with the view expressed by the Court of Justice in the past, whereby "*any possible issues relating to the sensitivity of personal data are not, as such, a matter for competition law, they may be resolved on the basis of the relevant provisions governing data protection*"[28]. Indeed, while personal data may raise competition issues in particular circumstances (as explained above), the fact remains that data protection infringements should be tackled primarily by data protection rules.

The analysis applied in *Facebook/WhatsApp* shows that the Commission is sensitive to the growing importance of data in today's economy[29]. It remains to be seen whether competition concerns arising from the accumulation of 'big data' or from the degradation of privacy could become relevant in future merger cases under the Commission's scrutiny.

7. Conclusion

Merger control is a difficult exercise involving a prospective analysis of future market events. This task is even more challenging in fast-moving technology-intensive markets in which the pace of innovation and market changes is extremely rapid and where services are often offered for free.

In *Facebook/WhatsApp*, the totality of the evidence collected during a thorough market investigation revealed that competition concerns were unwarranted.

Needless to say, the decision is case-specific and the Commission will assess each future case on its own merits. Yet, the decision does provide an insight into how the Commission tackles novel issues in the application of merger control rules to the digital sector (notably, free consumer communications and social networking services), including the role of network effects and 'big data'. It shows that EU merger control is fit to deal effectively with the specific challenges posed by mergers in the digital sector, assuming the Commission gets to review them in the first place.

[27] The letter was signed by the director of the Bureau of Consumer Protection of the FTC. It summarises WhatsApp's promises to its users regarding the limited data it collects and shares with third parties and Facebook's and WhatsApp's public statements in this regard after the announcement of the transaction. On this basis, the letter urges WhatsApp to continue to honour the promises made to its users, even though they exceed the level of data protection currently afforded to Facebook users. According to the letter, failure to honour these promises may result in a violation of Section 5 of the FTC Act, which prohibits deceptive or unfair practices.

[28] Case C-238/05 – *Asnef-Equifax v Asociación de Usuarios de Servicios Bancarios (Ausbanc)*, [2006] ECR I-11125.

[29] See, most recently, the interview with Competition Commissioner Vestager stressing potentially important implications of data in competition in the Internet economy (MLex Special edition, 22 January 2015).

Competition *merger brief*

Liberty Global/Ziggo: Consolidation and Innovation in Telecoms

Menno Cox, Hélène Kanellopoulos and Violeta Staykova

On 10 October 2014, the European Commission conditionally cleared Liberty Global's acquisition of Ziggo, the largest Dutch cable operator. Liberty Global already owned the second largest Dutch cable operator, UPC, although Ziggo's and UPC's networks in the Netherlands did not overlap. Both Liberty Global and Ziggo offered TV, broadband Internet, fixed telephony and mobile telephony services on their respective cable networks. Liberty Global also owned and distributed the Sport1 and Film1 TV channels in the Netherlands, while Ziggo owned the only other premium film channel in the Netherlands (HBO) through a joint venture with TimeWarner.

The Commission conducted an in-depth investigation into this merger and cleared it on the basis of a significant remedy package from Liberty Global[1]. This merger of two fixed networks in the Netherlands took place in a strongly evolving telecommunications landscape. In this article we examine the Commission's intervention in the *Liberty Global/Ziggo* case by placing it in the context of wider trends of innovation and consolidation in European and US telecommunications markets.

In a nutshell

In the midst of the telecoms consolidation wave observed in Europe and the US, the Commission's review of Liberty Global/Ziggo highlights the risk that fixed network consolidation can pose to innovation.

Even in the absence of horizontal effects at retail level, the Commission concluded that an increase in buyer power would allow the merged entity to hamper Internet-based video innovation.

Introduction

Something is brewing in telecoms land. Major Internet-related innovations are currently going hand-in-hand with widely diverging types of market consolidation.

Even during the Commission's review of the fixed (cable) network *Liberty Global/Ziggo* merger, the European Parliament approved (on first reading) the introduction of a pan-European net neutrality provision[2]; Netflix announced its launch in a further six EU countries[3]; and a consortium of public and private Dutch TV broadcasters launched a joint Internet-based catch-up TV (CUTV) platform called NLZiet. Meanwhile, in the US, Netflix concluded an historic paid peering agreement with cable company Comcast[4], while both HBO[5] and CBS[6] announced the launch of standalone over-the-top TV (OTT) services during the review of Comcast's proposed acquisition of Time Warner Cable (TWC).

OTT services are video services that can be provided directly to end consumers via their existing Internet subscriptions and so don't necessarily involve a fixed network operator as an intermediary. Fixed network operators and OTT services are thus entangled in a somewhat schizophrenic relationship. OTT services rely specifically on network operators to maintain high quality access into their terminating Internet networks to support the demanding HD video streams. At the same time, network operators risk their TV customers 'cutting the (cable) cord' if they can access their favourite TV programs cheaply and on-demand via a standalone broadband Internet subscription. Although a network operator can try to prevent such cord-cutting by, for example, bundling its TV

[1] See http://europa.eu/rapid/press-release_IP-14-1123_en.htm.

[2] On 3 April 2014, the European Parliament approved, on first reading, the draft 'Telecom Package' that includes rules on net neutrality, see: http://www.europarl.europa.eu/news/en/news-room/content/20140331IPR41232/html/Ensure-open-access-for-internet-service-suppliers-and-ban-roaming-fees-say-MEPs.

[3] See https://pr.netflix.com/WebClient/getNewsSummary.do?newsId=1251.

[4] On 23 February 2014, Netflix and Comcast announced the conclusion of a 'mutually beneficial interconnection agreement' that would 'provide Comcast's US broadband customers with a high-quality Netflix experience for years to come'; see http://corporate.comcast.com/news-information/news-feed/comcast-and-netflix.

[5] On 15 October 2014, TimeWarner announced the launch in 2015 of a standalone OTT streaming service; see http://www.timewarner.com/newsroom/press-releases/2014/10/15/hbo-chairman-and-ceo-richard-plepler-announces-hbo-to-offer-a.

[6] On 16 October 2014, CBS announced the launch of its full access, standalone OTT video on demand (VOD) and live streaming service 'CBS All Access'; see http://investors.cbscorporation.com/phoenix.zhtml?c=99462&p=irol-newsArticle&ID=1978514.

The content of this article does not necessarily reflect the official position of the European Commission. Responsibility for the information and views expressed lies entirely with the authors.

The authors would like to thank Hanna Anttilainen and Daniel Mes for their valuable contribution to this article.

and Internet offers (i.e. requiring customers always to take a TV subscription together with broadband Internet), it then risks its customer base being targeted by competitors that choose to offer unbundled broadband Internet subscriptions.

The fast-moving nature of this inherently difficult relationship is illustrated by the fact that Netflix, following the conclusion of the paid peering agreement with Comcast, went on to oppose the *Comcast/TWC* merger officially. This unexpected turnaround prompted Comcast to respond publicly that *'there was and is no need for Netflix or any other Internet content provider to work directly with us.'* Comcast complained that the paid peering agreement in fact resulted from Netflix *'exercising its market power to extract a more favorable arrangement directly from Comcast than what Netflix had been paying for through third party [Internet transit] providers'*[7].

The *Liberty Global/Ziggo* fixed network merger in the Netherlands is just one step in a wider process of consolidation in the telecoms industry. This process includes the integration of fixed (cable) networks, of fixed and mobile networks, and of fixed networks with audio-visual content, both in Europe[8] and in the US[9].

Careful not to interfere with, but rather to preserve the disruptive force that the Internet has proven to be – think of Whatsapp versus SMS, Skype versus mobile and fixed line telephony, and Netflix versus cable TV – antitrust and telecoms regulators on both sides of the Atlantic are trying to discern whether or not the increasing size of networks and their integration with audio-visual content is a necessary move to counter the growing clout of, for example, OTT players like Netflix. In other words, will such consolidation simply preserve an equilibrium in which network operators are capable of investing in their networks in order to keep up with the ever increasing bandwidth and response time required by the 'innovative' content providers, or does it threaten to prevent the development of a viable and competitive alternative (OTT) distribution platform for video content?

A central question in the merger review process by regulators is whether we are facing a pivotal moment in history in terms of fixed network market consolidation – one that requires far-reaching regulatory intervention – or whether today's perceived dominance of a firm like Google is tomorrow's forgotten position of MySpace, or indeed of the Dutch social network *Hyves*[10].

In the *Comcast/TWC* merger review process in the US, stakeholder claims vary. Comcast asserts that the merger will allow it to build scale and to invest more in R&D, innovation and infrastructure[11]. Other stakeholders complain that the merger will risk creating preferred ('Lexus') Internet lanes for high-paying content providers, in breach of the principle of net neutrality[12].

In Europe, the official press releases of the various fixed network mergers similarly talk of significant synergies that will accelerate growth[13] and preserve continued innovation[14]. Mergers involving the integration of audio-visual content with fixed networks seem, however, to be more challenging to sell to the general public[15].

[7] As per Comcast's corporate communication (made by a Senior Vice President of Corporate and Digital Communications) of 21 April 2014; see http://corporate.comcast.com/comcast-voices/comcast-response-to-netflixs-opposition-to-time-warner-cable-transaction.

[8] Those cases included in 2014 alone: COMP/M.7000 – *Liberty Global/Ziggo* (fixed-fixed, NL); COMP/M.7231 – *Vodafone/Ono* (mobile-fixed, ES); COMP/M.7421 – *Orange/Jazztel* (fixed-fixed, ES); COMP/M.7282 – *Liberty Global/Discovery/All3Media* (fixed-content, UK); COMP/M.7194 – *Liberty Global/Corelio/W&W/De Vijver Media* (fixed-content, BE); 14/DCC/160 – *Numericable/SFR* (fixed-fixed, FR) which involved the first imposition of third-party access on cable by any regulator in Europe; see http://www.autoritedelaconcurrence.fr/user/standard.php?id_rub=592&id_article=2445.

[9] Those cases include: Comcast/NBCU (fixed-content); Comcast/TimeWarner Cable (fixed-fixed), and; AT&T/DirecTV (fixed-satellite). Internet content provider Google has recently announced that it intends to roll out Fiber to the Home (FttH) in a further nine cities in the US; see https://fiber.google.com/newcities/. This integration of content and fixed networks not involving M&A activity could be seen as pro-competitive as it seems to have sparked AT&T to roll-out FttH in those same regional markets. Previously, it had only been providing fibre-to-the-node there. See the announcement of 21 April 2014: http://about.att.com/story/att_eyes_100_u_s_cities_and_municipalities_for_its_ultra_fast_fiber_network.html.

[10] Once the largest and most popular online social network in the Netherlands (with 10 million users), Hyves recently ceased to exist, having been made redundant by its competitor Facebook; see http://www.volkskrant.nl/media/hyves-stopt-als-sociaal-netwerk~a3536523/; http://hyves-corporate.pr.co/63596-hyves-transformeert-naar-online-gaming-portal.

[11] As per Comcast's corporate communication of 8 April 2014, accompanying the filing of its intended acquisition of TimeWarner Cable. See http://corporate.comcast.com/comcast-voices/comcast-and-time-warner-cable-file-applications-and-public-interest-statement-with-fcc.

[12] In its opposition to the Comcast/TimeWarner merger before the FCC, Netflix claimed, for example, that the merged entity could leverage its control over interconnection points into its Internet network to force third-party Internet content providers to pay (significant) termination access fees which, in turn, could place such Internet content providers at a competitive (cost) disadvantage relative to the merged entity's own Internet-based video services. Such behaviour would violate the core principle of net neutrality but would not face regulatory obstacles. Internet interconnection falls outside the scope of, for example, the open Internet condition imposed by the US DOJ on Comcast as a condition to the latter's acquisition of NBCU. See 'Petition to Deny of Netflix, Inc. in the matter of applications of Comcast Corp. and Time Warner Cable Inc. for Consent to Transfer Control of Licenses and Authorizations', p. 50 and onwards. See http://apps.fcc.gov/ecfs/document/view?id=7521819696.

[13] In relation to Vodafone's intended acquisition of Spanish cable operator Ono, see: http://www.vodafone.com/content/index/media/vodafone-group-releases/2014/ono.html; in relation to Liberty Global's intended acquisition of Ziggo, see: https://www.ziggo.com/resources/documents/Joint%20announcement%20press%20release.pdf, and; as regards Orange's intended acquisition of Spanish telecoms operator Jazztel, see: http://www.orange.com/en/press/press-releases/press-releases-2014/Orange-to-launch-a-voluntary-offer-to-buy-the-Spanish-operator-Jazztel.

[14] https://www.ziggo.com/resources/documents/Joint%20announcement%20press%20release.pdf.

[15] In relation to its intended acquisition of the UK-based production house All3Media, the CEO of Liberty Global stated: "*This is just the first step in*

The public synergy claims made by fixed network operators seem to stand in stark contrast to the story told by the (ongoing) official merger review procedures.

For instance, no efficiencies were claimed during the Commission's official review of the *Liberty Global/Ziggo* matter, and the parties eventually submitted a significant remedy package – even though, according to the Commission, the parties did not exercise significant competitive pressure on one another at retail level because their cable networks did not overlap. In the US, too, Comcast offered up-front to divest part of its residential video customers to a competitor[16] even though there was no geographical overlap with the cable network of TWC. AT&T, in turn, told the FCC it would extend its FttH (fibre-to-the-home) 'GigaPower' network to an additional two million homes in order to smooth the review of its intended $49 billion acquisition of satellite TV provider DirecTV[17].

It becomes apparent that a strict case-by-case analysis by regulators remains key in a sector which is in a state of flux at the moment, and where the key question is whether innovation will suffer from – or instead requires – consolidation. *Liberty Global/Ziggo* provides an example of how fixed-network integration threatened to hamper Internet-based innovation.

The Commission's review of Liberty Global/Ziggo

Partly triggered by a large number of concerned stakeholders, including TV broadcasters, copyright collecting societies, retail competitors and OTT players, the Commission's initial investigation in this case was followed by an in-depth review of the following key questions:

I. Would the merger result in the loss of direct or indirect competitive pressure exerted by Liberty Global and Ziggo on each other at retail level in the Netherlands, possibly via a chain-of-substitution effect occurring via their mutual competitor KPN? And on these retail markets, would the reduction of the number of players offering single and multiple play telecommunications services in the Netherlands be conducive to coordination and give rise to coordinated effects?

II. Would the merged entity likely enjoy significantly increased buyer power in the Dutch market for the acquisition of Pay TV channels, to the detriment of consumers?

III. Would the overlap between the only two premium film Pay TV channels in the Netherlands be likely to harm competition, both as a result of horizontal and vertical effects, despite the potential competitive pressure exercised by OTT players?

These issues are discussed in the following sections.

I. Retail of TV, fixed Internet, fixed telephony, and multiple play services: non-coordinated effects and coordinated effects

The starting point of the Commission's analysis of the effects of the proposed transaction on the Dutch retail telecoms markets was that it involved, like the *Comcast/TWC* deal, cable networks that don't overlap geographically. In both cases, these geographically distinct footprints prevented customers from directly switching between the parties.

Even so, the Commission further investigated whether the parties took account of each other's actions when making commercial decisions, either by directly benchmarking their pricing against each other, or via a 'sequential pricing' mechanism involving KPN, the incumbent Dutch telecoms operator, as a nation-wide competitor. The sequential pricing reasoning is best explained with an example: if Ziggo changes its prices in its footprint, KPN may react and, because of its national presence, this could in turn affect Liberty Global, which may also react. This means that Ziggo and Liberty Global could very well indirectly constrain each other, via KPN, and the concentration, by removing this constraint, could have negative effects on competition.

The Commission analysed the pricing data provided by the parties to see how their retail prices generally evolved, and in particular whether some form of sequential pricing had already taken place recently in the Netherlands. Although there are indications that the players on the Dutch retail telecoms and TV markets closely monitor each other and respond to each other's promotional offers, the Commission concluded that there is insufficient evidence to suggest that Ziggo, Liberty Global and KPN would consistently price sequentially in a way that could give rise to anti-competitive non-coordinated effects.

The absence of overlapping networks and of sequential pricing between UPC, Ziggo and KPN also played a major role in the assessment of possible coordinated effects resulting from the proposed transaction.

Following its in-depth investigation, the Commission concluded that certain elements, such as the degree of transparency, suggest that the Dutch retail telecoms markets may be conducive to coordination – also before the concentration. The Commission found that the merger would change very little with regard to potential coordination between the parties and KPN. Given the absence of overlaps between the cable networks, each of the parties was already in a quasi-duopoly with KPN on their respective footprints. As such, the merger of Liberty Global and Ziggo was not a true 'three-to-two' merger on a national market

our mission to own and develop content assets that support our core distribution platform across Europe"; see http://corporate.discovery.com/discovery-news/discovery-communications-and-liberty-global-acquir/.

[16] As per Comcast's corporate communication of 28 April 2014; see http://corporate.comcast.com/comcast-voices/comcast-reaches-agreement-with-charter-to-divest-3-9-million-customers-marking-an-important-milestone-toward-comcasts-merger-with-time-warner-cable.

[17] AT&T letter to the FCC of 25 November 2014, 'Applications of AT&T Inc. and DIRECTV for Consent to Assign or Transfer Control of Licenses and Authorizations, MB Docket No. 14-90'; see http://apps.fcc.gov/ecfs/document/view?id=60000988497.

and so would not alter any of the factors conducive to coordinated behaviour (e.g. transparency, deterrent mechanisms, retaliation of outsiders, etc.). In addition, the Commission did not retrieve sufficient qualitative evidence of past coordination nor of any increased ability to coordinate. As a consequence, the Commission concluded that the proposed concentration would not give rise to coordinated effects at retail level.

Since the Commission did not find any merger-specific competition issue on the Dutch retail telecoms and TV markets, the concentration was cleared unconditionally as regards these markets.

II. Increased buyer power versus OTT innovation

Although the transaction would not give rise to either coordinated or non-coordinated horizontal effects at retail level, both Liberty Global and Ziggo did acquire the same audio-visual content and TV channels from TV broadcasters for inclusion in their respective retail Pay TV offerings. This economic activity takes place upstream of the Dutch retail telecoms markets. The Commission found that the transaction would significantly strengthen Liberty Global's buyer power vis-à-vis TV broadcasters, as Ziggo represented the single largest Pay TV customer base in the Netherlands[18]. The Commission found that if the merger were to go ahead unaltered, Liberty Global could use its increased buyer power to hamper or eliminate OTT innovation.

In order properly to appreciate that conclusion, it is important to both (i) set out the pre-merger dynamics of the (evolving) Pay TV landscape in the Netherlands, and (ii) explain in detail why the merger would lead to an *anti-competitive increase* in Liberty Global's buyer power.

Structure of the Dutch Pay TV market

First, in order to enable retail customers to 'cut the cable cord' in favour of an OTT service, the latter would have to offer sufficiently attractive linear or non-linear (on-demand) content that is currently included in retail cable TV subscriptions. OTT services would therefore need access to the producers of that content: the TV broadcasters in the Netherlands[19].

Second, at the time of the Commission's review, TV broadcasters continued to rely on the existing fixed network operators (UPC, Ziggo and KPN) to reach enough TV customers to secure their advertising revenues. It was clear that the OTT platform was not yet sufficiently developed to allow TV broadcasters to switch their distribution instantly and entirely from the classic fixed networks in favour of the Internet. Creating a fully-fledged alternative OTT distribution platform would require a gradual transition.

Third, commercial negotiations between TV broadcasters and the merging parties simultaneously covered the classical distribution of linear TV channels as well as non-linear content that could be included in existing OTT offerings. Any increased buyer power that the merged entity would hold vis-à-vis TV broadcasters in the Netherlands could thus have a negative impact on the availability of all content that those TV broadcasters could include in, or supply to, OTT services.

Fourth, the Dutch Pay TV market was characterized by carriage agreements between cable operators, most notably Liberty Global, and TV broadcasters, which restricted the latter's ability to offer their TV content also over the Internet. As TV broadcasters would risk losing the still essential carriage on the fixed networks if they were to also offer their content OTT, they were limited in their ability to try to develop the OTT platform.

Given this structure of the Dutch Pay TV market, it appeared that an increase in the merged entity's buyer power in commercial negotiations with TV broadcasters could allow it to limit the access of OTT services to both linear and non-linear content that could be used to try and develop the OTT platform.

Anti-competitive increase in buyer power

The Commission found that if the merger were to go ahead, Liberty Global would indeed enjoy an increase in buyer power by which it could weaken the Dutch market structure by insisting upon more and more onerous agreements with TV broadcasters, restricting their ability to offer their content online (i.e. via an OTT service).

Three key elements underpinned that finding by the Commission: (i) the existence of a direct correlation between the size of a given operator's Pay TV subscriber base and the degree to which it can force TV broadcasters to accept contractual clauses that limit their ability to offer their content also online; (ii) the finding of a merger-specific increased ability to impose such contractual OTT restrictions, and (iii) the fact that the merged entity's existing ability to block or throttle specific OTT TV services by congesting Internet interconnection points into its network strengthened its ability to impose these contractual restrictions.

[18] ACM Telecommonitor vierde kwartaal 2013 televisie (https://www.acm.nl/nl/publicaties/publicatie/12993/Telecommonitor-vierde-kwartaal-2013/) and eerste kwartaal 2014 (https://www.acm.nl/nl/publicaties/publicatie/13136/Telecommonitor-eerste-kwartaal-2014/).

[19] OTT services can also be launched by TV broadcasters themselves, in which case the latter need to have at least the ability to use their own content for inclusion in an OTT service, even if that OTT service were not integrated into the retail TV offers of fixed network operators. At the time of the Commission's review of *Liberty/Ziggo*, several OTT services of different shapes and sizes existed in the Dutch market. For example, the Dutch public broadcaster (NPO) offered live streaming of its linear TV channels combined with on-demand catch-up TV services ('Uitzending Gemist') on its website. At the same time, the three largest Dutch TV broadcasters had just teamed up to provide their respective OTT services as part of a joint platform, NLZiet. Also, Netflix, who entered the Dutch market in 2013, offered an OTT service focusing on international TV series.

To properly appreciate why a likely increase in buyer power was found to be anti-competitive in this case, it is important first to have a closer look at the pre-merger commercial dynamics of the merging parties' relationship with TV broadcasters[20].

Essentially, the Commission's market investigation confirmed that the merging parties already held a degree of bargaining power against TV broadcasters in the Netherlands and that, in particular, Liberty Global had already tried to leverage that buyer power to reduce the 'threat' of OTT innovation. As already mentioned above, Dutch TV broadcasters continued to rely largely on advertising income, something that required them to achieve the widest possible coverage of Dutch TV households. Their ability to 'threaten' any of the big Dutch fixed network operators not to provide their content was therefore limited. At the same time, Liberty Global had already, before the merger, succeeded in imposing contractual conditions that limited the ability of TV broadcasters to offer their content simultaneously to Liberty Global and to alternative OTT services. The contractual clauses that Liberty Global had already sought to impose included outright prohibitions on offering such content online, as well as the right for Liberty Global to rescind the carriage agreement in case TV broadcasters were to offer their content in this manner.

Seen in that light, it becomes apparent that a merger that would give Liberty Global an increased ability to impose contractual clauses that would eliminate TV broadcasters' ability to innovate in return for continued carriage is likely to be anti-competitive.

The second key element underpinning the Commission's finding of a likely competition concern is that the transaction was likely to *increase* significantly Liberty Global's existing ability to hamper OTT-related innovation. To assess the merger-specificity of this concern, the Commission extensively reviewed internal business documents (carriage agreements, presentations, emails, etc.) of both Liberty Global and Ziggo. That review aimed at mapping out both Liberty Global's and Ziggo's prior stance on OTT TV displayed in their negotiations with each of the large TV broadcasters active in the Netherlands. It turned out that Ziggo had a more lenient policy in allowing TV broadcasters to innovate by offering their content online. This policy was used by some TV broadcasters as a benchmarking-tool to put pressure on Liberty Global to limit the scope of the contractual restrictions that it sought to impose. After the merger, therefore, Liberty Global would be in a stronger position to conclude more agreements with TV broadcasters that restricted their ability to offer their content online.

The third and final key element is the parties' pre-existing technical ability to degrade the quality of OTT services – or even to block their delivery to consumers. This was likely to strengthen the merged entity's future ability to restrict TV broadcasters in their ability to develop the OTT platform.

As early as 1998, the Commission noted that the explosive growth of Internet (video) traffic could allow a global carrier to degrade the quality of a specific Internet content service by refusing to upgrade Internet interconnection capacity[21]. With the rise of OTT services such as Netflix and NLZiet, Internet traffic is again growing at an incredible rate[22]. That phenomenon gives Internet network operators a renewed ability to congest the interconnection points leading into their networks.

Indeed, in their role as providers of Internet access services, Liberty Global and Ziggo operate Internet networks that providers of OTT services need to access these parties' Dutch broadband customers.

However, Liberty Global already enforced a peering policy that, in effect, required any OTT service to pay for a direct interconnection with Liberty Global's Internet network[23]. Accordingly, for those OTT TV services that don't wish to – or cannot – pay for delivering their content to Liberty Global's broadband customers, the only alternative means of doing so is via intermediary providers of Internet transit services. If that route were congested, however, Liberty Global could drive them out of the market by either refusing to engage in direct peering or by charging direct peering fees that would affect the competitiveness of their products.

The Commission's conclusion was supported by evidence showing that perceived risks of infringing Dutch net neutrality law were unlikely to deter Liberty Global from refusing to offer direct high quality access to its Internet network to OTT TV services[24].

[20] Also, as stressed by the Commission's non-horizontal guidelines, vertical mergers that are likely to strengthen the bargaining power of buyers in a given market are likely capable of generating significant efficiencies that could benefit end consumers. Accordingly, any regulatory intervention requires the finding of a position of the merged entity on vertically related markets that would be strong enough to give it the ability and an incentive to engage in some form of foreclosure. For a foreclosure to lead to competition concerns, negative effects on end consumers must also be proven likely to occur.

[21] COMP/IV/M.1069 – *WorldCom/MCI*, paragraphs 121, 122 and 125.

[22] In the US, Netflix currently accounts for 34% of overall Internet traffic: http://www.wsj.com/articles/SB10001424052702304908304579561802483718502.

[23] OTT TV services will never comply with the maximum ratio of 3:1 between traffic incoming and outgoing to Liberty Global's Internet network, which is required for settlement-free direct peering. Such OTT services generate largely one-way traffic, sometimes achieving inbound-outbound ratios in excess of 100:1. Moreover, under its peering policy, Liberty Global has reserved the right not to engage in private direct peering with any party at all, regardless of whether the requirements for settlement-free private direct peering are met. Liberty Global's peering policy is available at: http://www.libertyglobal.com/PDF/LGI-Settlement-Free-IP-Peering-Policy-2012-final.pdf.

[24] The ability to congest IP interconnections and the degree to which paid peering complies with principles of net neutrality are also issues that are currently subject to intense public discussion. The Commission however concluded that Liberty Global and Ziggo had a pre-existing ability to interfere technically with the quality of OTT TV services and that this ability would not change as a result of their merger. The Commission accordingly did not discuss the appropriateness of paid peering in general. Regarding recent discussions on this topic, see for

Notwithstanding the pre-existing nature of the ability to interfere technically with the delivery of Internet video traffic, the Commission ultimately concluded that for TV broadcasters to be able to have a real choice of providing their content to (or via its own) OTT services, their ability to reach Dutch customers effectively via the Internet should be guaranteed.

III. Controlling the only two premium Pay TV film channels: effects on competitors and on consumers

The so-called 'premium' Pay TV channels, featuring specific and often exclusive content – like sports or popular and recent movies and TV series – are as a rule offered on top of basic Pay TV subscriptions for additional payment. Post-transaction, Liberty Global would have controlled the only two premium Pay TV film channels in the Netherlands: Film1 (already owned by Liberty Global) and HBO (controlled jointly by Ziggo and TimeWarner). That combination would have eliminated the direct competition between those two channels.

The merged entity would have been in a position, first, to increase the wholesale prices of both Film1 and HBO, and second, to foreclose completely access by other Pay TV retailers to Film1 at wholesale level (i.e. it could block its retail competitors from distributing the channels to end consumers as part of their retail Pay TV services). Given that, pre-transaction, HBO and Film1 were distributed through almost every Pay TV operator in the Netherlands, any price increase or foreclosure would have had a wide effect across the downstream market.

Concerning horizontal non-coordinated effects, the Commission noted that Film1 and HBO both offer films and TV series and were indeed perceived as direct competitors by retail Pay TV operators and TV channel broadcasters[25]. Because Film1 and HBO are the only premium Pay TV film channels available at wholesale level in the Netherlands, providers of retail Pay TV services do not have an alternative source of supply.

The Commission's analysis also showed that a potential increase in the wholesale price of Film1 and HBO would likely be passed on to consumers via higher subscriber fees. The Commission concluded that the prospect of Liberty Global capturing the majority of the additional revenue stemming from an increased wholesale price of Film1 and HBO would represent sufficient incentive for Liberty Global to do so. Although Liberty Global does not exercise full control over HBO and would not be able to unilaterally increase the HBO wholesale price, the joint owner of HBO (TimeWarner) would also benefit from any price increase as it would catch the rest of the additional revenue generated. The Commission therefore considered it highly likely that TimeWarner would support an increase of HBO's wholesale price.

Regarding Liberty Global's ability and incentive to refuse the supply of premium Pay TV film channels to its competitors, the Commission found that only Film1 could be used for that purpose. As TimeWarner had joint control of HBO, a strategy to limit the distribution of that channel seemed more difficult. The Commission then performed a margin analysis to determine the minimum percentage of existing Film1 subscribers that would need to switch to Liberty Global's Pay TV service in order to make the foreclosure strategy profitable (in other words, to establish whether the downstream profit from the additional subscribers attracted would exceed the lost profit from the wholesale of Film1 to the foreclosed competitors). The analysis confirmed that Liberty Global could realistically and within a relatively short time attain the number of switching customers necessary to make the foreclosure profitable. Accordingly, the Commission concluded that Liberty Global would have both the ability and the incentive to foreclose, in particular Film1.

Remedies

Liberty Global addressed the competition concerns with two sets of commitments, namely the divestment of its Film1 premium Pay TV film channel and commitments in relation to the OTT distribution of content by TV broadcasters.

Film1 Commitment

Liberty Global committed to divest Film1 with all its assets (including the licence agreements for premium content held by Film1) and personnel, and to conclude a carriage agreement with the purchaser of Film1. This commitment should ensure that the channel will continue to be distributed via the cable network of Liberty Global in the near future. The clear-cut divestment of Film1 is an example of a classic structural remedy that corresponds with the Commission's established practice on addressing horizontal non-coordinated effects. As the divestment removed in full the overlap created by the transaction, the Commission concluded that this commitment was suitable and sufficient to eliminate the competition concern that arose from the combination of the only two premium Pay TV film channels in the Netherlands.

OTT commitment

As explained in section I, the Commission found that the merger would allow Liberty Global to conclude more agreements that restrict the ability of TV broadcasters to offer their content via an OTT platform. To the extent that a TV broadcaster operates the OTT platform itself, this is a restrictive agreement between Liberty Global and a potential competitor. To the extent that the broadcaster offers its content to a third party OTT platform, an agreement that restricts this ability denies a potential competitor

example: Draft report for public consultation (BoR 12-33) An assessment of IP-Interconnection in the context of Net Neutrality Comments from Cogent Communications, p. 7; Comments of AT&T on the BEREC Consultation Paper, *An assessment of IP Interconnection in the context of net neutrality* of 31 July 2012 (both available at: www.berec.europa.eu, and Christopher S. Yoo, *Innovations in the Internet's Architecture that Challenge the Status Quo*, J. on Telecomm. & High Tech. L. 79 (2010).

[25] This is consistent with the analysis performed by the Commission in the M.6369 *HBO/Ziggo/HBO Nederland* decision, paragraph 65.

to Liberty Global access to an important input. The Commission's Remedies Notice deals with the existence of such agreements that are inimical to competition. In appropriate cases, the Commission can accept commitments by the merging parties that terminate these agreements. Liberty Global committed to no longer enforce, and hence effectively terminate, any existing carriage agreements for TV channels and associated content that restrict the ability of TV broadcasters to offer their content online. Liberty Global also committed to no longer insisting upon such carriage agreements for a period of eight years. To make this remedy effective, Liberty Global will ensure that the broadcasters' OTT content can reach Liberty Global's Internet subscribers by maintaining sufficient capacity at interconnection points between the terminating Internet access network operated by Liberty Global and at least three reputable providers of Internet interconnection services. Doing so should ensure that there is uncongested access to the terminating Internet access network of Liberty Global in the Netherlands for the delivery of OTT content.

Conclusion

The *Liberty Global/Ziggo* case occurs in a context of significant sectorial changes and important innovations. Structuring remedies in fast-changing markets is not always easy, in particular when there is a need to ensure that those remedies don't unwittingly prevent certain commercial or technical developments in favour of others. The Commission is very aware of the rapid development of the OTT sector, the debates on potential limits to broadband Internet capacity, and the ongoing debates as to who ultimately should pay for capacity increases. The remedy package, rendered necessary by the degree of power of the merged entity on certain markets, shows the Commission's willingness to ensure that the competition issues identified are solved in a clear and coherent manner, while adapting to new industry trends and not locking the industry in to one commercial or technical solution.

European Commission

Competition *merger brief*

The "White Powder" Case: Balancing the Evidence

Luca Di Martile, Geneviève Lallemand-Kirche, Michael Karl Pieber, Laura Seritti, Arthur Stril

In September 2014, the Commission cleared the acquisition by Huntsman of competing titanium dioxide (TiO_2) producer Sachtleben, subject to conditions. TiO_2 is a chemical used in a large number of consumer goods applications, such as paint, paper, textile, cosmetics and printing ink. The worldwide TiO_2 market is about EUR 14 billion in total, and Huntsman and Sachtleben were clear market leaders in TiO_2 for printing ink applications, together supplying more than 70% of European demand.

The case raised several issues, both in terms of substantive assessment and process. First, it introduced new elements on how to use price correlation and qualitative evidence to properly define at which level (overall chemical product? end-use?) competition takes place. Second, it showed that Chinese producers are not necessarily going to compete in all mature markets, as they face hurdles such as production know-how. Third, although divesting manufacturing assets is usually the best way to resolve competition issues, this case was different. Because know-how was the main barrier to entry, divesting know-how was the proper solution in this particular merger case. Finally, it shed some light on multi-jurisdictional review.

In a nutshell

The Huntsman-Rockwood TiO_2 merger provides lessons for future chemical cases on the following topics:

1) The use of market features and price correlation to define relevant market.
2) Competition by Chinese products in the European market.
3) Non-divestiture remedies.
4) Multi-jurisdictional review.

1. Fifty shades of white

TiO_2 is used to make the colour white. Whenever you see, touch, wear or even eat something white, there is a good chance that it contains TiO_2. It is the world's number one white pigment. Five million tons are used annually for different purposes, from car paint and construction plastics to cosmetics and white ink for packaging. Its optical characteristics and brightness are unmatched, and its high refractive index is similar to that of diamonds.

You might assume that white is always white; in other words, that there is one single product market for TiO_2. But as our investigation shows, this is not the case. Closer examination of the TiO_2 market shows first that customers (i.e. ink manufacturers, coating manufacturers, etc.) use different grades of TiO_2 depending on what they make. Secondly, not all TiO_2 manufacturers can produce every TiO_2 grade. In addition, there are two production processes for TiO_2 (sulphate and chloride processes) leading to two different types of TiO_2 crystal with different technical properties.

In order to be used for a broad range of purposes, TiO_2 not only needs to be white, it also must have certain other properties which vary significantly from application to application. For instance, TiO_2 for printing ink, admittedly not the most important of TiO_2 applications, has to deliver high gloss and high opacity to allow the ink to be disposed in thin layers. To avoid wearing out the printing machines and ensure good dispersibility within the ink solvent, it must also have low abrasiveness - a property which is achieved through the sulphate-based manufacturing process.

On the other hand, for paint, paper and plastics, generally referred to as TiO_2 mass applications, the required technical properties are not so stringent, which makes the production process less demanding. The producers of TiO_2 have adapted to this demand-side need. Several of them developed know-how enabling them to fine-tune TiO_2 production to uses in specialty applications, such as producing dedicated TiO_2 grades for printing ink.

Options for customers requiring TiO_2 with special properties (dedicated grades) are limited, however. Therefore, only a *one-way substitution* is possible between mass applications and more specialised ones. For instance, it is technically possible to use TiO_2 made for printing ink in applications for paint, paper and plastics, but not the other way round, which leads to one-way substitutability on the demand side. Likewise, it is easier for producers of TiO_2 for printing ink to produce TiO_2 for coating applications than the other way round (one-way substitutability

The content of this article does not necessarily reflect the official position of the European Commission. Responsibility for the information and views expressed lies entirely with the authors.

The authors would like to thank Lucia Bonova, Thomas Buettner, Giulio Federico and Szabolcs Lorincz for their helpful comments and suggestions.

on the supply side). Because TiO_2 producers do not produce and customers do not purchase a universal "one size fits all" product, markets have to be defined along the lines of the different applications.

What conclusions can be drawn for market definition? One-way supply and demand substitutability is not sufficient to conclude that there is one overall market. And even though basic, chemicals can be tailor-made to customer needs. This means more precise analysis of customer needs and preferences, as well as of producer capabilities, is required. Ultimately, this analysis led DG Competition to find narrow markets in this case.

2. Price correlation and false positives

The merging parties, by contrast, argued that a wider market for TiO_2 exists. To support this argument, they submitted a price correlation study showing that the prices of several ink and coating grades appeared to develop in parallel. According to the study, this price *co-movement* suggests that coating and ink grades are part of the same relevant product market. This conclusion was contradicted, however, by strong qualitative evidence gathered during the market investigation indicating that ink manufacturers cannot use coating grades (low degree of *demand-side substitutability*) and that a number of coating grades manufacturers were not able to produce adequate grades for ink production (low degree of *supply-side substitutability*).

Price correlation analysis is a quantitative technique that measures the co-movement of prices over time. Analysing co-movement can help to define the relevant market for two specific products (or product groups or geographic regions). In general, a *correlation coefficient* measures the degree of simultaneous co-movement between two time series. The economic logic underpinning the use of the correlation technique on prices for market definition follows an *arbitrage argument*. That is, if two products show a high degree of substitution (i.e. can easily be used/produced instead of each other), the market's demand and supply will arbitrate between these products. As a consequence, changes of one product's price will induce similar changes in the other product's price, leading to their co-movement[1]. Hence, a high degree of co-movement between two prices over time, which results in a high correlation coefficient, suggests that the two products might belong to the same relevant market; whereas a close to zero or negative correlation index indicates that the two products might belong to different markets.

The technique has several shortcomings, however. To avoid drawing the wrong conclusions, a careful case-by-case assessment is necessary.

One of the most significant shortcomings of the technique is the likely presence of other common factors besides substitution that can affect the co-movement of prices. For example, the prices of gasoline and diesel fuel are likely to show co-movement over time, but this is likely to be driven - at least partially - by fluctuations in the price of crude oil. The presence of common price components might result in upwardly biased correlation coefficients, and the test may falsely predict common markets. Those common components have to be investigated both on the supply side (e.g. common costs of production), and on the demand side (e.g. common demand drivers, such as GDP). Due to this limitation, pure price correlations are more likely to be misleading and, consequently, several refinements have been suggested to correct the common component problem[2, 3].

A second important limitation of price correlation for the purpose of market definition is its relative nature. A correlation index is not in itself enough to make definitive statements about the substitution between two products. There are no clear rules showing when the correlation of two prices is "high enough" to prove that the underlying products belong to the same relevant market. The solution is to compare the correlation indices to a benchmark correlation coefficient, in order to determine the level at which the co-movement of two prices indicates substitution between the products. There must be sufficient evidence that the products underlying the chosen benchmark correlation coefficient belong to the same relevant market. But even then, the choice and validity of the benchmark correlation is an assumption, and not a hard fact[4].

Overall, there are serious reservations about using price correlation analysis to show that several products belong to the same market. The indirect nature of these methods to provide evidence about the degree of substitution between two products and the practical limitations to take common factors into account restrict the utility of these quantitative tools. Such shortcomings are likely to *increase* the correlation between two price series, and so are likely to falsely indicate the existence of a common market. Price correlation analysis seems therefore more appropriate as a one-sided test supporting the existence of separate markets where prices are not (or only weakly) correlated

[1] As an example, assume that products A and B have a high degree of substitution. If the price of product A increases relative to the price of product B, part of product A's consumers will switch their purchases to product B. The higher demand for product B will, in turn, cause an increase in product B's price. As a result of this arbitrage (equilibrating) process, the prices of the two products co-move over time. A similar argument might apply when a supplier of B switches part of its production to product A to profit from the higher price of this latter product.

[2] For example, partial correlation analysis, time fixed-effects method. See also Competition merger brief, Issue 1/2014 – November, page 7.

[3] In some cases a correlation coefficient might be biased downward, that is, indicating separate markets while the relevant market is larger. This problem is usually tested by aggregating the time series of prices to lower frequency (from weekly to monthly, from monthly to quarterly, for example), and checking whether the correlations are substantially higher between these more aggregated series.

[4] Other limitations of price correlation analysis, such as the non-stationary nature of the price series, are presented and discussed in the decision on case COMP/M.7061 – *Huntsman Corporation/Equity interests held by Rockwood Holdings*, in Annex I.

("separation" tool) rather than to prove the existence of one single market ("inclusion" tool).

In light of their limits and their ability to supply only indirect evidence, price correlation techniques are not directly informative on the outcome of the Hypothetical Monopolist test for market definition, as explained by the Commission in several recent cases[5,6]. Price correlation is mainly useful as a complement to other pieces of quantitative and qualitative evidence.

In the *Huntsman/Rockwood* case, the Commission found that the co-movement of coating and ink grade prices was largely driven by common cost and demand shocks. These shocks were primarily caused by an unexpected shortage of the minerals required to produce TiO_2 pigments, which hit the market during 2010-2011. The qualitative evidence demonstrated that this shortage increased production costs and, by extension, the price of TiO_2. The unforeseeable duration of the shortage led customers to increase their demand for TiO_2 in order to stockpile the pigments. This simultaneous increase in demand exacerbated the TiO_2 price increase. The mineral shortage and the demand shock were common across all TiO_2 grades (including ink and coating grades), which meant their prices followed a similar pattern over time and determined their co-movement.

During its review of the merger, the Commission refined the price correlation analysis by trying to account for common costs of production, and by applying different econometric specifications. The Commission's analysis refined the simple correlation by eliminating common costs from the prices, so that the correlation coefficient could capture only the competitive interactions between the products. Although some of the final results of the Commission's analysis pointed towards ink grades and coating grades belonging to different markets, the difficulties in isolating common components in the price of different products, and especially in determining the impact of the common demand shock, severely undermined their reliability. Ultimately, the price correlation analysis did not meet the required standards of proof (in particular in light of the strong qualitative evidence suggesting limited demand and supply-side substitution between differing grades), and so could not be considered as informative for this case.

3. Are Chinese suppliers automatically present in all mature markets?

After identifying the product level at which competition takes place, the Commission analysed the competition landscape and the potential forces that competing companies and potential entrants might exercise on the merged entity.

It is commonly admitted, and was also argued by the Parties, that Chinese companies are a serious competitive threat for European companies, in particular for manufactured products. With the strengthening of commercial exchanges between Europe and China, numerous products labelled "made in China" have gained ground in a number of markets. In the pigment industry and more specifically in the market in question – TiO_2 – a number of Chinese companies have built significant production capacity in the last decades, contributing to the current overcapacity in the global market.

Nevertheless, the presence of Chinese companies and their ability to compete varies, even in markets that can be considered to be mature. The situation of various colour pigments is telling: while Chinese red pigments are well established in Europe, imports of Chinese white TiO_2 pigments into Europe are lagging behind. In TiO_2 the market penetration of Chinese suppliers varies depending on the application. It ranges from significant in mass applications to virtually non-existent in specialty applications such as printing ink.

In the Huntsman/Rockwood case, the Commission extensively analysed the reasons behind the absence of Chinese suppliers in some TiO_2 segments, such as TiO_2 for ink applications. This absence is unexpected, because of the abundance of Chinese capacity and relatively few trade barriers (low transport costs and import duties). In addition, ink manufacturers have strong incentives and willingness to make sure they have access to alternative suppliers in case of a product shortage or price increase, as there are only a limited number of suppliers able to provide them with suitable TiO_2 grades. In spite of this, rather counterintuitively, the recent TiO_2 shortage (2010-2011) and associated price increase did not lead to higher market share for Chinese suppliers in specialty applications in Europe.

Our analysis showed that Chinese suppliers face very specific barriers to gaining market share in Europe. First, the limited presence of Chinese suppliers in speciality applications such as TiO_2 for ink can be ascribed to the fact that Chinese TiO_2 does not (yet) possess the suitable characteristics in terms of the gloss, brightness, and colour (more yellowish). Second, customers have been actively testing Chinese TiO_2 and found it to be of inferior quality due to a lack of key production know-how. As a result, the largest customers on the market have not substituted the main TiO_2 grades of Huntsman and Sachtleben for Chinese TiO_2.. The Commission then assessed the likelihood of Chinese entry, and in particular investigated whether the merger would "push" the Chinese suppliers onto the market. The evidence, however, showed that Chinese were still far behind and unlikely to develop the key know-how in the near future, even with customer help.

In addition, even provided the quality is acceptable, one of the reasons customers are not prepared to switch the bulk of their purchases to Chinese suppliers in the short term is security of

[5] The Hypothetical Monopolist test is the Commission's standard test for the purpose of market definition. According to this test, if a hypothetical monopolist of a set of products finds profitable to raise the products' prices by a small but significant amount, then the underlying set of products form a relevant market.

[6] See decision in case COMP/M.6663 – *Ryanair/Aer Lingus III*; decision in case COMP/M.6850 – *Marine Harvest/Morpol* and decision in case COMP/M.7155 – *SSAB/Rautaruukki*.

supply. Before engaging significantly with new suppliers, and even more so with those located far away, customers need to build relationships with them. This limits the share of the market Chinese suppliers are able to contest., at least in the initial stage. The upshot of this all is that, post-merger, customers would be left with only two established players in the EEA, namely the merged entity and the last surviving competitor, Kronos.

In some circumstances competition between the merged entity and its challenger could possibly be sufficient to prevent price increases. However, the need for security of supply leads customers - in particular large customers – to qualify and purchase from several suppliers simultaneously. In a market where numerous players are active multi-sourcing practice normally ensures both security of supply and competition between approved manufacturers. However, in this particular market structure, with only two relevant competitors (the merged entity and Kronos), the multi-sourcing mind-set of customers would exacerbate the adverse effects of the proposed merger. Customers will very likely seek to move part of their demand to Kronos, the only credible alternative. As a consequence, Kronos would quasi-automatically gain market share and therefore not have the incentive to compete strongly with the merged entity on prices or innovation. Kronos could even simply follow price increases applied by the merged entity and benefit from the adverse effects of the merger.

The past experience of TiO_2 shortage, the current market structure (only three competitors, inability of Chinese suppliers to step in with a credible product), the importance of security of supply for customers, and the conclusion that Chinese suppliers are not a strong contender in the short term, all these factors indicated that the merged entity would enjoy a dominant position in the market for TiO_2 for printing ink. The adverse effects of the merger were likely to be further exacerbated by the likely behaviour of the remaining competitor.

4. Divesting know-how

In most cases, divesting the plant that produces the relevant grades would be considered the most suitable remedy to the competition issues.

First, while some chemicals are manufactured in multi-purpose facilities used for a number of products, TiO_2 is generally produced in single-purpose dedicated plants, which can potentially produce several TiO_2 grades. For instance, the entire production of TR52, Huntsman's flagship TiO_2 grade for printing ink, is made in its TiO_2 plant in Calais, France.

Second, the Commission generally prefers the divestiture of a standalone business, for the viability reasons. Such remedies are also more likely to lead to a timely entry of the new competitive force.

However, in this case, production capacity was not the barrier to entry. Indeed, the investigation showed that the key barrier to entry in speciality grades (such as printing ink grades) was the know-how.

Divesting a production plant in this case would have been disproportionate, because printing ink grades represented only a fraction of the plant's capacity. Nor would such a divestiture have necessarily been the best fix, because most suppliers other than Huntsman and Sachtleben had the capacity but lacked the relevant know-how to become a viable competitive force in the market.

As an alternative to divesting manufacturing assets, the Commission accepted a know-how divestiture, including transmission of the production process, transfer of the brand and any other element necessary for the purchaser to be able to produce Huntsman's TiO_2 grade specifically used for ink applications.

For the know-how divestiture to produce a truly structural effect, the purchaser needed to fulfil stronger criteria in order to be considered suitable. In particular, the purchaser had to be a sulphate-based TiO_2 producer, with sufficient capacity to meet the current and reasonably foreseeable TR52 demand worldwide. Furthermore, the ability of the purchaser to distribute TR52 in Europe in the relevant timeframe was carefully assessed.

5. Multiple jurisdictions: one size fits all?

By the time the transaction was notified in Europe, it had already been filed in all other relevant jurisdictions, namely the US, Turkey, South Korea and Colombia, and had already obtained clearance in three of them, including the US.

In the US, the Federal Trade Commission decided not to pursue the case in December 2013. This was because of strikingly different features of the US market for TiO_2 for printing ink applications. The FTC and Commission case teams had discussions which shed light on these important differences.

From a demand point of view, the US printing ink industry has different standards and technical specifications for TiO_2, which make the use of chloride-based TiO_2 more widespread. In Europe, the industry has historically relied heavily on sulphate-based TiO_2, and due to specificities of the printing industry (namely a wider use of rotogravure techniques), chloride-based TiO_2 is not an option for a large part of the ink industry due to the higher degree of abrasiveness. From a supply point of view, the US does not have any sulphate-based TiO_2 production capacity, and depends entirely on imports, mainly from Europe (i.e. primarily from Huntsman and Sachtleben) and from China. Given these supply specificities and the differences in demand characteristics, the lower quality of the Chinese product is less of an issue in the US, resulting in a much higher penetration of Chinese imports in the US than in Europe.

Despite the different characteristics of the two markets, the merging parties referred to the unconditional US clearance to

urge the Commission also to clear the transaction unconditionally. However, because of the different market features, the merger raised specific EEA concerns which could not be dismissed without adequate remedies.

6. Conclusion

The *Huntsman/Rockwood* case is an interesting example of a merger in a relatively mature chemical market. On first sight, one could be tempted to draw the hasty conclusion that the products are homogeneous and that entry is easy. That was, however not the case. This merger provides some interesting lessons.

First, apparent homogeneity and correlation of prices of different market segments do not necessarily mean that one single market exists, as there can be specific barriers for new entrants to compete in some market segments, as was the case for TiO_2 for printing ink.

Second, in a market where demanding customers widely recognise the merging firms' know-how, suppliers without a suitable product – among others Chinese suppliers in this case – can fail to become a sizeable competitive force. Such know-how can be a strong indicator of product differentiation, leading to the need to depart from the initial image of homogeneous commodity chemicals.

Finally, the barrier for other TiO_2 suppliers to enter the market for TiO_2 for printing ink was the lack of know-how. Although divesting manufacturing assets is usually the most suitable and viable way to remedy competition issues in merger cases, in this case the Commission accepted divestiture of the production know-how in light of the particular features of the market.

Competition *merger brief*

Holcim / Lafarge: paving the way to first phase clearance

Daniele Calisti and Jean-Christophe Mauger

Introduction

On 15 December 2014, the Commission gave the green light for the merger between Holcim of Switzerland and Lafarge of France, subject to remedies[1]. The combination of these two cement producers creates a world leading player in the construction industry.

The merger follows a string of deals in the industry. For instance, in the same year, the Commission unconditionally cleared two asset exchanges between Holcim and Mexican cement producer Cemex, encompassing their operations in Spain and Western Germany[2].

The scale of the Holcim/Lafarge merger is impressive, as it combines worldwide players that operate industrial assets in most of Europe. Its construction materials portfolio ranges from cement to ready-mix concrete. Because most of these products are traded locally, the Commission's case team and the parties' lawyers were confronted with hundreds of potential relevant markets. Several markets showed significant overlaps, which made it clear in advance to all involved that competition concerns could be expected.

When executing a deal of this size, time is of the essence. Without a timely discussion between the parties and the case-team on the approach to be taken to analyse hundreds of potentially affected markets, the amount of information required and its processing could otherwise cause delays. That is why the Parties already at an early stage initiated pre-notification talks with the Commission. Holcim and Lafarge acknowledged from the start that significant overlaps in a mature industry such as cement would require an all-encompassing remedies package. The guiding principle for the design of that remedies package was simple. In each of the Member States where there are overlaps, either Holcim or Lafarge would divest its activities covering the complete array of products they produced. Any exception to that rule, i.e. when they would retain an asset in overlap countries, would need to pass the Commission's scrutiny.

Holcim and Lafarge obtained clearance in phase I thanks to a structural remedy of an unprecedented size, which would remove the entire overlap between the parties and ensure the viability of the divested business.

Managing a divestment process of this size may also require certain exceptional arrangements.

In a nutshell

In the Holcim/Lafarge case, the Commission gave green light to the creation of a global player in the building materials industry.

In order to obtain clearance, the Parties offered to divest a package of assets of an unprecedented size. The case offers insights into the scope and the procedural features that remedies need to have to be clear-cut and suitable for phase I clearance.

An analysis of this case illustrates both the substantive scope of the remedies necessary to approve a deal of this magnitude, and of the procedural safeguards that the Commission considers necessary in divestment processes of exceptional size.

1. Cement and all the rest: product and geographic markets

Cement is a crucial input in the construction industry. It is made out of clinker, which is produced by sintering limestone, and other cementitious materials. Cement comes in either bulk or bags and is processed with aggregates into ready-mixed concrete and concrete end products. Aggregates are also an input for asphalt which is used in road surfacing. Cement producers are active on several of these markets and most, including Holcim and Lafarge, have integrated operations.

[1] See Press Release IP/14/2683, available at http://europa.eu/rapid/press-release_IP-14-2683_en.htm.

[2] See Commission Decision C(2014) 3649 final, of 5.6.2014 in case M.7009 – *Holcim / Cemex West*, and Commission Decision C(2014) 6299 final of 9.9.2014 in case M.7054 *Cemex / Holcim assets*. Both cases were cleared following in-depth (Phase II) investigations. There has also been a deal between Holcim and Cemex concerning Holcim's assets in the Czech Republic, which has been cleared by the Czech competition authority.

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The authors are grateful to Robert Thomas, Andreea Stanciu and Peter De Luyck for their contributions to this article. The authors are also grateful to the other members of the case-team, Birthe Panhans, Edit Komaromi, Matthias Hunold and Blaž Višnar, for helpful comments and suggestions.

In line with multiple precedents, the Commission concluded that grey cement, the main focus market, represents a product market separate from all these other building materials, which represent separate product markets of their own. Grey cement is produced according to customer requirements into different classes and grades. Consistent with previous practice, the Commission did not consider different classes and grades of grey cement to be distinct markets from a competition point of view, because there is a large degree of supply side substitutability among different grades, and different classes are to some extent substitutable[3].

Regarding the geographic market, the Commission followed its assessment of recent in-depth investigations in the *Holcim/Cemex* cases. Here, the Commission concluded that a large majority of grey cement sales are made within a maximum distance of 150 or 250 km from the production facility. The competitive landscape can therefore be defined by drawing circles around each of the suppliers' plants: these circles would in principle encompass all the customers for which the respective plant is a potential source of supply. The *Holcim/Lafarge* case followed the same approach, though with circles of differing sizes for most of the other building materials markets.

2. Mega-mergers and mega-divestments: early remedy proposal and divestment principles

According to Holcim and Lafarge, one of the objectives of their merger is to improve their global footprint, with a focus on emerging markets and a balanced exposure to developed countries[4]. The parties announced the goal of closing the transaction in the first half of 2015. Already in April 2014, the parties stated their intention to propose "selected divestments in developed countries" in order "to anticipate any regulatory requirements" and secure early approval.

In a July 2014 press release, well in advance of the formal filing of the transaction with the Commission[5], Holcim and Lafarge announced a list of assets to be included in the remedies package. The asset selection resulted in a divestment of the entire position of one of the parties in each of the EEA countries where they overlap, with few exceptions. The assets to be disposed included Holcim assets in France (métropole), the Czech Republic and Hungary. Lafarge earmarked assets in Austria, Romania, Germany, the United Kingdom and the French overseas territory of la Réunion. There were a number of exceptions to the general rule of divesting the entire position of one of the parties in cases of overlap. In France, Holcim announced it would retain its Altkirch plant in Eastern France, together with its associated downstream assets.

In an exceptional move, the parties presented remedies together with the formal notification at the end of October 2014. The proposed package of divestments contained several changes compared to earlier statements [6], in particular in Central Europe[7]. The parties made it clear that they had made the changes following preliminary 'constructive' discussions with the Commission during pre-notification contacts.

It is the Commission's guiding principle that merger induced competition concerns need to be remedied as early as possible in an effective and lasting way. In order to accept remedies already in phase I, the Commission needs to be satisfied that the competition problem to be addressed is straightforward and the remedies proposed constitute a clear-cut solution. A structural solution removing the entire overlap normally qualifies as a clear-cut solution. The Commission also has to be sure that the combination of merging parties' activities in areas where no remedies are tabled do not give rise to concerns. When parties approach the Commission with upfront remedies that meet these principles, the Commission is prepared to look at such proposals already in the pre-notification stage, as long as the competition concerns are clear and the potential of the remedies to solve these concerns are beyond doubt.

This approach is, however, exceptional. The tight merger assessment deadlines which the Commission must observe do not normally allow a dual track assessment of both competition concerns and possible remedies in parallel.

What made the Holcim/Lafarge merger exceptional is the magnitude of the overlaps in a multitude of markets spread over most of Europe. In such cases, it may be useful for parties to anticipate regulatory requirements to accelerate the process and swiftly reach a satisfactory outcome for both the companies and the Commission. The Commission was prepared to examine the remedies proposed at an early stage because they were structural, aimed at removing the entire overlap, and appeared to offer, in principle, a clear-cut solution to the problems potentially raised by a deal of significant size.

While it remains the Commission's duty to assess whether competition concerns exist in the territories where divestments are proposed, it is permitted for parties to include more assets in a divestment package than may be strictly required to solve the

[3] See for instance Commission Decision C(2014) 3649 final, of 5.6.2014 in case M.7009 – *Holcim / Cemex West*, 46 to 48.

[4] Press Release of Holcim and Lafarge issued on 7 April 2014

[5] Press Release of Holcim and Lafarge issued on 7 July 2014.

[6] Press release of Holcim and Lafarge issued on 28 October 2014.

[7] In particular, the parties decided that they would retain Lafarge's Austrian plant of Mannersdorf, and that that they would divest all of Holcim's operations in Slovakia instead. While there are no Lafarge plants in Slovakia, the Lafarge Mannersdorf plant in Austria is close to the Holcim Rohožnik plant in Slovakia. Moreover, Holcim currently has no active plant in Hungary, and supplies its terminals in that Member State, to be divested, mostly from Slovakia. The Mannersdorf plant would have removed the overlap with the Slovakian plant, but it was doubtful whether it could have supplied the divested Hungarian terminals so as to make them viable. By offering Holcim's Slovakian plants rather than Mannersdorf, the Parties ensured a more clear-cut solution to the potential competition and viability issues.

competition concerns, if this is necessary for the divestment package to form a stand-alone and viable business.

3. The Commission's assessment

Despite the fact that the parties intended to eliminate almost all overlaps through upfront remedies, the Commission still carried out a thorough market investigation to identify competition concerns. Once the competition concerns had been identified, the Commission had to verify whether the proposed package of remedies would remove each and every one of them.

The Commission applied the principle that remedies can only be accepted when they unambiguously eliminate competition concerns. Also, the divested assets need to be a viable business that the Purchaser can use to effectively compete post-merger on a lasting basis.

To determine whether this was the case, the Commission market tested the remedies. The Commission concluded that the remedies package proposed by Holcim and Lafarge when notifying the transaction did not fully remove all competition concerns. Besides a problem with some of Holcim's Hungarian assets and and a concern about alternative fuels[8], the main issue concerned the viability of the proposed divestment in Western France.

In Western France, the initial remedy proposal included one Holcim cement terminal and two grinding stations[9]. These were supplied with cement and clinker by Holcim plants elsewhere in Europe. While clinker can be sourced over long distances from suppliers in the Middle or Far East[10], this is not the case for cement. This made it doubtful that the divested terminal would be able to reproduce the significant competitive constraint exerted by Holcim on Lafarge in this region.

As a result, the parties substituted this terminal in the divested business with a nearby Lafarge grinding station, which will enable the purchaser of these assets to compete with a dense network of cement grinding stations along the Western coast of France.

Also excluded from divestment despite the overlap of activities by both companies in France was Holcim's Altkirch Eastern France cement plant. The Commission found, however, that this exception was justified, as the weak position of Lafarge in this region did not require the inclusion of Altkirch in the package, nor was it required for viability reasons.

The final remedies package is of a size comparable to the one initially proposed, that is to say a combination of European assets currently generating a turnover of several billion euros. These divestments encompass the entirety of the operations of one of the parties in Germany, Romania, Hungary, the UK[11], Réunion, the Czech Republic and Slovakia, certain Holcim assets in Spain, and some plants of both parties in France.

4. How to implement the remedies: insights into the modalities of divestment.

Defining the scope of a remedies package that is capable of removing the impediment to competition is of little value if the assets divestiture and the resulting commercial structures cannot be implemented[12], or fall short of having a 'workable and lasting' impact on the market.

As the divested business represents a substantial number of assets and the transaction value will be considerable, the parties emphasised the need to maintain some degree of flexibility in the divestment process. Although these are upfront commitments without which the merger cannot be implemented, there is a need to minimise the risk of a complex and lengthy divestment process. A suitable buyer needs to operate the divestment business as quickly as possible as a competitive force in the market.

In view of the exceptional size and scope of the remedy, the Commission accepted to leave the parties some flexibility on the modalities of the divestment in order to minimise implementation risks. One aspect of this flexibility is the possibility to sell certain assets separately rather than as a whole package. Another aspect concerns the possible divestment of the assets through a variation of a classic M&A disposal.

4.1 A single package v multiple packages

Once the outlines of the divestment business were clearly determined, the commitments contained a little flexibility as to whether the divested assets would be sold as a single package to a single buyer or in multiple packages to multiple buyers[13]. One should not forget that the parties in the Holcim/Lafarge merger, have also undertaken to divest assets in non-European countries. As a consequence, another possible option in this particular context would be the sale (in whole or in part) of the European

[8] Alternative fuels, including certain types of waste, are used by producers to reduce energy consumption and CO2 emissions, and thus reduce the related costs.

[9] A grinding station does not produce clinker (the main raw material for the production of cement) but grinds clinker sourced from other cement plants.

[10] See for example Commission Decision C(2014) 6299 final of 9.9.2014 in case M.7054 *Cemex / Holcim assets*.

[11] The assets divested in the UK are currently operated by Lafarge through a Joint Venture (Lafarge Tarmac). As a follow up to its sector enquiry, the UK Competition and Markets Authority required that one of the plants of Lafarge Tarmac be sold. The remedies proposed to the European Commission were coordinated with the requirements of the CMA. As a result one of the plants of Lafarge Tarmac will not be divested with the divestment business but will be kept by the parties.

[12] Commission notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004, ('Remedies Notice'), point 10.

[13] The commitments also left open the possibility that certain parts of the package (particularly the assets in the UK, those in Spain and in the Czech Republic) could be sold independently to different buyers.

divestment business together with other assets in other jurisdictions, which could even lead to a single deal for the global divestment package.

It was possible to be flexible towards the possible split of the divestment package, because the market test results did not question the effectiveness and viability of certain smaller packages. Because the parties asked for flexibility in the definition of the packages, the Commission chose to assess the viability of the assets not only as a whole (on a European scale), but also in smaller parts (e.g. the viability of the UK business was separately assessed). While the Commission in its decision assessed the viability of the divestment package as a whole, the market test also confirmed the viability of national business units. To ensure viability, the Commission insisted that the merged entity would divest the required central functions (administration, HR, procurement, sales etc.) required for national businesses to operate on a stand-alone basis. Also, as cement is an energy intensive industry, the future profitability of cement plants depends to a large extent on access to alternative fuels. The commitments make structural access to proprietary sources for each of the national plants possible.

One particular issue was the disposal of Holcim's assets in Spain and the Czech Republic. This is because the Commission and the Czech competition authority had already cleared the acquisition of these assets by Cemex. However, since the transaction with Cemex had not yet been implemented, the Commission assessed the concentration under the assumption that those assets still belonged to Holcim. That is why the Spanish and Czech assets are part of the divestments to which the parties committed in this case[14].

In any event, whatever divestment structure the parties choose, implementation risk is effectively contained as the parties proposed commitments with an upfront buyer clause. This means that the main transaction (the merger between Holcim and Lafarge) cannot close until they have entered into a binding agreement for the whole of the divested assets with one or more purchasers to be approved by the Commission. This type of clause, in line with the Remedies Notice[15], is particularly appropriate when there are uncertainties in finding a suitable purchaser or when other implementation risks may arise.

4.2 Classic M&A divestiture or Hybrid solution

Because of the exceptional size and scope of the package, and the possible difficulties in finding a potential buyer with sufficient financial resources to acquire the whole of it, the commitments propose two different divestment modalities. The first possibility is the 'classic' and well established divestiture of the business through an M&A structure, whereby the parties enter into a binding sale and purchase agreement with one or more purchasers of the divestment business before closing the main transaction.

The second option is a 'hybrid solution', whereby part of the shares of the divestment business would be acquired by a new investor in Divco, while the remaining shares would be disposed of through capital markets, either via an IPO or a spin-off. Again, the the unprecedented transaction value and the substantial number of assets represented by the divestment business warrant such exceptional flexibility..

In any case, this flexibility was provided because the main characteristics of the hybrid solution are compatible with the fundamental requirements of the commitments. Apart from checking the viability of the proposed commitments, the Commission must ensure that commitments can be implemented within a short period of time[16], that the resulting structures will be workable and lasting[17], that divestiture commitments do not in principle require monitoring after being implemented[18], and that the merged entity cannot subsequently acquire influence over the whole or part of the divestment business[19]. In order for remedies to be accepted in phase I, they need to offer a 'clear-cut' solution[20]. The hybrid solution provides a certain degree of flexibility, but nonetheless contains a number of safeguards that replicate the features of a classic M&A divestment.

The most obvious challenge of a solution involving capital markets concerns possible uncertainties about the entity that ultimately will control the divestment business. The prospective purchaser of the assets has to fulfil a number of standard criteria, the so-called purchaser requirements, which the Commission examines in its buyer approval process[21]. These requirements include independence from the parties, financial resources and proven relevant expertise, as well as the incentive and ability to maintain and develop the divested business as a viable and active competitive force[22].

In order to meet these requirements within the specific structure of a hybrid solution, the parties will grant control over the divestment business to an anchor investor. The Commission will have to approve this investor before the rest of the shares of the divestment business can be disposed of through the capital markets. It is specifically because of the combination of a buyer approval process with a flotation of remaining shares, this solution has been labelled as 'hybrid' in the commitments.

[14] In a recent press release dated 6 January 2015 Holcim and Cemex announced that they closed a number of transactions through which Cemex also acquired the assets in Spain and the Czech Republic that Holcim had to divest under the Holcim/Lafarge remedies. For further info see: http://www.cemex.com/MediaCenter/PressReleases/PressRelease20150106.aspx .

[15] Remedies Notice, points 53 to 55.

[16] Remedies Notice, point 9.

[17] Remedies Notice, point 10.

[18] Remedies Notice, point 13.

[19] Remedies Notice, point 43.

[20] Remedies Notice, point 81. See also point 14.

[21] Remedies Notice, point 50.

[22] Remedies Notice, point 48.

As with all structural remedies, the Commission will want to be assured, also in the case of a hybrid solution, that the acquirer of the divestment business will operate the assets effectively and on a lasting basis. The extent to which this can be ensured crucially depends on the extent to which the anchor investor controls the divestment business. This was a particular point of attention in the Commission's analysis of the hybrid solution. In the commitments submitted at the moment of notification, the parties suggested a minimum share for the anchor investor which was below 50%. The parties were confident that the proposed level of shareholding would have been sufficient for the anchor shareholder to exercise control over a listed company. However, determining the amount of shares necessary to exercise *de facto* control over a listed company is not always an easy exercise, especially in a case such as this where the divestment business does not yet exist. In order to satisfy the requirement that commitments in phase I be clear-cut, the Commission made it clear that it could not accept a minimum shareholding for the anchor investor set below 50%. The minimum shareholding offered by the parties should instead be above 50%, to ensure that a potential buyer will have *de iure* control over the divestment business.

In order to further strengthen the lasting effects of the hybrid solution, the parties agreed in the final commitments to apply strict requirements on the structure of a potential anchor shareholder. While the anchor investor may be a consortium, the parties accepted restrictions (number of members, presence of a consortium leader, minimum duration of the consortium's involvement in the divestment business) intended to ensure stability and continuity in the control exerted by the consortium.

One final feature deserves specific mention. All commitments should ensure that the merged entity does not re-acquire or retain any influence over the divested business. In a situation where the divestment business, in the event of a hybrid solution scenario, could potentially be listed on a stock exchange, even a partial spin-off of its shares to shareholders of the merged entity could be problematic. Also, if the divestment business were floated or spun off to the market, it would be easy for the current shareholders to (re)acquire shares of the divestment business. In order to neutralise this risk, the parties undertook to obtain a non-reacquisition commitment from the historic core shareholders (in terms of equity) of Lafarge and Holcim not to acquire any interest in the divestment business for a certain period of time.

5. Conclusion

Holcim/Lafarge is a significant merger case in which two leading cement producers obtained phase I clearance through a comprehensive set of remedies of unprecedented size.

Several lessons can be drawn from this transaction. It is possible for deals of this magnitude to be cleared in phase I, but parties need to remove all competition concerns up-front, through a credible, clear-cut and all-encompassing package of remedies. As witnessed by the press releases issued by the parties throughout the process, pre-notification is an important moment to discuss and prepare such a package with the Commission services.

The early proposal of a comprehensive set of remedies is, however, not in itself sufficient. The Commission remains under the obligation to investigate all the affected markets and to seek the views of market players on the adequacy of the remedies in a market test and to ground its decision on the case on the basis of the results of its investigation. As demonstrated by this case, a clearance in phase I was only possible because the parties were prepared to offer all that was needed to dispel the Commission's concerns, i.e. a structural upfront remedy removing the entire overlap between the parties.

Finally, this case also illustrates the readiness of the Commission to show flexibility because of the exceptional size and scope of both the merger itself and the remedies package. In the end, however, also this exceptional case required the application of the principles and safeguards provided by the Remedies Notice, even if adapted to exceptional divestment modalities.