

Agenda

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Divide and conquer? Geographic segmentation of telecoms markets

Ofcom's pioneering decision to define sub-national geographic markets for wholesale broadband access in the UK has led many European regulators to consider geographic aspects in market reviews as a way to target regulation where it is most needed. This article reviews Ofcom's experience and looks at how other regulators are tackling the complex economic and practical issues that arise when defining sub-national markets or imposing differentiated remedies within national markets

In November 2007 Ofcom was the first national regulatory authority (NRA) in the EU to define sub-national geographic markets for wholesale broadband access (WBA).¹ Its decision implies the removal of regulatory obligations in a number of these markets covering 65% of UK homes and businesses where it considers that BT no longer has a position of significant market power (SMP). The European Commission has endorsed Ofcom's analysis, stating that its proposal represents a 'reasonable move towards better targeted regulation, concentrating on those geographic areas where structural competition problems persist'.²

Similarly, during its consultation on the leased lines market review of January 2008, Ofcom is again proposing to define sub-national markets and relax remedies in the most competitive of these (particularly the Central and East London Area).³ Its proposals have not yet been notified to the Commission.

Other NRAs in Europe are taking notice. Earlier this year, the Comisión del Mercado de las Telecomunicaciones (CMT, the Spanish NRA) made public its guiding principles of the regulatory approach for next generation access networks (NGAs). The identification of areas with different competitive conditions in order to impose different remedies was a prominent feature of its proposals.⁴

In response to this trend and the perceived need for more guidance on how to proceed when assessing the definition of sub-national markets and/or the imposition of differentiated remedies in specific geographic areas within a nationally defined market, the European Regulators Group (ERG) has published a draft common position on geographic aspects of market analysis.⁵

These developments are of critical importance for telecoms operators. Indeed, geographic segmentation lies at the core of the European incumbents' position in the debate on the reform of the EU telecoms regulatory framework. As identified by the European Telecommunications Network Operators' Association (ETNO), national incumbents see geographic segmentation of markets and/or remedies as a way of freeing themselves from what they perceive as burdensome access obligations in areas where they face, or have the prospect of facing, competition from other operators.⁶

There are a number of complex economic issues that NRAs will have to tackle in the market analysis process when taking account of the geographic differences that may exist within currently defined national markets. By reviewing the ERG's common position and contrasting it with the experience of Ofcom in conducting the WBA market review, as well as analysing the ongoing debate in other Member States such as Spain, this article provides an overview of the debate. It also considers some of the complex decisions that NRAs may have to make when defining sub-national markets or imposing differentiated remedies within national markets.

Ofcom's approach and the ERG common position

When assessing the geographic aspects of market definition during its analysis of the WBA market, and in line with the SMP guidelines on market analysis and the assessment of market power of the European Commission (the SMP Guidelines), Ofcom started by assessing the scope for demand- and supply-side substitution using the SSNIP framework for market definition.⁷ However, Ofcom's analysis concluded that, in

this case, the SSNIP framework would not be particularly informative for the purposes of identifying relevant geographic markets.

On the demand side, given the high costs associated with relocating, it seemed unlikely that a customer would move house in response to a SSNIP in the area where they currently live. This would have led to excessively narrow markets (ie, at the level of a household), which was unlikely to be representative of the differences in competitive constraints that existed in the WBA market. Similarly, on the supply side, Ofcom concluded that while the scope for providers moving to other areas in response to a SSNIP was significant, the current and planned network deployment from local-loop unbundling (LLU) operators already included those areas where supply-side substitution might take place. In that sense, Ofcom concluded that supply-side substitution based on LLU would not provide additional competitive constraints over and above that identified in the analysis of competitive conditions and, as such, would not be relevant for market definition.⁸

Ofcom's focus therefore switched to the identification of areas with sufficiently homogeneous competitive conditions, as established by the SMP Guidelines.⁹ In practice, this involved a two-step process.

1. Choosing an appropriate geographic unit of analysis. This required striking the right balance between granularity and practicality, and ensuring that the geographic unit is able to capture differences in competitive conditions between areas in a meaningful way. The options considered by Ofcom are

Table 1 Ofcom's options for the geographic unit of analysis in the WBA market

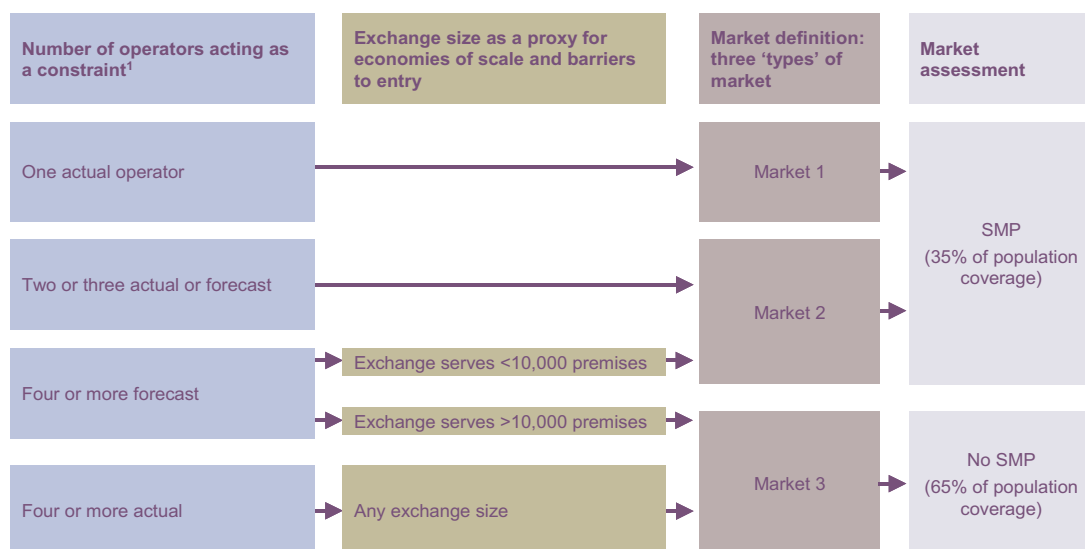
Geographic unit	Number of units
Customer premises	Approximately 28m
Full postcodes	Approximately 1.8m
Postcode areas	Approximately 11,000
Local exchanges	Approximately 5,600
Groups of local exchanges depending on network hierarchy	Depends on network
Counties/metropolitan districts	70
Nations and regions	12

Source: Ofcom (2007), op. cit., Table 3.1.

summarised in Table 1. It chose to use BT's local exchanges since it considered that the obligation to provide LLU imposed on BT in the wholesale local access market was a key driver of the differences in competitive conditions in the WBA market.¹⁰ Evidence that BT had begun to geographically de-average its wholesale broadband prices at the level of individual exchanges also played a key role in Ofcom's choice of geographic unit.¹¹

2. Identifying measurable parameters to assess competitive conditions within the geographic unit of analysis. This required the selection of a consistent set of structural indicators of competition that would allow the aggregation of geographic areas with current and/or prospective sufficiently homogeneous competitive conditions. After reviewing the suitability of a number of indicators, Ofcom chose to use the following:

Figure 1 Summary of Ofcom's wholesale broadband access market review



Note: ¹ A cable operator (ie, Virgin Media) considered as acting as a competitive constraint if it can serve at least 65% of premises in the exchange footprint.

Source: Ofcom (2007), op. cit., and Oxera analysis.

- the number of actual operators present in an exchange—where only operators with at least 10% national coverage are considered so as to filter out niche players;
- the number of operators planning to enter an exchange—as specified by the LLU rollout plans submitted to Ofcom;
- the size of the exchange in terms of number of premises—as a proxy for economies of scale and therefore the likelihood that forecast entry in an exchange will be viable in the long run.

The final element in Ofcom's market definition exercise consisted of aggregating the various geographic units of analysis into 'markets' with sufficiently homogeneous competitive conditions using the indicators described above. This led to the identification of three types of market, as shown in Figure 1, in two of which BT, based on various other indicators, was eventually found to hold SMP. In the third market, covering 65% of population coverage in the UK, Ofcom found that BT no longer held a position of SMP and lifted all regulatory obligations.

The general principles of Ofcom's approach have been reflected in the ERG's common position on geographic aspects of market analysis. The various steps an NRA should take when deciding whether and, if so, how, to incorporate geographic elements in its market analyses are summarised in Figure 2.

Before delving into the detailed geographic analysis the ERG suggests a preliminary analysis assessing, at a high-level, whether a national market seems the most appropriate unit of analysis. This preliminary assessment would look at whether the SSNIP framework suggests the presence of a national market; whether competitive conditions are sufficiently homogeneous across a national market as measured by the presence of a uniform national price by the incumbent operator at a similar level as alternative operators; and/or whether alternative networks have very small localised market shares or almost national coverage with similar prices across the board.

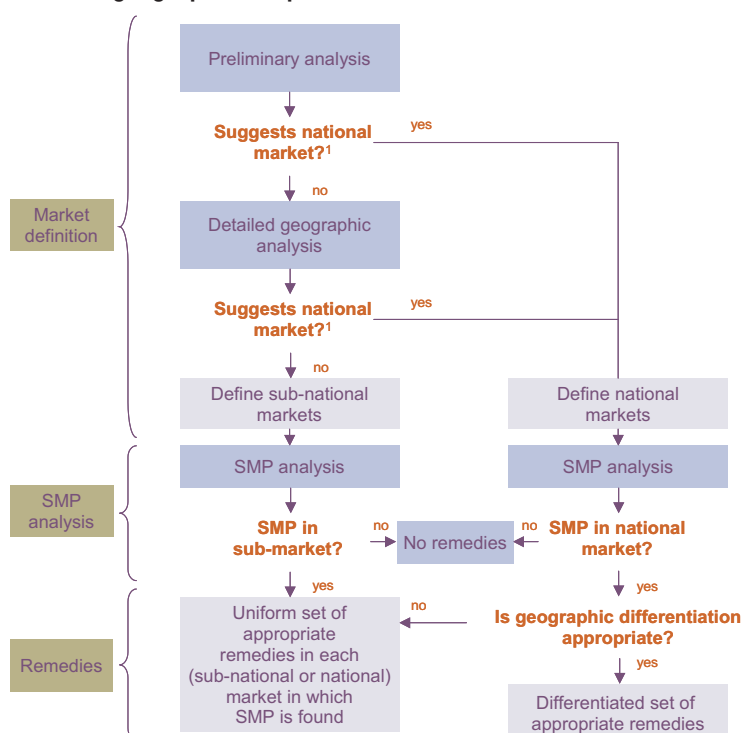
If, on the contrary, the preliminary analysis were to show that alternative operators have significant, but less than national, coverage and the incumbent sets geographically differentiated prices—or its prices are national but there are significant differences with the prices of alternative operators where these are active¹²—there would be strong indications that sub-national markets with heterogeneous competitive conditions exist and a detailed geographic analysis would be warranted.

In line with Ofcom, the ERG's common position suggests that the detailed geographic analysis should proceed in two steps.

- Choosing an appropriate geographic unit of analysis which is sufficiently small such that competitive conditions are homogeneous within it, but sufficiently large such that it remains practical to collect and analyse information.
- Assessing the homogeneity of competitive conditions by considering geographic units against a number of criteria such as barriers to entry, numbers of suppliers, distribution of market shares and price differences. This is similar to the analysis required for SMP assessment purposes, but is not intended to be a fully fledged market analysis. Ultimately, the NRA would need to aggregate areas with homogeneous competitive conditions, as indicated by the application of the criteria.

If either the preliminary analysis or the detailed geographic analysis were to lead to the definition of a national market, NRAs may still be in a position to impose differentiated remedies within a national market. This is the case in situations where competitive conditions differ across geographic areas, but are not sufficient to undermine the finding of a national market.

Figure 2 The ERG's decision-making flowchart for considering geographical aspects in market reviews



Note: ¹ Within this framework 'national market' refers to a market of the size of the incumbent operator's network coverage.
Source: Oxera, based on ERG (2008), op. cit.

This is an area that is likely to be subject to intense debate in the next round of market reviews because it relies on a judgement call about what are considered to be variations in competitive conditions of sufficient strength to define sub-national markets, and what are deemed to be differences which would require only the imposition of separate remedies within a national market. As shown below, the approaches could lead to different regulatory measures.

Back to the nitty-gritty

The WBA market analysis by Ofcom and the ERG's publication of a common position indicate that significant progress has been made in understanding how to account for geographic differences in the electronic communications regulatory framework. Nevertheless, the experience in one particular Member State, or in a particular product market (such as WBA), may not translate directly into another country and/or product market. This is illustrated by the outcome of the WBA market review in Austria where, unlike Ofcom, TKK, the Austrian NRA, defined the market as national in scope on the basis of a common pricing constraint, but imposed different remedies within the national market. TKK based its decision on the fact that Telekom Austria faced smaller incentives to refuse to provide access to competitors in areas where it faced greater competition.

Moreover, while the ERG's publication offers guidance for NRAs on how to assess geographic aspects in market analyses, the devil is in the detail and NRAs still face a challenging task in the next round of market reviews. The NRAs' job will be closely scrutinised by market players, which have a good deal at stake in the outcome of these reviews, particularly in relation to the analysis of the wholesale local access (market 4 of the updated Commission Recommendation on relevant markets¹³) and WBA (market 5 of the Recommendation) markets in the context of NGA investments by incumbents and alternative providers.

The definition of sub-national markets in, for example, the wholesale local access market, may significantly increase the likelihood that regulation will be removed in some of the sub-national markets—ie, incumbents may no longer be required to provide LLU or its equivalent in an NGA world to their rivals. On the other hand, the definition of a national market (combined with an SMP finding in that market) will mean that the NRA must impose some form of remedy in all geographic areas. The debate would then move to the shape and form of these remedies and how light they need to be in those areas within the national market that are deemed to be more competitive.

The CMT's proposal for the Spanish market is novel in this regard. As part of its regulatory objective to

encourage investment in NGAs it has announced that it will not require a physical unbundling of fibre-to-the-home (FTTH) networks comparable with LLU obligations currently in place for the wholesale local access market. However, to the extent that Telefónica, the incumbent, continues to use its legacy copper network (either in its entirety or partially as part of a fibre-to-the-cabinet—FTTC—solution) it will still be subject to its existing LLU obligations. Similarly, the CMT considered that access to ducts and infrastructure is likely to be a key remedy in the wholesale local access market to the extent that Telefónica, as the owner of this infrastructure, is still found to have SMP in the wholesale local access market.

Moreover, the CMT is considering splitting the market into competitive and non-competitive areas on the basis of a geographical segmentation analysis. In non-competitive areas, operators that roll out FTTH networks would be required to provide indirect wholesale access or bitstream; whereas in competitive areas such an obligation would be subject to a 'sunset clause'.¹⁴ Given that the market analysis for markets 4 and 5 has not yet begun in Spain, it is not yet possible to compare the CMT's choice of geographic unit with that selected by Ofcom in its WBA (market 5) review.

An additional challenge that NRAs need to be aware of in the context of NGA investments is the fact that the geographic unit of analysis, if it is based on the existing infrastructure of the incumbent operator (eg, its local exchanges), may cease to be a meaningful dimension to segment the market. Indeed, NGA deployments based on FTTC or FTTH solutions would potentially result in the phasing-out of a large number of exchanges that are currently being unbundled by alternative operators.

In that sense, BT's recent announcement that it plans to invest £1.5 billion in an FTTx network over the next four years is likely to test Ofcom's conclusions on the WBA market.¹⁵ In essence, by phasing out a number of its exchanges and moving the point of unbundling closer to the customer's premises, BT's plans are likely to require a re-definition of both the geographic unit of analysis and the criteria employed to assess competitive conditions and aggregate areas.

Anticipating this concern, European NRAs in countries where the incumbent has already announced its NGA rollout plans may have to select a geographic unit which is much more 'future-proof', such as the political regions or communities in a country. Alternatively, they may have to wait some time for the market to develop and mature before deciding to segment the national market in a particular way.

In any case, given the example of Ofcom's approach in achieving partial de-regulation of a product market within

the European regulatory framework, one would expect to see many more market notifications to the Commission from NRAs incorporating geographic elements in their analysis. A question that emerges is how will the debate unfold in each Member State, and will the Commission

be prepared to endorse the definition of multiple sub-national markets and/or the imposition of differentiated geographic remedies at a time when it is seeking increased harmonisation across the EU?

¹ Ofcom (2007), 'Review of the Wholesale Broadband Access Markets 2006/07: Identification of Relevant Markets, Assessment of Market Power and Proposed Remedies', November.

² European Commission (2008), 'Commission Approves Ofcom Proposal to De-regulate Part of the UK Broadband Market', press release, IP/08/232, February 14th.

³ Ofcom (2008), 'Business Connectivity Market Review: Review of the Retail Leased Lines, Wholesale Symmetric Broadband Origination and Wholesale Trunk Segments Markets', January.

⁴ CMT (2008), 'Principios y líneas maestras de la futura regulación de las redes de acceso de nueva generación (NGA)', January.

⁵ ERG (2008), 'Draft Common Position on Geographic Aspects of Market Analysis (Definition and Remedies)', June.

⁶ Intervention by Michael Batholomew, ETNO Director, in the 3rd International Conference on Broadband Internet, Athens, June 6th 2008.

⁷ The SSNIP (small but significant, non-transitory increase in price) framework is a standard economic tool used in the market definition stage of competition cases. When applied to the analysis of demand-side substitution, for example, the SSNIP framework assesses whether a customer would switch to an alternative product or geographic area if the price of the particular product within a geographic area were to increase by 5% or 10%.

⁸ Ofcom (2008), op. cit., para 3.208, p. 49.

⁹ Paragraph 56 of the SMP Guidelines states that, 'According to established case-law, the relevant geographic market comprises an area in which the undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the conditions of competition are similar or sufficiently homogeneous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different. The definition of the geographic market does not require the conditions of competition between traders or providers of services to be perfectly homogeneous. It is sufficient that they are similar or sufficiently homogeneous, and accordingly, only those areas in which the conditions of competition are "heterogeneous" may not be considered to constitute a uniform market.'

¹⁰ In the UK, all operators active in the provision of xDSL wholesale broadband services rely on the purchase of LLU inputs (either full or shared unbundling) from BT's exchanges. The differences in competitive conditions in the WBA market are therefore strongly correlated with the number and importance of LLU operators in a particular exchange.

¹¹ Ofcom (2007), op. cit., para 3.234, p. 54.

¹² When the incumbent's prices are nationally uniform, but different (and higher) than those of alternative operators, the ERG suggests that this may be an indication of the incumbent having a low market share in competitive areas. When this is taken together with the presence of alternative operators with significant coverage, the uniform pricing policy of the incumbent is no longer a good indication of the existence of a national market.

¹³ Commission Recommendation of December 17 2007 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, 2007/879/EC, OJ, L 344/65.

¹⁴ CMT (2008), 'CMT Encourages the Deployment of Fibre Optic Networks', press release, January 21st.

¹⁵ BT (2008), 'BT Plans UK's Largest Ever Investment in Super-fast Broadband', press release, July 15th.

If you have any questions regarding the issues raised in this article, please contact the editor, Derek Holt: tel +44 (0) 1865 253 000 or email d_holt@oxera.com

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