

Agenda Advancing economics in business

New powers for telecoms and media regulators? Part 1: the rise of oligopolists

Continued M&A activity in the fixed and mobile telecoms sector is creating more concentrated oligopolistic market structures that may pose problems for regulators trying to impose remedies on the basis of joint dominance findings. In addition, vertical integration between network operators and content providers, and the growth of communications bundles including premium TV content, are creating new challenges for regulators and antitrust enforcers. Is the European telecoms regulatory framework fit to deal with these challenges?

On 8 July 2015, Oxera held a round-table event in Brussels to discuss the new challenges faced by regulators in the telecoms and media space. Operating under the Chatham House rule, it was a lively and engaging debate attended by senior representatives from the European Commission (DG Connect and DG Competition), national telecoms regulators, lawyers, and major telecoms and media operators.

This article explains some of the challenges that regulators are facing as a result of the more concentrated oligopolistic markets, and summarises the key points that emerged from the round-table discussion. A subsequent article will focus on the challenges posed by the vertical integration and convergence of network operators and content providers.

Why all the fuss about consolidation and convergence?

The communications market is undergoing a substantial degree of consolidation. This includes horizontal transactions within and between fixed and mobile operators (such as Three/O2 in Ireland, Liberty Global/Ziggo in the Netherlands, and BT/EE in the UK), and vertical transactions between network operators and channel/ content providers (such as Liberty Global/De Vijver Media in Belgium, and Telefónica/DTS in Spain).

There are many reasons for this trend, including commercial drivers (pressure on margins, consumer demand for bundles, the growing importance of content, and the emergence of over-the-top, OTT, distribution technologies) and political pressure to invest and achieve positive outcomes for consumers.

These drivers show no signs of abating. With further consolidation across Europe expected, the debate at the national and EU level around the appropriate regulatory treatment of the combined entities will continue to intensify. In the short run, this will test the effectiveness of the EU's merger regulation regime; in the medium term, the new market structures that emerge are likely to test the suitability of the existing ex ante European telecoms regulatory framework.

For example, the emergence of concentrated (oligopolistic) market structures—where no single firm has significant market power (SMP)—can create problems for regulators attempting to impose remedies, given the difficulties involved in demonstrating joint dominance or tacit collusion. At the same time, the European Commission has cleared several recent mobile and fixed mergers subject to innovative access remedies, without the need to show coordinated effects.

This apparent contradiction has not gone unnoticed. Indeed, BEREC (the Body of European Regulators for Electronic Communications) recently provided guidance on the analysis and regulation of oligopolies.¹ In particular, it suggests that elements of the SIEC (significant impediment to effective competition) test used in merger control could be incorporated into the ex ante telecoms regulatory framework.

These issues are far from being just an interesting theoretical discussion. In the Netherlands, for example, the most recent analysis of the wholesale local access market by ACM (the Dutch national regulatory authority, NRA) found that Ziggo and KPN held a position of joint dominance in the retail broadband market, but that only KPN was dominant at the wholesale level. This market review closely followed the Commission's approval of Liberty Global's acquisition of Ziggo, which created a cable operator with nationwide coverage to rival the incumbent, KPN. Tensions are running high in this case, with the Commission issuing a 'serious doubts' letter,² and BEREC issuing an opinion supporting ACM.³ Indeed, the case could shape how NRAs approach similar situations in future.

The above naturally raises the question of whether it is time to revisit the 'dominance' standard that lies at the heart of the ex ante regulatory framework for electronic communications services.

The regulation of oligopolistic markets—revisiting the dominance standard

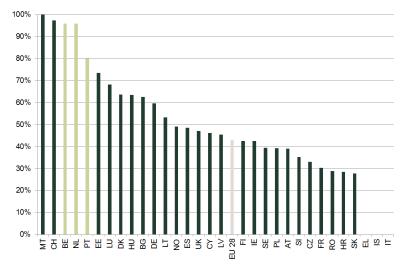
Since 2002, the use of the dominance standard has shaped regulation of the telecoms sector in Europe. Back then, the regulatory framework aimed to align the analysis conducted by NRAs with the process followed by competition authorities under Article 102 TFEU. NRAs were therefore required to define relevant economic markets and identify whether one or more operators that were active in these markets held SMP—a position equivalent to dominance under competition law.⁴

The stated ultimate goal of the framework was to give way to infrastructure-based competition, and remove regulation altogether.⁵ Providing access to bottlenecks at different points in the incumbents' networks was expected to allow access operators to build enough scale to gradually roll out infrastructure of their own and eventually build their own networks. While highly successful at creating a vibrant access market, it may be fair to say that the framework has not quite delivered on that ultimate promise—at least not in relation to networks aimed at the mass residential market.

Nevertheless, as explained above, the trend towards convergence and consolidation is reshaping the landscape. Technological convergence and the continued growth in, and consolidation of, cable networks are leading to increased infrastructure-based competition in the broadband market—the market share of alternative infrastructure providers rose from 19% in 2005 to 30% in 2014,⁶ and in some countries (e.g. the Netherlands, Belgium and Portugal) it has surpassed the incumbent's market share. While competition from alternative platforms in these countries may be driven by ubiquitous cable network coverage, other member states also have extensive cable coverage, as shown in Figure 1.

Even in countries where coverage is not national, broadband networks have economies of density such that alternative cable infrastructures tend to have strong coverage in urban areas. Where NRAs define sub-national markets, oligopolies may emerge at a local level.

Figure 1 Cable network coverage of EU member states



Note: Cable coverage is defined as broadband delivered over a fixed cable TV network using coaxial cable as specified in the earlier cable broadband standards such as DOCSIS 1, usually providing download speeds of up to about 20Mbps.

Source: IHS Global Limited and Valdani Vicari & Associati (2013), 'Broadband coverage in Europe 2013', study by IHS and VVA for the European Commission.

A regulatory 'blind spot' at the heart of the framework?

This emerging competitive landscape could have important implications for the application of the regulatory framework. It could mean that no single operator is found to be dominant, which could, in principle, present an opportunity to finally deliver on the promise of full deregulation. However, given the possibility that the consolidated structures might result in tacitly colluding oligopolies, or 'tight' oligopolies that fail to deliver effective outcomes (see below), this would be a major step for an NRA to take. In any event, the authorities have a difficult task ahead.

First, it is notoriously difficult to establish whether the conditions for joint dominance exist—a task that is not made any easier by the lack of precedent or extensive NRA experience. Furthermore, without a finding of single or joint dominance, an NRA would not be able to impose any remedies and would be forced to remove any existing ones.

This leads to the question of whether there might be an oligopoly 'blind spot' at the heart of the telecoms regulatory framework—specifically, regarding what BEREC has described as tight oligopolies: market structures that cause sub-optimal market outcomes without explicit collaboration or tacit collusion (see the table overleaf).⁷

Do regulators need a new tool to deal with tight oligopolies? BEREC seems to believe so, and that part of the solution may lie in a modified version of the SIEC test used in merger control.

Table 1 Market characteristics facilitating tacit collusion and tight oligopolies

	Tacit collusion (economic theory)	Tight oligopoly (as per BEREC)
Number of firms	Small	Small
Barriers to entry	High	High
Price transparency	Ambiguous	n.a.
Market shares and cost structures	Symmetric	n.a.
Product differentiation	Low	High
Capacity constraints	Low	High
Switching costs	Ambiguous	High
Countervailing buyer power	n.a.	None

Note: The economic assessment of the likelihood of tacit collusion ultimately depends on an overall analysis of the combination of different market features.

Source: Oxera, based on BEREC (2015), 'Report on oligopoly analysis and regulation', BoR (15)74, June.

Towards a new standard of intervention—lessons from merger control

BEREC draws an analogy with 'gap cases' in merger control, which led to the adoption of the SIEC test under the reformed EU Merger Regulation in 2004. Under the former merger regime, the Commission could prohibit only those mergers that created or strengthened a dominant position. Rightly or wrongly, this was thought to lead to an enforcement gap in practice, particularly for mergers of firms that were close substitutes to each other, but where neither of the firms was dominant prior to the merger, nor would their combination create a dominant firm.⁸

The SIEC test closed the gap, allowing merger enforcers to focus directly on the competitive effects of the merger using a more effects-based approach that looked at any loss in competition between the parties. This also included wider 'equilibrium effects' beyond the merging parties, which are relevant in oligopolistic market structures, where firms compete by taking account of each other's actions.

Recent examples of this test being applied in fixed and mobile markets are *Orange/Jazztel*, *E-Plus/Telefónica* and *O2/Three*.⁹ In all three cases, neither of the merging entities was a dominant operator individually, and nor was their combination expected to result in dominance. However, the Commission identified competition concerns (for example, regarding the elimination of close competitors) and imposed remedies involving access obligations and, in some cases, divestments.

Towards a new standard of intervention—lessons from the UK's market investigations regime

If we accept BEREC's premise that the existing regulatory framework involving an SMP test can lead to regulatory blind spots and sub-optimal enforcement of tight oligopolies, the ensuing question is how the framework can be reformed to close this potential loophole while maintaining the benefits of the current regime.

While the SIEC test has been proposed as one way forward, several potential problems lie ahead in attempting to adapt this test for the ex ante framework. These include the fact that it is aimed at capturing the effects of specific transactions, rather than examining markets on an ongoing basis.

A potential alternative is the 'adverse effect on competition' (AEC) test used by UK competition authorities when conducting market investigations. In particular, the authority must decide 'whether any feature, or combination of features, of each relevant market prevents, restricts or distorts competition in connection with the supply or acquisition of goods or services'.¹⁰ Where it does, this constitutes an AEC.

If an AEC is established, the authority may take proportionate remedial actions, taking account of relevant customer benefits. These may lead to structural and/or behavioural remedies such as functional separation or divestments; market opening measures; informational remedies; obligations to provide access on fair, reasonable and non-discriminatory (FRAND) terms; price caps; and/or quality of service requirements.

It could be argued that the UK market investigations regime fills an enforcement gap left by competition law, specifically in relation to non-colluding oligopolies. In its guidance document on market investigations references, the UK's Office of Fair Trading (OFT) noted:¹¹

[Commission] case law does not at present cover all types of coordinated parallel behaviour that may have an adverse effect on competition. ... Market features that can lead to adverse effects on competition in an oligopolistic market can be wider than the conditions that the case law has found to be necessary for collective dominance ... Furthermore, what qualifies as an abuse of collective dominance is underdeveloped in the case law. For these reasons a market investigation reference will be able to address wider competition concerns than could be addressed by a [competition law] case and might, therefore, be a better way of proceeding.

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	Dominance/ SMP	Abuse of dominance	Transaction	Effects on competition and consumers
A. Ex ante regulatory framework	\checkmark	×	×	×
B. Ex post competition law	\checkmark	\checkmark	×	\checkmark
C. Merger reviews (SIEC test)	×	×	\checkmark	\checkmark
D. Market investigations (AEC test)	×	×	×	✓

Figure 2 Required conditions for the imposition of remedies under the different tests

Source: Oxera.

The figure above summarises the similarities and differences between the frameworks for market investigations, merger control, ex post competition enforcement and ex ante regulation.

Under the market investigations regime, a finding of dominance could be one of the features giving rise to an AEC—however, as with the ex ante regulatory framework, an abuse of dominance is not required to establish the existence of an AEC. Similarly, the market investigations framework provides a broad set of remedial tools to tackle the sources of AECs, in much the same way as the regulatory framework provides NRAs with a set of remedies to address dominance. A key difference, however, is that the tools available under the market investigations regime can be potentially much wider and far-reaching.

Could a suitably modified market investigations/AEC test regime be the right way to address the challenges faced by the existing SMP framework in telecoms?

Key points raised in the Oxera round-table discussion

The above issues were considered in detail in the Oxera round-table discussion. Overall, there was some acceptance among the participants that there could be a problem of 'gap cases', as some oligopolies can lead to negative outcomes for consumers in terms of price and quality, and this may not necessarily be the result of single or joint dominance market structures.

Under the current market review process, the only way to regulate oligopolies would be through a finding of joint dominance. It was recognised that this might prove challenging for NRAs, given the lack of precedent in regulatory or competition cases. Similarly, it was noted that today's largely positive market outcomes in Europe can be traced back to regulatory interventions predicated on dominance findings—most notably, granting alternative communications providers access to the incumbent's network on FRAND terms. There was therefore some sympathy for the position in which some NRAs could find themselves, given that an inability to intervene in cases of poorly performing oligopolies could result in the need to lift existing remedies and return the sector to the old days of a lack of effective competition. In other words, there was some acceptance (at least at an intellectual level) that, if sufficiently negative outcomes materialised from non-colluding oligopolies, regulatory intervention would be justified—the corollary of this reasoning would be that a new regulatory tool would be needed for NRAs to be able to intervene in these situations.

However, despite the recognition of the conceptual issue that NRAs are facing, a significantly greater degree of scepticism was expressed in relation to whether it was possible to improve the regulatory framework to address these gap cases.

The introduction of a new tool—even if there were an intellectual case for one—could do more harm than good if it were not based on clear, robust and objective criteria that NRAs could apply consistently across Europe. Providing new tools to NRAs and/or extending the reach of regulation to new situations creates the risk of poor interventions—i.e. Type 1 errors, in which regulation is applied to situations and markets that do not need intervention.

The view among the participants was that, despite its shortcomings—and no system is perfect—one of the beneficial characteristics of the existing framework was that it tended to produce reliable and robust conclusions. This is a key benefit, as predictability is critical in encouraging investment in this sector.

The key issue discussed in this context was how it could be objectively determined whether a particular oligopolistic market was (or could be forecast to be) a good or poorly performing one that required regulatory intervention. Can a set of objective criteria be developed to identify such a market with a sufficient degree of certainty? While there was no firm conclusion on this issue, it was identified as an area that needed considerable further development before a new test could be introduced into the regulatory framework.

Indeed, it was noted that it is more fruitful to focus on how regulators could avoid the emergence of tight or poorly performing oligopolies using existing regulatory tools and that these should not just be those provided for under the Access Directive (i.e. access remedies and cost orientation), but the wider set of tools covering consumer protection, consumer switching, transparency, spectrum allocations, licence conditions, and universal service obligations (USO). Indeed, in Table 1 it can be seen that some of the defining characteristics of tight oligopolies most notably, high switching costs—are factors that NRAs are currently able to influence with this broader set of tools.

Notwithstanding the points raised above, there was a lively discussion on the role that a modified version of the SIEC test, or some version of the AEC test, could play in a reformed regulatory framework.

In relation to the SIEC test, it was noted that the current tools developed by competition authorities are better suited to analysing the impact of structural changes in the market, where there are clear before/after scenarios (e.g. the effect of a proposed transaction). In such a case, authorities are required to assess, for example, the closeness of competition between merging parties, the loss of a strong competitive force, and/or the strengthening of buyer power due to the structural change. It does not need to make absolute statements regarding the level of competition.

It is therefore much less clear how such a test could be modified to deal with 'steady-state' market conditions absent a transaction, as would be the case under the ex ante regulatory framework.

The AEC test of the UK market investigation regime was discussed as a possible way forward. Despite its long track record of uncovering features in a wide range of markets resulting in sub-optimal outcomes for consumers, as well as providing regulators with a broad set of remedial tools, the round-table participants did not seem to believe that such a test could be successfully included within the ex ante regulatory framework. Of particular concern was the large number of features, conditions and market characteristics that could give rise to an AEC, which often resulted in protracted and wide-ranging investigations, generating significant uncertainty in the markets under review. As a result, the commonly held view was that market investigations are there to be used sparingly and in exceptional circumstances. Incorporating the AEC test into the ex ante regulatory framework could therefore be fraught with problems.

Concluding remarks

The consolidation trend is here to stay. Whether it is through continued M&A activity in the sector, or organic growth from current market participants,¹² the market dominance of the traditional incumbent fixed telecoms operators is being challenged. As a result, the traditional regulatory paradigms are also coming under pressure.

Understandably, NRAs are asking for guidance, as they see that their traditional tools (dominance findings) may no longer be as effective in regulating the sector. The scepticism expressed by the round-table participants about the need to extend the NRAs' powers is also understandable. At a time when the sector needs to attract capital to fund the roll-out of fibre and 4G networks, this could provide the wrong signal to investors if not managed extremely carefully.

This is not to say that an intellectual case from a regulatory economics theory perspective for an extension of the regulatory framework is a weak one. However, regulators may not have done themselves many favours by focusing almost exclusively on the risks and negative features of more concentrated market structures. Instead of this trend being merely a cause for concern, regulators could, in fact, embrace it as an opportunity to finally deliver on the original objectives of the regulatory framework—i.e. to promote infrastructure-based competition, and to offer consumers greater choice of high-quality products at affordable prices, delivered through sustainable regular investment.

The regulatory nirvana would be to oversee an effective competitive interaction between differentiated platforms (fixed, mobile and cable), some of which may also be vertically integrated into content, interacting with an ecosystem of OTT providers competing to offer services over these platforms. The role of the regulator would be to ensure that consumers have sufficient information to make informed choices, that they are able to exercise that choice through efficient and effective switching processes, and that minimum USO safeguards on quality and availability of services are guaranteed.

Indeed, not all European markets may be able to get there immediately. But in those markets where conditions have been met, regulators should be prepared to make bold decisions to remove access regulation remedies. Maybe then regulators can get what they originally asked for.

¹ BEREC (2015), 'Report on oligopoly analysis and regulation', BoR (15)74, June.

² European Commission (2015), 'Wholesale local access provided at a fixed location in the Netherlands: Opening of a Phase II investigation pursuant to Article 7 of Directive 2002/21/EC as amended by Directive 2009/140/EC', C(2015) 3078 final – Case NL/2015/1727.

³ BEREC (2015), 'Opinion on Phase II investigation pursuant to Article 7 of Directive 2002/21/EC as amended by Directive 2009/140/EC: Case NL/2015/1727 – Wholesale local access provided at a fixed location in the Netherlands'.

⁴ As specified in Article 14(2) of the Framework Directive. European Commission (2002), 'Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive)', *Official Journal of the European Communities*, L 108/33, 24 April.

⁵ ERG (2003), 'ERG Common Position on the approach to Appropriate remedies in the new regulatory framework', ERG (03) 30rev1; Cave, M. (2006), 'Encouraging infrastructure competition via the ladder of investment', *Telecommunications Policy*, **30**, pp. 223–37.

⁶ European Commission, 'Digital Agenda Scoreboard Key Indicators', https://digital-agenda-data.eu/datasets/digital_agenda_scoreboard_key_indicators, accessed 17 August 2015.

⁷ BEREC (2015), 'Report on oligopoly analysis and regulation', BoR (15)74, June, p. 48.

⁸ Roller, L.-H. and de la Mano, M. (2006), 'The impact of the new substantive test in European Merger Control', January, http://ec.europa.eu/dgs/competition/ economist/new_substantive_test.pdf, accessed 17 August 2015.

⁹ European Commission (2015), 'Mergers: Commission clears acquisition of Jazztel by Orange, subject to conditions', IP/15/4997, 19 May. European Commission (2014), 'Commission decision of 2.7.2014 addressed to Telefónica Deutschland Holding AG declaring a concentration to be compatible with the internal market and the EEA agreement (Case M.7018 - Telefónica Deutschland/ E-Plus)', (2014) 4443 final, 2 July. European Commission (2014), 'Commission decision of 28.5.2014 addressed to Hutchison 3G UK Holdings Limited and Hutchison 3G Ireland Holdings Limited declaring a concentration to be compatible with the internal market and the EEA agreement (Case M.6992 - Hutchison 3G UK / Telefónica Ireland)', C(2014) 3451 final, 28 May.

¹⁰ UK Enterprise Act 2002, Section 134(1).

¹¹ Office of Fair Trading (2003), 'Market investigation references: Guidance about making the references under Part 4 of the Enterprise Act', para. 2.5.

¹² For example, in the UK, Virgin Media has announced a £3bn investment (Project Lightning) in broadband digital infrastructure to connect an additional 4m homes and businesses. Virgin Media (2015), 'Virgin Media and Liberty Global announce largest investment in UK's internet infrastructure for more than a decade', news release, 13 February, http://about.virginmedia.com/press-release/9467/virgin-media-and-liberty-global-announce-largest-investment-in-uks-internet-infrastructure-for-more-than-a-decade, accessed 14 August 2015.

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