



European University Institute
Department of Law

**ON THE EDGE OF ANTITRUST:
THE RELATIONSHIP BETWEEN COMPETITION LAW AND
SECTOR REGULATION IN EUROPEAN ELECTRONIC
COMMUNICATIONS**

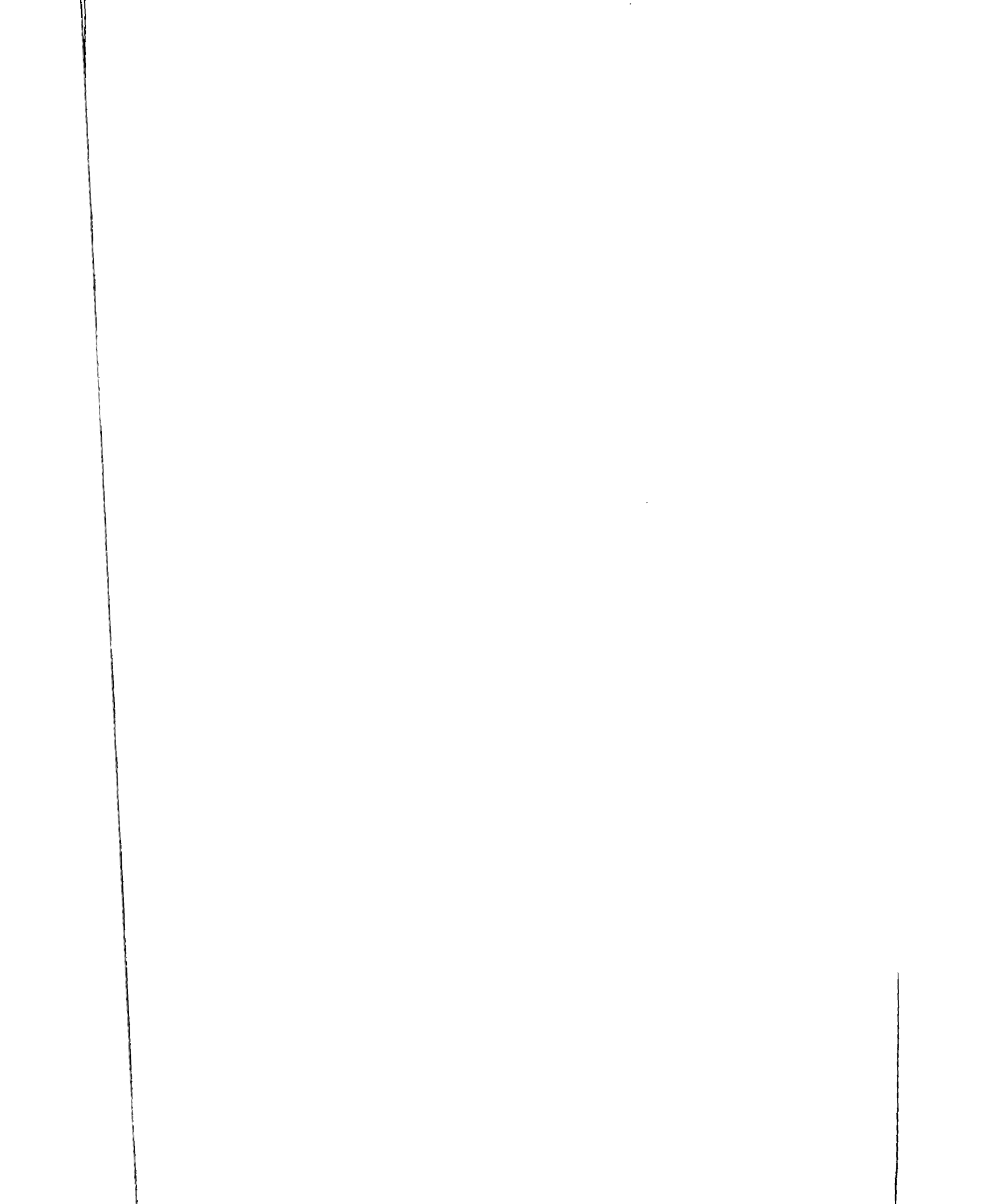
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Thesis submitted with a view to obtaining the degree of
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Florence, October 2006

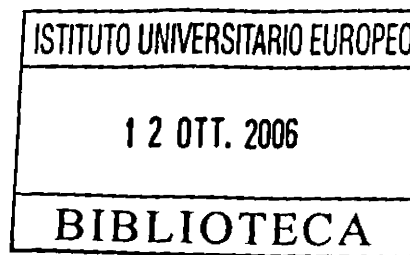






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To Diego Biagioni
Such a free mind ...

FOREWORD

It is a great chance to be able to do a thesis. It is a chance because it gives you one of the most precious things in today's world: time. Time to discover, time to read, time to think, time to discuss, time to meet, time to build oneself ... in some independence. Even more so, to live this chance in Florence is a gift of God (if it exists ...). At the European University Institute, there is a breath of beauty, a wind of freedom, and something more that I can not describe which makes this place really unique, which makes this place changing your life ...

In the meanwhile, a thesis had to be written, and for that, I have benefited so much from the exchanges of ideas with so many people that I'm not sure there is something new and original here (except maybe the mistakes ...) I don't know how I can thank all these people, I just hope that they will give me the opportunity to pay back some of my debt.

First, I would like to thank my supervisors and members of the examining board. Besides his humour, Jacques Ziller has shown an incredible humanity, flexibility and patience. These are very rare qualities but were so indispensable for me. Massimo Motta has the beautiful talent of making economics as easy to understand, if not easier, as law. I have benefited so much from his lessons, from being able to write with him, and importantly I have also appreciated his flexibility and human qualities. Pierre Larouche inspired me all along: at the beginning, I agreed with his thesis, then two years after I disagreed, and finally here I agree again with most of it ... and the conversations with him have always been extremely stimulating. He also has shown great kindness to the point that I'm asking myself if he would not be a Canadian. Finally, Inge Bernaerts accepted ex-ante to read this long text in a very short time and made me benefit from her deep knowledge and experience during several occasions already. Annick Bulckaen was equally helpful and efficient in the final rush.

Then there are all the people I met in the small telecom regulatory world. Undoubtedly, the most important one is Richard Cawley. It is a great chance to work for someone you admire, and I realised how lucky I have been. More I know Richard, more I admire his intelligence, his humour and his ideal. He will always prefer truth to power. Many of the ideas here come

directly from discussions with him, and surely this work would not have been possible without him. I have also been lucky with my two previous bosses, Michel Coipel and Jean-Marie Cheffert. I have been touched by their sensibility and their attention and both of them have influenced me a lot, possibly more than they realise. Three other idealists that I had the honour to meet and frequently discuss with were Yves Blondeel, Christian Hocepied and Robert Queck. They communicated to me their enthusiasm for the telecom regulation, helped me to construct my thinking and will probably recognise some of their ideas. And then, there is my great friend Tony Shortall. It is often not easy, although it is stimulating, to work with someone cleverer than you. But with Tony, his natural optimism and his 'Irish kindness', it was more than easy, it was a pleasure. I had also the chance to discuss with many others experts that were a gold mine for me, in particular Allan Bartroff, Philippe Defraigne, Reinald Krüger, Ralf Nigge, Paul Richards, Peter Scott, and Jean-Paul Simon.

Finally, I would like to thank my family that has always been very supportive and sometimes even more excited than me with this work, and my friends in Belgium and in Italy from whom I learn so much and without whom I would not be the same.

Thus, the most important thing I learned while doing this work was that behind ideas, beyond words, there are people, and that is what counts. It is obvious, but when you understand it, when you live it, it is wonderful.

Brussels, October 2006.

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CHAPTER 1: INTRODUCTION

This dissertation studies the application of competition law and the design and application of sector regulation in the European electronic communications sector as well as the relationship between both legal rules. This sector comprises all the infrastructures of the Information Society: fixed networks (like PSTN, cable or fibre networks), mobile networks (GSM, 3G, WiFi, WiMax) or satellite networks.¹ In particular, I try to answer two questions. The first question is substantive and asks what criteria should be used to determine the scope of a sector regulation that applies in addition to competition law, and relatedly whether a sector regulation should use the same methodologies than competition law. The second question is institutional and asks whether the substantive (or first-generation) harmonisation in Community law should be followed by an institutional (or second-generation) harmonisation.

Rationale for the topic

I chose this topic for several reasons. First, the electronic communications services are an important part of the European economy. They account for € 273 billion in 2005 and had always a stronger growth rate (between 3.8% and 4.7% in 2005) than the average of the economy. They represent the largest segment (44.4%) of the overall Information and Communications Technologies sector, which itself accounts for around 40% of the productivity growth and 25% of the overall growth in Europe.² Thus the development of the electronic communication services is key to the success of the re-launched Lisbon strategy.³ In turn, this development will very much depend on having the right regulatory framework given the prevalence of regulation in the sector.

Second, the sector went through a paradigm shift during the last twenty years as regulation has been turned on its head.⁴ Until liberalisation that took place in the nineties, regulation aimed to prevent entry and control the retail prices of the legal monopolists, which were often

¹ See Article 2 of the 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), OJ [2002] L 108/33.

² Communication from the Commission of 20 February 2006, European Electronic Communications Regulation and Markets 2005 (11th Report), COM(2006) 68, p. 2.

³ Communication from the Commission of 1 June 2005, i2010 – A European Information Society for growth and employment, COM(2005) 229.

⁴ See Viscusi et al. (2005).

integrated in the public administration. Since then, the regulation aims to promote effective competition and for that, favours entry of new private players. Thus, whereas in the past regulation was antagonist to competition law, it is now perfectly in line with antitrust. Such alignment has been pushed so far that now, sector regulation uses the same economic methodologies as antitrust law. The study of this experience is interesting for the electronic communications sector as such, but also for the other sectors because some, like the previous Commissioner Monti (2004a), have pleaded in favour of the extension of the electronic communications regulatory model to other network industries, like electricity.

Third, the regulation of the sector represents an interesting experience of harmonisation without centralisation or managed decentralisation in the European context. In the wake of the principle of subsidiarity, the aim is to ensure harmonisation of policy when necessary, but maintain decentralisation of individual decisions. It is interesting to see if this system works, especially in a fast moving sector where regulation should adapt quickly but at the same time where rapid regulatory decisions and legal certainty are indispensable to safeguard investment incentives.

Fourth and finally, the regulation of the sector is so intertwined with economic, political and technological considerations that it is not any more the law as I was taught at university. The elaboration and the application of the regulation of electronic communications have moved the legal studies in another paradigm, intrinsically linked to its context.

Methodology

The methodology I follow is a mix of empirical considerations and economic principles. I start by assessing how competition law and sector regulation have been applied in practice, on the basis of case studies. Then, I try to inject some economic thinking to rationalize the practice and propose some improvements to the regulatory model.

Outline

To do so, the dissertation comprises five chapters. After this introduction, Chapters 2 and 3 study respectively the application of competition law and sector regulation, Chapter 4 analyses the relationship between both legal instruments and Chapter 5 concludes. Chapters 2

and 3 follow the same structure: the first section is an overview of the legal instrument (being competition law or sector regulation), the second section deals with the substantive law with an analysis of the rules and their application to the sector, the third section deals with institutional design with an analysis of the role of the national and the European institutions, and the fourth section is an assessment of the role of the legal instrument. Chapter 4 brings the threads together: the first section analyses the convergences and remaining divergences between competition law and sector regulation and makes some proposals for an optimal balance between rules and coordination between institutions. On that basis the second section makes some proposals to improve the European regulatory framework in the context of the forthcoming 2006 Review. Finally, Chapter 5 concludes by answering the two questions asked at the outset of the dissertation.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is essential for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent and reliable data collection processes to support informed decision-making.

3. The third part of the document focuses on the role of technology in modern data management. It discusses how advanced software solutions can streamline data collection, storage, and analysis, leading to more efficient and accurate results.

4. The fourth part of the document addresses the challenges associated with data security and privacy. It stresses the importance of implementing robust security measures to protect sensitive information from unauthorized access and breaches.

5. The fifth part of the document concludes by summarizing the key findings and recommendations. It reiterates the importance of a data-driven approach and encourages the organization to continue investing in data management capabilities to stay competitive in the market.

CHAPTER 2: COMPETITION LAW IN ELECTRONIC COMMUNICATIONS

This Chapter describes the application of European competition law in the electronic communications sector. In the first section, I describe the instruments of European competition law (and its relationship with national antitrust laws) and its objectives. In the second section, I analyse the substantive law by making an overview of the instruments of *ex-post* competition law as well as its application in the sector, and then by making an overview of the instruments of *ex-ante* competition law as well as its application to the sector. In the third section, I turn to the institutional design distinguishing the European and the national levels. Finally in the fourth section, I take a critical look at the implementation of competition law.

2.1. TYPE OF COMPETITION LAW AND OBJECTIVES

The different types of competition law

European competition law is mainly composed of two sets of rules.⁵ On the one hand, *ex-post* rules apply after an infringement has been committed and aim to punish it and deter any further violation of antitrust rules. The substantive rules are provided in two Articles of the EC Treaty. Article 81 EC prohibits enterprises' agreements and concerted practices that have as their object or effect the distortion of competition and that have an effect on trade between Member States, unless they have some positive effects (i.e. improve production, distribution, promote technical or economic progress, allow consumers a fair share of the resulting benefit, and do neither eliminate competition nor impose competitive restrictions which are not indispensable). Article 82 EC prohibits enterprises' abuses of dominant position that affect the trade between Member States, unless they may be objectively justified and increase efficiency. The institutional design is provided by Council Regulation 1.⁶ It foresees that the Commission, the national competition authorities and the national Courts should apply the substantive rules and provide for the investigation powers of the Commission.

⁵ On European competition law in general, see Bellamy and Child (2001), Faull and Nikpay (1999), Korah (2004), Van Bael and Bellis (2005), Whish (2003).

⁶ Council Regulation 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Article 81 and 82 of the Treaty, O.J. [2003] L 1/1.

On the other hand, *ex-ante* competition law aims to prevent any anti-competitive behaviour by controlling market concentrations. Substantive and institutional rules are provided by the Council Merger Regulation.⁷ It prohibits concentration that would significantly impede effective competition (in particular by creating a dominant position) and that would have a Community dimension, unless justified by efficiency reasons. The Commission is the sole responsible of such merger review that should be done in two-phases.

To be sure, the distinction between *ex-post* and *ex-ante* branches is not clear cut,⁸ as with its deterring effect, the *ex-post* branch has some *ex-ante* effects, and conversely, the *ex-ante* control may lead to *ex-post* obligations. Yet, I use this distinction as it is largely used in the literature.

⁷ Council Regulation 139/2004 of 20 January 2004 on the control of concentrations between undertakings. O.J. [2004] L 25/1.

⁸ In particular, see Larouche (2002:130-135).

Figure 2.1: The European Competition law

	EX POST		EX ANTE
	Abuse of dominant position	Agreement and concerted practices	Concentrations
SUBSTANTIVE LAW	<i>Article 82 EC</i>	<i>Article 81 EC</i>	<i>Council Regulation 139/2004</i>
Conditions	1. Enterprise 2. Dominant position 3. Abuse 4. Effect on trade between Member States	1. Enterprise 2. Agreement or concerted practices 3. object or effect of distorting competition 4. Effect on trade between Member States	1. Concentration 2. Significant impediment to competition, including dominant position 3. Community dimension
Exemption	(possible defences : objective justifications meeting competition efficiency)	- Improve production, distribution, promote technical or economic progress - Allow consumers a fair share of the resulting benefit - Not impose competitive restrictions which are not indispensable - No elimination of competition	(possible defence efficiency)
Effects	- End of abuse - Fine + Private damages	- End of agreement and nullity - Fine + Private damages	Prohibition
INSTITUTIONAL DESIGN	<i>Council Regulation 1/2003</i>		<i>Council Regulation 139/2004</i>
Institutions	- Commission - National Competition Authorities - National Courts		Commission
Steps	Complain or ex-officio case Enquiry without strict deadlines Possible decision		Compulsory notification, with suspensory effects Phase I (25-35 days) Phase II (90-105 days)

The objectives of European competition law

Neither the EC Treaty, nor the Council Regulations provide for the objectives of the European (ex-post and ex-ante) competitive law. Hence, they depend of the practice of the Commission as controlled by the Community Courts. These objectives have evolved over time⁹ and most authors consider that antitrust law should mainly aim at protecting the consumers' welfare. Indeed recently, the Commission noted about Article 82 EC that¹⁰

4. With regard to exclusionary abuses the objective of Article 82 is the protection of competition on the market as a means of enhancing consumer welfare and of ensuring an efficient allocation of resources. Effective competition brings benefits to consumers, such as low prices, high quality products, a wide selection of goods and services, and innovation. Competition and market integration serve these ends since the creation and preservation of an open single market promotes an efficient allocation of resources throughout the Community for the benefit of consumers. In applying Article 82, the Commission will adopt an approach which is based on the likely effects on the market.

⁹ In the past, and even to some extent today, antitrust law also aimed at the establishment of the internal market and the protection of the 'right' of Small and Medium enterprises to enter the markets. In general, see Amato (1997), Ehlermann and Laudati (1998), Kovacic and Shapiro (2000), Motta (2004:17-30).

¹⁰ DG Competition Discussion paper of 19 December 2005 on the application of EC Article 82 to exclusionary abuses, para 4 and 54. Also Commission Guidelines on the assessment of horizontal mergers, para 8.

2.2. SUBSTANTIVE LAW

After having set the stage of the European competition law, I focus now on its substantive aspects and detail the *ex-post* antitrust and its application to the electronic communications sector as well as the *ex-ante* antitrust and its application to the sector.

2.2.1. Overview of ex post competition law

A. Market Definition

A1. General Principles

The concept of 'market' may have very different meanings depending of the context.¹¹ For the ordinary citizen, a market is the place where buyers and sellers meet. For the economist, a market is the whole of any region in which buyers and sellers are in such free intercourse with one another that the prices of the same good tend to equality easily and quickly. For an antitrust practitioner, a market is any product or group of products and any geographic area in which collective action by all firms would result in a profit maximising price that significantly exceeded the competitive price. In fact, the notion an antitrust relevant market is closely linked to the purposes of competition policy.

As seen, the main objective of antitrust is to control the exercise of market power by the firms in order to ensure an overall efficiency. The first step of any antitrust action is thus to measure market power, which may be defined as the ability to raise price above the competitive level.¹² Unfortunately, such market power can not be detected directly as the competitive price is unknown. Therefore, authorities assess the market power indirectly by relying on other observable indicators. It has been shown that market power is inversely related to the demand elasticity of the firm. But again, this elasticity is often unknown, hence other variables should be used.

It has also be shown¹³ that market power is (1) directly related to the market share, (2) inversely related to the demand elasticity of the market and (3) inversely related to the fringe

¹¹ Massey (2000:12).

¹² Bishop and Walker (2002); Motta (2004: Chapter 3).

¹³ Landes and Posner (1981).

supply elasticity. In turn, (2) the demand elasticity of the market is inversely related to the extent of the market: the more market is defined broadly, the more market demand elasticity is small, and the more a pre-defined level of market share indicates market power. (3) The fringe supply elasticity is directly related to the ease of entry: the more entry is easy, the more supply elasticity is high, and the less a pre-defined level of market shares indicates market power. Hence, market shares are only used as an easily available proxy to measure market power enjoyed by firms and a relevant market is aimed at catching the boundaries of competition between firms for the market shares to give appropriate indications.

In European competition law, market definition principles result from Commission practice and the case law of the Court of Justice.¹⁴ They have been codified in 1997 in a Notice on the relevant market.¹⁵ Accordingly, a relevant market combines a product/service dimension with a geographical dimension. A product/service market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their price and their intended use. A geographic market comprises the area in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas.¹⁶

Thus to define a market, the competitive constraints that discipline the firms' behaviours should be identified. The first constraint comes from the demand side (demand substitution): in the case of a relative price increase, customers would switch to other products or to suppliers located elsewhere. It is not necessary that all customers switch for the price increase not to be profitable, a certain number of them may suffice.¹⁷ It is possible to rank the customers on a scale according their readiness to switch and calculate the number of customers necessary to make the price increase non-profitable. The last customer on the scale who would make the price increase non-profitable is labelled the 'marginal customer', and only the behaviour of this marginal customer is relevant. The second competitive constraint comes from the supply side (supply substitution): in the case of a relative price increase, new

¹⁴ For an overview: Kauper (1996).

¹⁵ Commission Notice on the definition of relevant market for the purposes of Community competition law, O.J. [1997] C 372/5. This Notice presents only ways to define markets and do not curb the Commission discretion in that regard: Case T-210/01 *General Electric v Commission* [2005] ECR II-0000, para 519.

¹⁶ Also Article 9(7) of the Merger Regulation.

¹⁷ DG Competition Discussion paper on exclusionary abuses, para 18.

suppliers or suppliers located elsewhere will start to offer the product in a relatively short timeframe.¹⁸

One way of assessing both substitutions is to apply the 'hypothetical monopolist test' (or SSNIP test, for Small but Significant and Non-transitory Increase in Price) introduced by the US Merger Guidelines.¹⁹ The authority starts with a specified product in a specific area that is artificially supposed to be offered by only one supplier, the hypothetical monopolist. It should then determine whether, the prices of other products remaining constant, a small but significant (between 5 to 10%) and non-transitory price increase would be profitable for the hypothetical monopolist. If this relative price increase would be profitable because the substitution possibilities are limited over a reasonable period (of one to two years),²⁰ the product and the area under review constitute a relevant market. On the other hand, if the price increase would not be profitable because the customer would cease to buy from the hypothetical monopolist, the market should be enlarged, adding other products and/or extending its geographical zone. The authority should continue to broaden the market until the set of products and the geographical area are such that the relative price increase becomes profitable.

A useful corollary of the SSNIP test can be helpful in certain circumstances. As noted by Cave et al. (2006:11-14), this corollary, known as the Critical Loss Test, asks the following question: if set of services X is not to be a market, how much switching of consumers in response to the 5-10% price increase must be present to make the increase unprofitable? In summary, the Critical Loss Analysis may be described as involving the following steps: (1) estimate the 'incremental margin' (i.e. the margin between price and costs assessed by using observations about price and variable costs) and calculate the 'critical loss' (i.e. the volume of sales that would make a given percentage price increase unprofitable for a hypothetical monopolist); (2) estimate what the 'actual loss' in sales would be (using available demand data, including elasticity estimates for the 'candidate market') for the price increase; and (3) if Actual Loss exceeds Critical Loss, the market needs to be broadened.

¹⁸ European competition practice distinguishes between supply substitution and potential competition. The first refers to short term supply substitutability and is taken into account at the market definition stage. The second refers to long term supply substitutability and is taken into account at the dominance assessment stage: Commission Notice on market definition, para 20-24.

¹⁹ Also Croccini (2002).

²⁰ See also DG Competition Discussion paper on exclusionary abuses, para 35.

In electronic communications sector,²¹ there are at least two main types of relevant markets to consider, that of services or facilities provided to end users (retail markets) and that of access to facilities necessary to offer such services provided to the operators (wholesale markets). Antitrust authorities should start by defining the retail product markets taking into account demand-side and supply-side substitutions. This definition should be primarily based on the respective needs of each customer categories (large, medium and small corporate customers as well as individuals) and not necessarily on the technology used. To be sure, customers' needs and preferences may depend on specific technologies. For instance, fixed and mobile telephony are not in the same market because of the additional mobility feature offered by the latter,²² But as technological convergence takes place, consumers' preferences are not any more linked to technologies. For instance, consumers may be indifferent to receive their broadband Internet connections via Digital Subscriber Line technologies over telecom copper pair or via cable modem over broadcast cable infrastructure or may be indifferent of getting voice over Public Switch Telecom Network or over Internet Protocol.²³

On the basis of retail markets definition, the authorities define the linked wholesale or intermediate product markets as the wholesale customers are -by identity- the retail suppliers: authorities have to determine the necessary service or the infrastructure for an operator to enter a specific retail market.²⁴ For instance, if it is considered that Digital Subscriber Lines and cable modem are part of the same retail Internet broadband access market, then it could be deduced that, for that purpose, telecom and cable infrastructures are part of the same wholesale market.²⁵ At this stage, the consideration of supply-side substitution is of the utmost importance for the markets should not be defined too narrowly.²⁶

²¹ See Commission Guidelines of 9 July 2002 on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services, O.J. [2002] C 165/6, herein *Guidelines on market analysis*, para 33-69. Up to now, the Community Courts did not give many indications on the markets definition in the specific sector of electronic communications. In Case T-221/15 *Endemol* [1999] ECR II-1299, para 106, the Court of First Instance stated that the Commission enjoys an important discretion with respect to assessment of economic nature. See three studies made for the Commission services: Squire-Sanders-Dempsey and WIK Consult (2002); Europe Economics (2002); and Bird and Bird (2002).

²² This has been a constant practice of the Commission, see inter alia: *Pirelli/Edizione/Telecom Italia*, para 33.

²³ See Section 3.2.2.A.

²⁴ However, see *infra* on the issue of self-supply.

²⁵ In the U.S., some consider that DSL and cable should be part of the same relevant market: Crandall et al. (2002).

²⁶ Also in this sense, Madiega (2006).

Turning now to the geographical scope of the market, it is used to be determined by the existence of legal and other regulatory instruments and by the area covered by the network. Some noted a tendency towards a Pan-European dimension of the markets. If previously, telecommunications markets were divided along national borders due to regulatory and technical restrictions, nowadays, electronic communications services can increasingly be provided or sold across national borders due to the liberalisation and the harmonisation of technical standards and licensing procedures across Europe. Nevertheless, the majority of electronic communications markets still maintain a national²⁷ or even infra-national²⁸ dimension.

*A2. Difficulties of application*²⁹

The application of such economic antitrust methodologies poses several problems in the electronic communications sector. Some are general (cellophane fallacy and treatment of self-supply) whereas other are linked to the specific characteristics of the sector (calculation of the mark-up and importance of having a dynamic view of market definition, problems created by two-sided markets or the Calling-Party-Pays principle, and the possibility to define market route-by-route.)

Imperfect information

The first difficulty applies generally to all antitrust cases and is related to the lack of necessary information to empirically conduct the HMT test. Indeed, a rigorous application of such test requires a vast amount of data on the elasticity of the demand etc that are often not

²⁷ Markets have been considered national for call termination (*Telia/Sonera*, para 51), the local loop (*Telia/Telenor*, para 121); international roaming (*Telia/Sonera*, para 49). They have been considered to be national or covering linguistic region for broadcast transmission networks and the linked ancillary services (*MSG Media Service*, para 45; *Nordic Satellite Distribution*, para 71; *DeutscheTelekom/Beta Research*, para 23-24; *BiB/Open*, para 44).

²⁸ Markets for national leased lines may be narrower than national (possibly consisting of 'larger metropolitan' and 'rest of country' segments) given the geographically unequal development of competition in most Member States. On the other hand, markets for international leased lines appear to be at least European if not global (Commission Working Document of 8 September 2000 on the initial results of the Leased Lines Sectoral Inquiry, p. 11).

²⁹ Dobbs (2006), Europe Economics (2002), Hocepiéd (2004), Richards (2006a).

available to the authorities and experience to date shows that the HMT test is mainly used as a conceptual framework or as a thought experiment to form conjectures.³⁰

Cellophane fallacy

The second difficulty applies generally to all ex-post antitrust cases and is related to the lack of knowledge of the competitive price on which the 5-10% increase should be based. As this competitive price is often unknown, the authorities may be tempted to rely on the prevailing price in the market. But this existing price may be higher than the competitive price because firms have already abused their market power. Using prevailing price leads to an overly broad defined market, and possibly no finding of dominance where there is indeed market power. This risk is known as the cellophane fallacy after a US case where the Supreme Court fell the trap and defined too broadly a cellophane market.³¹ Additionally in electronic communications sector, many prices are regulated and they will be presumed, in the absence of indications to the contrary, to be set at a competitive level and should therefore be taken as the starting point for the SSNIP test.³²

Self-supply: Hypothetical/notional market and indirect retail pricing constrain

The third difficulty applies to cases dealing with vertical chain of production and relates to the consideration of self-supply in the market definition. As Hogan & Hartson and Analysis (2006) put it, there is several cases in the electronic communications sector where self-supply plays an important role in the wholesale market definition

³⁰ Cave et al. (2006:11), Schwarz (2006:6).

³¹ *United States v du Pont de Nemours*, 351 U.S. 377 (1956). See also DG Competition Discussion Paper on exclusionary abuses, para 13-16.

³² Commission Guidelines on market analysis, para 42.

Table 2.1: Role of self-supply in the electronic communications sector

Market	Market description	Key question related to self-supply
Market 8	Call origination on the public telephone network at a fixed location (e.g., carrier selection and pre-selection service)	Should on-net calls be included in the market share calculation?
Market 12	Wholesale broadband access (e.g., bitstream products)	Should cable-based services be included in the market definition?
Market 13/14	Wholesale terminating trunk segments of leased lines (e.g., half-links)	Boundaries between terminating and trunk segments, defined by the NRA, often do not match existing commercial products. In this context, how can self-supply help quantify and assess operators' market share?
Market 15	Access and call origination on public mobile telephone networks (e.g., MVNO agreement)	Mobile operators are usually vertically-integrated and genuine MVNO agreements are currently rare. In this context, could the inclusion of self-supply be avoided in the market definition and calculation of market share?

Source : Hogan & Hartson and Analysys (2006:109)

Two hypotheses should be distinguished depending of the existence of a wholesale demand. In the first hypothesis, there is a potential wholesale demand although there is no wholesale transaction. That may be the case when a newcomer requires access to a facility whose access has not been granted before. In this case, the exercise of defining a wholesale market may sound artificial because it creates a market in law that does not exist in practice and there is a risk that the different parts of the production chain are choked up into numerous artificially narrow relevant antitrust markets.³³ However, this is only a superficial view as there are only three conditions for a market to be defined: (1) the product or service is indispensable to carry an activity, (2) there is a potential customer demand, and (3) there is a technical possibility of offering the service and granting third party access.³⁴ Adding a fourth condition related to the existence of current supply to third parties could slow down innovation and have very distortive effects. Indeed, this condition would give incentives to the owner of the local loop to systematically deny any access, in order to ensure that its facility will not be defined as a market and ultimately that it will not be found dominant. Thus in *IMS Health*,³⁵ the Court of Justice held that

³³ Larouche (2000b:203-211), Richards (2006a:206-209). This issue will become even more problematic as the industry moves towards New Generation Networks and multiple slightly differentiated retail services will be based on the same broad infrastructure.

³⁴ Also in favour of the possibility to define an hypothetical market: Europe Economics (2002:51).

³⁵ Case C-418/01 *IMS Health v NDC Health* [2004] ECR I-0000, para 44. See along the same lines, the comments by the Commission in Case HU/2004/96. See also Case T-221/95 *Endemol v Commission* [1999] ECR II-1299, para 107, and Case T-310/01 *Schneider Electric v Commission* [2002] ECR II-4071, para 281-297 where the Court of First Instance considered that the Commission should have include self-supply in the market definition.

44. (...) it is sufficient that a potential market or even hypothetical market can be identified. Such is the case where the products or services are indispensable in order to carry on a particular business and where there is an actual demand for them on the part of undertakings which seek to carry on the business for which they are indispensable.

And the Commission held that³⁶

The fact that at the wholesale level no access to third parties is granted does not exclude the possibility to analyse the relevant market. Where the majority of or all supply on the relevant market is captive, i.e. provided internally by vertically integrated mobile network operators, the structure of supply at the wholesale level can be derived from supply at the retail level. On the other hand, although retail market conditions may inform an NRA of the structure of the wholesale market, they may and need not in themselves be conclusive as regards the finding of SMP at the wholesale level (...)

To take into account the third condition related to the technical possibility to offer the service, the Commission distinguishes between self-supply of the incumbent and the new entrants³⁷

In many cases the incumbent is the only firm in a position to provide a potential wholesale service. It is likely that there will be no merchant market as this is not in the interest of the incumbent operator. Where there is no merchant market and where there is consumer harm, there is the need to construct a notional market when pent-up demand exists. Here the implicit self supply of this input by the incumbent to itself should be taken into account.

In other contexts there are alternative firms that also self supply the necessary inputs. In these cases, third party access seekers could potentially move their business to such alternative operators. However, this is normally limited by capacity constraints, the potential lack of ubiquity of these networks, and the likelihood of the alternative providers entering the merchant market quickly. In general self supply by alternative operators will only be considered where these constraints are not present, which is unlikely in practice.

Note that to define such hypothetical market, Cave et al. (2006:15-16) propose other conditions. They submit that it would be justified to construct a notional relevant wholesale market (and include the self-provided inputs of the existing operators) if commercial wholesale offerings were likely to develop under competitive market conditions. In other

³⁶ Annex to the Communication from the Commission of 6 February 2006 on Market Reviews under the EU Regulatory Framework: Consolidating the internal market for electronic communications, COM(2006) 28, p. 7.

³⁷ Explanatory Memorandum of the draft Second Commission Recommendation of 28 June 2006 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation, SEC(2006) 837, p. 15.

words, a notional market may be defined when a vertically integrated operator would have an incentive to offer a wholesale product to third parties under competitive conditions (i.e. when the new entrant has advantage over the incumbent's downstream arm and that the incumbent's economies from a vertically integrated value chain do not outweigh this advantage). However, such conditions are not in line with the *IMS* case and are more difficult to apply in practice as the authority would have to imagine what would be the market conditions under a competitive situation to decide how markets should be defined.

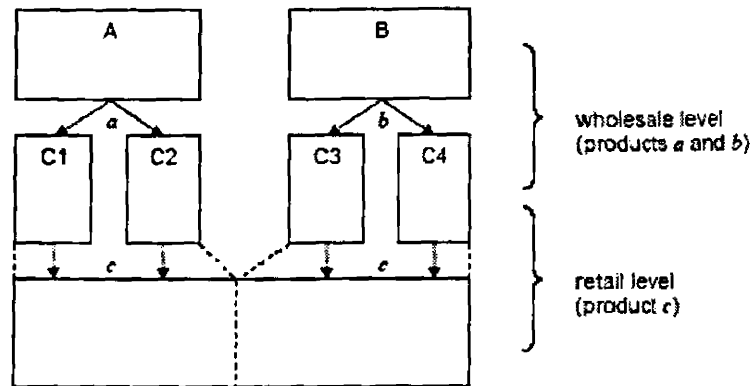
The implication of the hypothetical market is that a market for local loop or for bitstream³⁸ may be defined if for instance an incumbent offers retail DSL services, even though the incumbent does not currently grant access to its local network.³⁹ Similarly, it should be possible to define a market for MVNO access although no mobile operator is giving wholesale access to its network.

The second hypothesis is when there is no wholesale demand and yet the wholesale market definition may have to include self-supply because of the indirect retail pricing constrain. In other words, when defining a wholesale market, the authority should not only look at wholesale substitution, but also at the retail substitution. If it does not do so, the authority would end up protecting competitors instead of protecting competition. To clarify the matters, I follow Schwarz (2006). As illustrated in Figure 2.2, suppose A to be a hypothetical monopolist of an input a , which is supplied to the companies C1 and C2, which produce product c that is supplied at the retail level. B offers product b (which is differentiated from a) at the wholesale level, which is supplied to C3 and C4, which also offer product c at the retail level.

³⁸ See the definitions of those terms in the Glossary.

³⁹ The market definition may be more complex if the incumbent does not offer retail DSL services, but newcomer wants access to the local loop to offer DSL services. It seems to me that even in this case, a market for local loop or bitstream may be defined, otherwise innovation may be slowed down. That does not mean that every type access requested by a new entrant should be defined as a market, some substitutability test having to be done.

Figure 2.2: Two wholesale markets linked via the retail level



Source: Schwarz (2006:7)

The question is what happens if A increases its price from 5 to 10%. At the *wholesale level*, (1) the undertakings C1 and C2 might switch to supplier B (demand-side substitution), and/or (2) supplier B might take up the production of product *a* (supply-side substitution at the wholesale level). At the *retail level*, C1 and C2 facing an increase in input prices, usually will be forced to increase prices. (3) As a response to the price increase, consumers might switch to undertakings C3 or C4. C1 and C2 lose sales and will, as a consequence, reduce their demand for input *a*. This may well make a 5-10% price increase by the hypothetical monopolist A unprofitable. Only a hypothetical monopolist producing *a and b* could then (in the absence of further alternative inputs) profitably impose such a price increase at the wholesale level if demand-side substitution *at the retail level* is sufficiently strong. Thus, wholesale market definition depends to supply- and demand-side substitution at the wholesale level, and to substitution patterns at the retail level.

This indirect retail constrain was already intuitively recognised by Advocate General Jacobs in its opinion in *Bronner* when arguing that⁴⁰

58. [...] it is important not to lose sight of the fact that the primary purpose of Article [82] is to prevent distortion of competition - and in particular to safeguard the interests of consumers - rather than to protect the position of particular competitors. It may therefore, for example, be unsatisfactory, in a case in which a competitor demands access to a raw material in order to be able to compete with the dominant undertaking on a downstream market in a final

⁴⁰ Case 7/97 *Bronner v MediaPrint*.

product, to focus solely on the latter's market power on the upstream market and conclude that its conduct in reserving to itself the downstream market is automatically an abuse. Such conduct will not have an adverse impact on consumers unless the dominant undertaking's final product is sufficiently insulated from competition to give it market power.

59. It may be noted that in *Commercial Solvents Advocate General Warner*, in coming to the same result as the Court, also considered the position on the downstream market:

'I do not think that the question whether the market for the raw materials for the production of a particular compound is a relevant market can, logically, be divorced from the question whether the market for that compound is a relevant one. The consumer, after all, is interested only in the end product, and it is detriment to the consumer, whether direct or indirect, with which Article [82] is concerned.' (Opinion in *Joined Cases 6/73 and 7/73*, p. 266).

The difficult question is to quantify the indirect retail effect and decide at which strength retail elasticity would be sufficient to constrain the wholesale monopolist. Using the reformulation of the Marshall-Hicks formula for the elasticity of derived demand, Schwarz (2006:10-12) shows that wholesale demand will be more elastic (hence impact of the constraints via the retail level will in general be stronger) when (i) the larger the elasticity of demand at the retail level is; (ii) the more responsive the retail price is to a change in the wholesale price or the higher the pass-through is (i.e., the more competitive the retail level is), and (iii) the larger the ratio of wholesale to retail price is. According to Cave et al. (2006:19), the indirect pricing constraint appears to become large enough where the share of the wholesale input in the retail price is over 50 %.⁴¹

In practice, the most controversial question in the sector has been the effect of the retail competition between ADSL and cable on the definition of the wholesale access market.⁴² To decide, each of the three elements above has to be empirically measured. According to Schwartz (2006:16), (i) the elasticity of demand between ADSL and cable has been estimated in the US between -1.1184 and -1.462; (ii) the pass-through varies between 0.5 (monopoly with linear demand at the retail level) and 1 (competitive retail market); and (iii) the cost of

⁴¹ Note that if the indirect pricing constraint from short-run retail demand substitution is not strong enough to be reflected in the market definition, it may still have to be taken account of in the market analysis as a factor limiting the market power of incumbent operator.

⁴² Another issue is whether a hypothetical monopolist on the transit market would be constrained by retail demand substitution. Cave et al. (2006:19) argue that it will not because the share of the wholesale cost in the retail price of a call minute is lower than 10 %, hence the impact of a wholesale price increase on wholesale demand for transit would be largely diluted.

wholesale access in the retail product has been estimated between 0.45 (in the UK) and 0.8 (in Austria).⁴³ On the basis of those estimates, he concludes that: "it can be said that there may be instances where the substitution between DSL and cable at the retail level is sufficient to constrain DSL at the wholesale level. However, an a priori conclusion that this will always be the case seems unjustified. Unless the elasticity of retail demand is not considerably larger than the US estimates, it appears that the constraints via the retail level between DSL and cable will only be strong enough if the cost of bitstream access relative to the retail price as well as the coverage of cable networks in relation to DSL is significantly larger than 0.5". Moreover, as the ratio of wholesale to retail price is larger for the wholesale access market than for the unbundling of the local loop (because the former include more wholesale services than the latter), there would be situations where the indirect pricing constraint would be sufficient to discipline a hypothetical monopolist on the wholesale broadband access market, but not on the unbundled market.⁴⁴

Necessary market-up and Schumpeterian markets

The fourth difficulty applies to antitrust cases in sectors characterised by high fixed sunk costs and continuous innovation. A benchmark price based on the marginal cost and a small mark-up (5 to 10%) as used in the hypothetical monopolist test may be insufficient to recoup these fixed costs, and therefore would lead to an overly narrow market definition (and consequently a finding of market power where actually there is none.) As put by Gual (2003:12),⁴⁵ the benchmark and the mark-up should generate sufficient revenues to cover fixed costs without leading to excess profit. Moreover, the sector is often driven by important and continuous innovation and the competition often takes place *for* the market instead of *in* the market.⁴⁶ The hypothetical monopolist test leads to a static measure of the degree of competition in the market and is a poor guide to dynamic competition, often more relevant in electronic communications. Again, it may lead to a too narrow market definition, or at least a too frequent finding of market power.

⁴³ Similarly, Cave et al. (2006:71) submit that the cost share of unbundled loops in broadband supply is very low, hence the exclusion of cable in the wholesale market definition is justified, but that the case for inclusion of cable WBA might rely on the much higher cost share (about 60%) of WBA in retail prices.

⁴⁴ See Cave et al. (2006:77).

⁴⁵ See also Katz (2004:253).

⁴⁶ Evans and Schmalensee (2001).

More generally, standard antitrust principles are adapted to stable industries where competition is mainly in price but need to be substantially modified to deal with innovation and the Schumpeterian creative destruction competition.⁴⁷ When markets are dynamic, some monopoly power (as defined with static method) may increase welfare if it is necessary to support innovation and if it is constrained by the threat of creative destruction.

Two-sided market

The fifth difficulty applies to two-sided or multi-sided markets.⁴⁸ This is the case when the platform can affect the volume of transactions by charging more to one side of the market and reducing the price by the other side by an equal amount. When the two sides cannot internalise externalities between them, the role of the platform can therefore be the one of an intermediary, finding the right pricing structure between the two sides and allowing trade to take place.⁴⁹ Because of the inter-group network externalities, socially-optimal prices in two-sided markets typically depend on price elasticities of demand, intergroup network effects, and costs. Thus market definition is a complex exercise that can be conducted by taking into account market realities and avoiding mechanical applications of standard definitions and tools. Indeed, the Commission itself recognises that standard antitrust principles need to be modified to deal with two-sided markets where there are strong interactions between each side of the markets.⁵⁰ Thus when markets are two-sided, regulators should not only look at the level of the price on each side of the market, but also at the structure of the price between the different sides because it may be efficient that one side is charged below whereas the other side is charged above costs.⁵¹

⁴⁷ Alleman and Rappoport (2005); Audrestch et al. (2001), Baake et al. (2005), Dobbs and Richards (2004), Evans and Schmalensee (2001), Posner (2001: Chapter 8), Richards (2006b).

⁴⁸ On this issue, see Evans (2003), Evans and Noel (2005). For instance, the free-to-air broadcasting is a two-sided market between end-users and advertisers: Explanatory Memorandum of the Draft Second Recommendation on relevant markets, p. 43.

⁴⁹ Cave et al. (2006:24).

⁵⁰ DG Competition Discussion paper on exclusionary abuses, para 67.

⁵¹ Rochet and Tirole (2004). Moreover, as noted by Cave et al. (2006:28) even if a two-sided market is *assumed* to be perfectly competitive, the market does *not* work, that is, the market does not produce efficient outcomes. This is in stark contrast with standard one-sided markets: when these markets are competitive, they are also efficient and no regulator should interfere with their working. In two-sided markets, instead, privately chosen prices, even when ideally set by competing firms, will differ from socially optimal prices. An appropriate intervention can increase consumer and social welfare. Therefore there is an argument to say that 2SPs are to be subject to more rather than less regulatory oversight. By the same token, in case intervention is needed, regulation has to be appropriate and informed by the theory and analysis of 2SPs. The application of one-sided analysis to 2SPs might produce serious regulatory failures.

Single network market

The sixth difficulty applies to markets characterised by externalities that may lead to very narrow market definition. For instance, in the European fixed and mobile industry, the prevalent tariff principle is the so-called 'calling-party-pays': the called party -who chooses the network which has to be called- does not pay for the call, whereas the calling party -who usually can not choose the network- has to pay for the call. There is a dichotomy between the person who pays and the one who chooses, or in other words, the called party imposes a negative externality on the calling party. It is thus plausible that the called network may increase profitably its termination charges⁵² because on the one hand, the calling network (and ultimately the calling customer) has no choice but to use the network of the called person, and on the other hand, the called customer will not switch to another network as he does not pay the termination charge. Each network may thus be defined as a separate market with regard to wholesale termination.⁵³ Obviously, the market definition is an empirical exercise and others factors may constrain the pricing behaviour of the called network. For example, the person called may be sensitive to the price to be reached (in case of close users groups or family and friends when the called party actually pays the invoice of the calling party), or there may be a choice between the different networks to be used (using call back or multiple SIM cards if available.)⁵⁴ If these factors are present, termination may be defined more broadly and comprise all the mobile networks of a specific country. But the general point is that market may be defined very narrowly due to the specific tariff structure.⁵⁵

⁵² The termination charges are the wholesale charges that the calling network pays to the called network to terminate a call. For instance, if a customer of Vodafone calls a customer of Orange, Vodafone will pay to Orange a charge for the call to be terminated on the Orange's network.

⁵³ See Explanatory Memorandum of the Recommendation on relevant markets, p. 19-20 and 32-34. Decision of the Competition Commission of February 2003, *Vodafone, O2, Orange and T-Mobile: Reports on references under section 13 of the Telecommunications Act 1984 on the charges made by Vodafone, O2, Orange and T-Mobile for terminating calls from fixed and mobile networks*, available at <http://www.competition-commission.org.uk/inquiries/completed/2003/vodafone/index.htm>. Case M.2803 *Telia/Sonera*, para 32; Case M.4035 *Telefonica/O2*, para 10, Cave et al. (2006:87). The single network definition is not based, nor does imply, that mobile termination is an essential facility or a natural monopoly (as the Commission argues wrongly in Annex II of its Communication on Market Reviews, p. 5 and 7). Mobile networks do not have the characteristics of the essential facility as there are numerous in each country. In addition, the market failure related to mobile termination, i.e. negative externality, is not the same as the market failure related to essential facility, i.e. natural monopoly. In addition, the literature and case-law on secondary markets (as summarised in DG Competition Discussion paper on exclusionary abuses, para 243-265) is irrelevant here. Termination can not be considered as a secondary product because the customer does not pay for it.

⁵⁴ The call back means that the called party will call back the calling party on the latter's network. The multiple SIM cards means that the mobile handset of the person called contains several SIM cards, hence several networks may be used to reach him.

⁵⁵ On the economics of regulating termination, see Armstrong (2002), Laffont and Tirole (2000), Vogelsang (2003).

Route-by-route market

Finally the seventh difficulty applies to all network industries where products are geographically bound. In others words, there is a geographical aspect in the product dimension definition that should not be confused with the geographical dimension definition. The product definition may be based on the route to be followed, or on the network to be used. Ultimately, the route-by-route approach implies that every combination of two points (like the link between two telecom customers) is a separate product market. This has been adopted in some airlines competition cases⁵⁶ because the time to travel is substantial and even the most frequent flyers do not fly more than several times a week. However, this approach makes less sense in telecom⁵⁷ because the signals travel very quickly on networks (hence a customer may be indifferent if his conversation is routed directly between London and Paris or have to go via Amsterdam), and the tariffs are usually averaged across different routes for economic and legal reasons.⁵⁸ Therefore, it is more appropriate to adopt an approach by network or cluster of products, possibly sliced according to the economic conditions to deploy its different parts (distinction between local and trunk segments.)⁵⁹

Product market may also be defined according to the geographical component of the customer requirements, which is related to the coverage, the quality, the pricing and the nature of the service under review. For instance, residential customers have low or average quality requirements that can be met by interconnecting different networks, hence they tend to be less sensitive to the network coverage of their telecom suppliers. On the other hand, business customers can be very sensitive to the quality of the call, hence pay a lot of attention to the network coverage under direct control of their suppliers. Therefore, the product market for large customers should be limited to large international networks, whereas the market for residential customers should encompass more geographically limited networks.⁶⁰

⁵⁶ Case C-66/89 *Ahmed Saeed* [1989] ECR I-803, para 40-41.

⁵⁷ Larouche (2000b:418).

⁵⁸ Nevertheless, if these elements are not present, markets may be segmented on a route basis. For instance, international voice telephony services may be broken down by individual call traffic routes between any country pair (*BT/MCI (II)*, para 19; *BT/AT&T*, para 84; *BT/Esat*, para 19; Case UK/2003/6 (UK wholesale international services)).

⁵⁹ Also in this sense, Cave et al. (2006:20), Katz (2004:253).

⁶⁰ Larouche (2000b).

Conclusion

If all these difficulties do not invalidate the use of antitrust principles in electronic communications sector,⁶¹ they should be kept firmly in mind. First, in this sector more than elsewhere, authorities should ensure that market definition is only used as a mean to assess market power and not as an end in itself.⁶² Second, market definition is not the sole means and economists have devised others methodologies to measure market power directly.⁶³ Third, market definitions are not unique. In practice, even within the same area at the same time, market definition can vary depending of the competition problem under investigation.⁶⁴

B. Dominant position

Once the relevant market has been defined, the market power should be assessed to determine if operator enjoy dominant position. A dominant position has been defined by the Court of Justice in *United Brands*⁶⁵ as

65. (...) a position of economic strength (...) which enables the undertaking to prevent effective competitive being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers.

Such dominant position may be held by one firm (single dominance) or several ones (collective dominance).⁶⁶

Single dominant position

The assessment of single dominance⁶⁷ is not an easy task that is limited to a review of an exhaustive check list, but requires a thorough and overall analysis of the economic

⁶¹ Commissioner Monti (2000).

⁶² Katz (2004:253).

⁶³ Bishop and Walker (2002: Part III), Motta (2004:124-134).

⁶⁴ More obviously, market definition evolves over time, hence the precedent value of a specific case is limited: Case T-210/01 *General Electric v Commission* [2005] ECR II-0000, para 118.

⁶⁵ Case 27/76 *United Brands*. See also Case 85/76 *Hoffman-La Roche*, para 38.

⁶⁶ I do not deal here with the sometimes refereed concept of super dominant position: Case T-210/01 *General Electric v Commission*, para 550, Whish (2003:189-190).

⁶⁷ DG Competition Discussion Paper on exclusionary abuses, para 28-42; Commission Guidelines on market analysis, para 72-82; ERG Revised Working Paper of September 2005 on the SMP concept for the new regulatory framework, ERG (03) 09rev3, Section 3.

characteristics of the relevant market to determine if one undertaking enjoys sufficient market power to behave independently.⁶⁸ To do so, the antitrust authority should look at three sets of criteria: the market position of the allegedly dominant undertakings and its rivals, the barriers to entry and expansion and the market position of the buyers. The existence of a dominant position may derive from several factors which, taken separately, are not necessarily determinative.⁶⁹

First, the authority should assess the level, the evolution and the distribution of the market share. If an operator has less than 25% market share it will be presumed not to be dominant,⁷⁰ whereas if it has more than 40-50% market share it will be presumed to be dominant.⁷¹ Both presumptions are refutable in particular according to the concentration of the market or the evolution of shares over time.⁷² The market shares should preferably be measured in value because telecom services are differentiated, and not in volume or with the number of lines or termination points.⁷³

Second, the authority should determine the level of barriers to entry and expansion. The Commission takes the broad Bainian conception of entry barriers⁷⁴ as it defines them as 'factors that make entry impossible or unprofitable while permitting established undertakings to charge prices above the competitive level'.⁷⁵ Thus, entry barriers that may lead to a dominant position are of four types: (1) structural barriers of legal and regulatory nature, for instance when legislation limits the number of participants due to the rarity of resource to be

⁶⁸ Commission Guidelines on market analysis, para 78 and ERG Revised Working Paper on SMP, para 6. See also Case 87/76 *Hoffman-La Roche*, para 39.

⁶⁹ I follow here the methodology proposed by the DG Competition Discussion paper on exclusionary abuses, para 28.

⁷⁰ Recital 32 of the Merger Regulation.

⁷¹ Case 85/76 *Hoffman-La Roche*, para 41; Case C-62/86 *Akzo*, para 60; Case T-395/94 *Atlantic Container Line*, para 328.

⁷² Note also that more the product are differentiated, less they are able to exert a competitive constrain, even when they are in the same market: DG Competition Discussion paper on exclusionary abuses, para 33, Commission Guidelines on the assessment of horizontal mergers, para 28.

⁷³ Commission Guidelines on market analysis, para 76-77; Commission Notice on market definition, para 53-55; ERG Revised Working Paper on SMP, para 7.

⁷⁴ Bain (1968). See also McAfee (2004).

⁷⁵ DG Competition Discussion Paper on exclusionary abuses, para 38. Note that whether entry is profitable depends in particular on the cost of (efficient) entry and the likely responses of the incumbents and post-entry prices. Similarly, the European Regulators Group defined the barriers to entry as 'an additional cost which must be borne by entrants but not by undertakings already in the industry; or other factors which enable an undertaking with significant market power to maintain prices above the competitive level without inducing entry': ERG Revised Draft Common Position on remedies, p. 125. Also, Commission Guidelines on the assessment of horizontal mergers, para 71. This Bainian conception is appropriate as antitrust aims to maximise the welfare of the consumers: Schmalensee (2004). On entry barriers, see also Gilbert (1989), Harbord and Hoehn (1994), OECD (2006).

used;⁷⁶ (2) structural barriers of economic nature comprising absolute cost advantages conferring a competitive advantage on the allegedly dominant undertaking which makes difficult for others to compete effectively (like preferential access to essential facilities, innovation and R&D, financial resources, or important switching costs);⁷⁷ (3) structural barriers of economic nature comprising economies of scale and scope when the underlying fixed costs are sunk; and (4) strategic barriers like anti-competitive exclusionary behaviours performed by the allegedly dominant undertaking to discourage entry or force exit of competitors.⁷⁸

Third, the authority should determine if the buyers are sufficiently strong to protect themselves and exercise countervailing buying power that would remove any market power of the seller. The presence of strong buyers can only serve to counter a finding of dominance if it is likely that in response to prices being increased above the competitive level, the buyers in question will pave the way for effective new entry or lead existing suppliers in the market to significantly expand their output so as to defeat the price increase.⁷⁹ This third element has proved to be extremely controversial in the electronic communication in the context of the fixed and mobile call termination market.⁸⁰

Collective dominant position

The assessment of collective dominance⁸¹ is more complex and amounts to the case where two or several firms, which remain independent, behave as a single entity.⁸² This parallel behaviour may be due to structural links (like agreements) between the firms, or to a market structure such that firms align their behaviours without any concentration or link (pure tacit collusion).

⁷⁶ In electronic communications, such entry limitations are authorised in case of scarce resources like rights of use for radio frequencies: Article 5 of the Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services, OJ [2002] L 108/21.

⁷⁷ Such absolute cost advantages are the only economic barriers in the narrow Stiglerian conception: McAfee et al. (2004).

⁷⁸ DG Competition Discussion paper on exclusionary abuses, para 40. Most of these elements are taken (without any classification) in the para 78 of the Guidelines on market analysis and elaborated in para 9 to 22 of the ERG Revised Working Paper on SMP.

⁷⁹ DG Competition Discussion paper on exclusionary abuses, para 41.

⁸⁰ See Section 3.2.2.E.

⁸¹ DG Competition Discussion Paper on exclusionary abuses, para 43-50; Commission Guidelines on market analysis, para 86-106; ERG Revised Working on the SMP concept, Section 4; Commission Guidelines on the assessment of horizontal mergers, para 39-60.

⁸² Case T-102/96 *Gencor*, para 276-277; Case C-396/96P *Compagnie Maritime Belge*, para 39.

In economics,⁸³ Rey (2004) distinguished between three types of factors that should be looked at to determine if there is a risk of tacit collusion in the electronic communications sector, as summarised in Figure 2.3 below.⁸⁴ First and most crucially, there are three *necessary factors* helping collusion: (i) the presence of important regulatory or economic entry barriers, (ii) frequent interactions between firms, and (iii) a mature market where innovation plays little role. Second, there are three *important factors* helping collusion: (i) a high concentration of the industry, (ii) symmetry between firms⁸⁵ covering different dimensions such as costs and technologies knowledge, production capacities, market shares, and number of varieties in product portfolio, (iii) structural links between firms like cross-ownership. Finally, there are some *additional factors* that may help or hinder collusion. Four of them are helping collusion: (i) multi-market contacts between firms, (ii) demand growth, (iii) market transparency, and (iv) vertical product differentiation (one firm having a better product than its rivals). Three additional factors are hindering collusion: (i) demand fluctuations and business cycles, (ii) strong countervailing buying power, and (iii) network effects. Other additional factors have ambiguous effects: (i) production capacity constraint, (ii) demand elasticity, (iii) horizontal product differentiation (different combinations of characteristics, possibly at comparable prices but targeted at different types of customers).

Figure 2.3: Market characteristics and collusion

	Help collusion	Hinder collusion	Ambiguous effects
Necessary	- High regulatory or economic entry barriers - Frequent interactions between firms - Mature market		
Important	- High concentration - High symmetry between firms - Intense structural links between firms		
Additional	- Multi-market contacts - High demand growth - Market transparency - Vertical product differentiation	- Demand fluctuations - Strong countervailing buying power - Network effects	- Important production capacity constraint - High demand elasticity - Horizontal product differentiation

The factors in italics are those mentioned in the Annex II of the Framework Directive.

⁸³ On tacit collusion: Ivaldi et al. (2003), Motta (2004: Chapter 4), Shapiro (1989), Stigler (1964).

⁸⁴ Most of these elements are taken (without any classification) in the Annex II of the Framework Directive and in the para 97 of the Guidelines on market analysis, and elaborated in para 26 to 41 of the Revised ERG Working Paper on SMP.

⁸⁵ Thus the measure of concentration that rises with the asymmetric distribution of assets between firms (like the HHI index) can not be used to detect the probability of collusion as it compounds two factors (concentration and symmetry) that have an opposite effect on collusion. Other measure that does not vary with asymmetry (like the C index) is more indicative.

In the case-law, the proof of collective dominance is recent and still controversial. It has been first been designed by the Community Courts in the context of the *ex-ante* merger control. In *Airtours*, the Court of First Instance held that an antitrust authority should prove three conditions to prohibit a merger on the basis of the creation of a collective dominant position⁸⁶:

62. (...) First, each member of the dominant oligopoly must have the *ability to know how the other members are behaving in order to monitor whether or not they are adopting the common policy*. (...), it is not enough for each member of the dominant oligopoly to be aware that interdependent market conduct is profitable for all of them but each member must also have a means of knowing whether the other operators are adopting the same strategy and whether they are maintaining it. There must, therefore, be sufficient market transparency for all members of the dominant oligopoly to be aware, sufficiently precisely and quickly, of the way in which the other members' market conduct is evolving;

- Second, the situation of tacit coordination must be sustainable over time, that is to say, there must be an incentive not to depart from the common policy on the market. (...) The notion of *retaliation in respect of conduct deviating from the common policy* is thus inherent in this condition. (...) for a situation of collective dominance to be viable, there must be adequate deterrents to ensure that there is a long-term incentive in not departing from the common policy, which means that each member of the dominant oligopoly must be aware that highly competitive action on its part designed to increase its market share would provoke identical action by the others, so that it would derive no benefit from its initiative (see, to that effect, *Gencor v Commission*, paragraph 276);

- Third, (...) must also establish that the foreseeable *reaction of current and future competitors, as well as of consumers, would not jeopardise the results expected from the common policy*. (emphasis added)

However, in the recent *Impala* case,⁸⁷ the same Court of First Instance seems to be more relaxed when proving collective dominance under ex-post antitrust as it states:

250. However, although when assessing the risk that such a dominant position will be created the Commission is required, *ex hypothesi*, to carry out a delicate prognosis as regards the probable development of the market and of the conditions of competition on the basis of a prospective analysis, which entails complex economic assessments in respect of which the Commission has a wide discretion, the finding of the existence of a collective dominant

⁸⁶ Case T-342/99 *Airtours v Commission*. See more recently Case T-193/02 *Laurent Piau v Commission*, para 111. The criteria are summarised in the DG Competition Discussion paper on exclusionary abuses, para 48-50.

⁸⁷ Case T-464/04 *Impala v Commission* ECR [2006] II-0000, in which the Court of First Instance annulled the Decision of the Commission of 19 July 2004, *Sony/BMG M.3333*.

position is itself supported by a concrete analysis of the situation existing at the time of adoption of the decision. The determination of the existence of a collective dominant position must be supported by a series of elements of established facts, past or present, which show that there is a significant impediment of competition on the market owing to the power acquired by certain undertakings to adopt together the same course of conduct on that market, to a significant extent, independently of their competitors, their customers and consumers.

251. It follows that, in the context of the assessment of the existence of a collective dominant position, although the three conditions defined by the Court of First Instance in *Airtours* (...) which were inferred from a theoretical analysis of the concept of a collective dominant position, are indeed also necessary, they may, however, in the appropriate circumstances, be established indirectly on the basis of what may be a very mixed series of indicia and items of evidence relating to the signs, manifestations and phenomena inherent in the presence of a collective dominant position.

252. Thus, in particular, close alignment of prices over a long period, especially if they are above a competitive level, together with other factors typical of a collective dominant position, might, in the absence of an alternative reasonable explanation, suffice to demonstrate the existence of a collective dominant position, even where there is no firm direct evidence of strong market transparency, as such transparency may be presumed in such circumstances.

As further indications, Annex II the Framework Directive adopted under sector-specific regulation⁸⁸ gives a non-exhaustive list of criteria to be used in the electronic communication sector to determine the existence of a collective dominance which broadly correspond to the criteria proposed by Rey and imposed in *Airtours*: mature market, stagnant or moderate growth on the demand side, low elasticity of demand, homogeneous product, similar cost structures, similar market shares, lack of technical innovation, mature technology, absence of excess capacity, high barriers to entry, lack of countervailing buying power, lack of potential competition, various kinds of informal or other links between the undertakings concerned, retaliatory mechanisms, lack or reduced scope for price competition. In addition, the Commission Access Notice gives the example of the incumbent and the cable operator as being jointly dominant on the local access market.⁸⁹

⁸⁸ 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, OJ [2002] L 108/33.

⁸⁹ Commission Access notice, para 80. Also Cave et al. (2006:75).

Figure 2.4 below summarises the indicators to determine the existence of a single or of a collective dominant position.

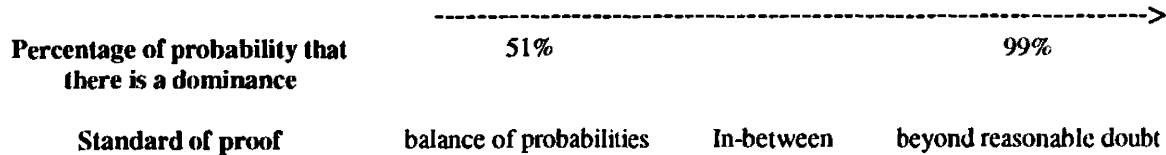
Figure 2.4: Indices to dominant position

	Single dominance	Collective dominance
Structural entry barriers: Legal	- Limited access to spectrum - Price controls for social purposes	<i>Idem</i>
Structural entry barriers: Economic (Stiglerian) Absolute cost advantages	- Control of infrastructure not easily duplicable/essential facility - Technological advantage - Easy or privileged access to capital - Vertical integration - High switching costs	<i>Idem</i>
Structural entry barriers: Economic (Bainian)	- Economies of scale - Economies of scope	<i>Idem</i>
Expansion barriers	Barriers to expansion	No excess capacity
Buying power	Absence/low countervailing buying power	<i>Idem</i>
	- Overall size of the undertaking - Product/services diversification - Highly developed distribution network	
	----	- Similar cost structure - Mature technology - Links between undertakings
	----	Indicators are ambiguous - Moderate demand growth - Low elasticity of demand
	----	- Transparency - Homogeneous product
	25%-40/50%	- Similar market share
		- High concentration (HHI, CR3, CR4)
	Exclusionary anti-competitive behaviours	
	Excessive price	
	Absence of potential competition	
	- Active competition - Existence of standards/conventions - Customer ability to access and use information - Price trends - International benchmarking	

standard of proof of dominant position

an important legal issue, particularly relevant for the collective dominant position, is the standard of proof. This is the standard that an antitrust authority uses to decide a

case on its merits. Generally, three standards are possible.⁹⁰ (1) The very high criminal standard of 'beyond reasonable doubt'. In this case, the antitrust authority should have no reasonable doubt that an operator has dominance. (2) The much lower civil standard of 'balance of probabilities'. In this case, the authority should think that it is more likely than not (i.e. there is at least a 51% possibility) that the operator has dominance. (3) An in-between standard where the authority should think that it is highly probable (at say 70%) that the operator has dominance. Unfortunately, the issue of standard of proof in ex-post antitrust is not very clear.⁹¹



This issue of the standard of proof should not be confused with the related but different issue of the standard of judicial review, which is the standard that a Court uses to assess the legality of an administrative antitrust decision.⁹² Thus standard of proof and standard of judicial review are two different concepts. The former applies to an antitrust authority when deciding a case whereas the latter applies to a Court when judging an antitrust decision. However, both are linked because when a court applies a manifest error standard of review, the standard of proof incumbent on the antitrust authority, whatever it may be, becomes much easier to meet as the authority is allowed a significant margin of discretion.⁹³

C. Abuse

The third condition for an antitrust authority to condemn an operator is the existence of an abuse of the dominant position. In *Hoffman-La Roche*,⁹⁴ the Court of Justice defined the abuse as

91. (...) an objective concept relating to the behaviour of an undertaking in a dominant position which is such as to influence the structure of a market where, as a result of the very presence of the undertaking in question, the degree of competition is weakened and through recourse to methods which, different from those which condition normal competition in

⁹⁰ Bailey (2003). Vesterdorf (2005a).

⁹¹ Bailey (2003:855-857).

⁹² As clearly explained by the President of the Court of First Instance Vesterdorf (2005a). This distinction has also been made by the Advocate General Tizzano in his Opinion in the *Tetra Laval* case, para 71-90. The two main possible standard of judicial review are: full control, or restrained (marginal) control.

⁹³ Vesterdorf (2005a:6 and 29).

⁹⁴ Case 85/75 *Hoffman-La Roche*.

products or services on the basis of the transactions of commercial operators, has the effect of hindering the maintenance of the degree of competition still existing in the market or the growth of that competition.

In *Continental Can*,⁹⁵ the Court of Justice considered that Article 82 covers all types of anticompetitive exclusionary practices.

26. The [Article 82] is not only aimed at practices which may cause damage to consumers directly, but also at those which are detrimental to them through their impact on an effective competition structure, such as is mentioned in [Article 3(g)] of the Treaty. Abuse may therefore occur if an undertaking in a dominant position strengthens such a position in such a way that the degree of dominance reached substantially fetters competition, i.e. that only undertakings remain in the market whose behaviour depends on the dominant one.

As summarised in Figure 2.5,⁹⁶ the different abusive practices may be categorized according to: (1) their nature (exploitative i.e. directly exploiting the end-users, or exclusionary i.e. indirectly exploiting consumers by excluding efficient competitors), (2) the variable on which they act (price or non price), and (3) the market on which they have an effect.⁹⁷

Figure 2.5: Categorization of the abusive practices

		Single market	Horizontal Foreclosure	Vertical foreclosure	
Exclusionionary behaviour	Non-pricing abuse		Refusal to supply		
			Tying		
			Exclusive agreements		
	Pricing abuse	Discriminatory pricing			
		Predatory Pricing			
		Selective price cutting			
		Loyalty rebates	Margin squeeze		
Exploitative behaviour	Non-pricing abuse	Unfair contractual terms and conditions			
	Pricing abuse	Discriminatory pricing			
		Excessive pricing			

In December 2005, DG Competition adopted an interesting Discussion paper stating its view on the treatment of four exclusionary abuses (predatory pricing, single branding and rebates,

⁹⁵ Case 6/72 *Continental Can* [1973] ECR 215. Similarly, Case 85/76 *Hoffman-La Roche* [1979] ECR 461, para. 1.

⁹⁶ For similar but less exhaustive categorization, see DG Competition Discussion Paper on exclusionary abuses, para 54-76.

⁹⁷ On the economics of vertical effects, see Hart and Tirole (1990), Motta (2004:Chapter 6), Ordover and Saloner (1989), Rey et al. (2001), Rey and Tirole (2003), Riordan (2005), Salop (1999), Weisman (2003).

tying and bundling, and refusal to supply).⁹⁸ The Commission states that it will assess such exclusionary conduct on the premise that in general only conduct which would exclude a hypothetical “as efficient” competitor is abusive. Such “as efficient” competitor is a hypothetical competitor having the same costs as the dominant company.⁹⁹ However, the Commission recognises that it may sometimes be necessary in the consumers’ interest to also protect competitors that are not (yet) as efficient as the dominant company. Thus, the assessment does not only compare cost and price of the dominant company but will apply the as efficient competitor test in its specific market context, for instance taking account of economies of scale and scope, learning curve effects or first mover advantages that later entrants can not be expected to match even if they were able to achieve the same production volumes as the dominant company.¹⁰⁰ Finally, the Commission admits that exclusionary conduct may escape the prohibition of Article 82 EC in case the dominant undertaking can provide an objective justification for its behaviour or it can demonstrate that its conduct produces efficiencies which outweigh the negative effect on competition. The burden of proof for such an objective justification or efficiency defence will be on the dominant company. In general there are two types of possible objective justifications. The first type is where the dominant company is able to show that the otherwise abusive conduct is actually necessary conduct on the basis of objective factors external to the parties involved and in particular external to the dominant company (‘objective necessity defence’). The second type is where the dominant company is able to show that the otherwise abusive conduct is actually a loss minimising reaction to competition from others (‘meeting competition defence’).¹⁰¹

Such anti-competitive practices are present in all industries, but they are particularly probable in the electronic communications sector because of several characteristics that make stronger the possibilities and the incentives for such conducts.¹⁰² First, the structure of the sector was very much asymmetric at the beginning of the liberalisation and still is today.¹⁰³ The incumbents have thus only to maintain their power with exclusionary conducts, and not to

⁹⁸ The Commission was cautious enough to note that the principles of the Discussion paper are without prejudice to the (sometimes more interventionist) approach described in Notices applying to specific sectors (like the Commission Access Notice): Discussion paper, para 6 and 216.

⁹⁹ DG Competition Discussion paper on exclusionary abuses, para 63.

¹⁰⁰ *Ibidem*, para 67.

¹⁰¹ *Ibidem*, para 77-78.

¹⁰² For the first two characteristics, see also Motta (2004:411). For the frequent abuses practices in electronic communications, see ERG Revised Common Position on remedies, Section 1.

¹⁰³ Annex 2 of the Communication from the Commission of 20 February 2006, European Electronic Communications Regulation and Markets 2005 (11th Report), COM(2006) 68.

increase it (which is much more difficult). Second, strong market power factors characterise the sector. These increase incentives to exclude competitors as once you get a dominant position, you might more easily maintain it than in other sectors. Third, many markets in the sector are closely related. That eases the possibilities of leveraging power from one market to other ones.

Thus,¹⁰⁴ the dominant operator may delay network access, with lengthy negotiation or pretended technical problems, so that the rival supplied at a later point in time compared to his retail affiliate (*delaying tactics*). In doing so, the incumbent may protect rents on established retail market and gain a first mover advantage on new and emerging markets. He may also impose contract terms that are unnecessary for the provision of network access but raise rivals' costs or restricts rivals' sales (*undue requirements*). For instance, he may stipulate a particular and more expensive technology, bank guarantees or security payments, or information agreement¹⁰⁵ beyond what is economically and technically justifiable. In particular, he may tie-in together several products when the rival only wants one of them. He may also design the products characteristics to put its rivals on disadvantage (*strategic design of product characteristics*). For instance, he may use standards which are easy to meet for his retail arm but need additional investment for the rivals to ensure compatibility or make interconnection technically possible. The dominant operator may equally refuse to supply necessary information to take up the wholesale offer and/or to supply the retail products or he may provide to his downstream arm information that he does not provide to the rivals (*withholding and discriminatory use of information*). He may also degrade the quality of access offered to the rivals and offer a better quality to his own subsidiaries (*quality discrimination*). For instance, incumbent may give priority to its own traffic at network bottlenecks or, in case of network breakdown, gives priority to its own customers when fixing the problem. In the following, I deal with the characterization of the most frequent abuses in the electronic communications sector.

¹⁰⁴ The list of anti-competitive practices is drawn from the ERG Revised Common Position on remedies, at 33-34.

¹⁰⁵ That may include data about rivals' customers that may then be used by the incumbent to target those customers with tailor-made offers and induce them to switch (undue use of rivals' information).

Excessive prices

A price is unfair and excessive when it is above the economic value of the product,¹⁰⁶ which means above the normal competitive level. In the Guidelines on vertical restraints, the Commission defines a “competitive” price as being equal to minimum average costs.¹⁰⁷ Over time, the Court of Justice developed a veritable cocktail of approaches to determine whether a price is excessive, as summarised in Figure 2.6 below.¹⁰⁸ First, the Commission may compare the price with the underlying costs of the dominant operator,¹⁰⁹ and in doing so, apportion common costs following the rules of sector-specific regulation if any.¹¹⁰ Second, the Commission may compare the investigated price with the (most easily observable) price of the dominant operator in other relevant markets in the same Member State¹¹¹ or in other Member States.¹¹² Third, the Commission may compare the investigated price with the price of other companies offering similar products in the same relevant market,¹¹³ in the other relevant market in the same Member State,¹¹⁴ or in other relevant market in another Member State (doing a benchmarking exercise).¹¹⁵

Figure 2.6: The cocktail of proofs for excessive pricing

	Cost of the dominant firm	Other prices of the dominant firm (Discrimination)	Price of other firms offering similar products
Same relevant market (product and geographic)		-----	(Competitor comparison)
Other relevant markets in the same Member State	-----		
Other relevant market in another Member State	-----		(Benchmarking)

¹⁰⁶ Case 27/76 *United Brands* [1978] ECR 207, para 249-252; Commission Access Notice, para 105-109. On excessive prices, see in general, O’Donoghue and Padilla (2006: Chapter 12), and with a focus on telecommunications, Haag and Klotz (1998).

¹⁰⁷ Commission Guidelines on Vertical Restraints, O.J. [2000] C291/1, para. 126.

¹⁰⁸ This is taken from Motta and de Streel (2006).

¹⁰⁹ Case 27/76 *United Brands* [1978] ECR 207, para 249-252; Case 298/83 *CICCE* [1985] ECR 1105, paras. 24-25; Cases 110, 241 & 242/88 *Lucazeau/SACEM (SACEM II)* [1989] ECR 2811, para. 29 noting that the production costs to be taken into account are those of an efficient firm, and not necessarily those of the investigated firm which may have inflated production costs because of its dominant position (X-inefficiency).

¹¹⁰ Case 66/86 *Ahmed Saeed* [1989] ECR 803, para 41.

¹¹¹ Case 26-75 *General Motors* [1975] ECR 1367, para. 12. Case 226/84 *British Leyland* [1986] ECR 3263, para. 28.

¹¹² Case 27/76 *United Brands* [1978] ECR 207.

¹¹³ Case 27/76 *United Brands* [1978] ECR 207; Case 24/67 *Parke, Davis* [1968] ECR 55; Case 53/87 *Renault* [1988] ECR 6039, paras. 16-17.

¹¹⁴ Case 26-75 *General Motors* [1975] ECR 1367; Case 30/87 *Bodson* [1988] ECR 2479.

¹¹⁵ Case 40/70 *Sirena* [1971] ECR 69, para. 17; Case 78/70 *Deutsche Grammophon*, [1971] ECR 487; Case 395/87 *Tournier (SACEM I)* [1989] ECR 2521, para. 42; Cases 110, 241 & 242/88 *Lucazeau/SACEM (SACEM II)* [1989] ECR 2811

However in practice, the Commission has very rarely take antitrust cases for excessive prices as it understands to be particularly ill-equipped to assess excessive prices and does not wish to behave as price setting authority.¹¹⁶

Predatory prices

Predatory pricing¹¹⁷ is the practice where a dominant company lowers its price and thereby deliberately incurs losses or foregoes profits in the short run so as to enable it to eliminate or discipline one or more rivals or to prevent entry by one or more potential rivals thereby hindering the maintenance or the degree of competition still existing in the market or the growth of that competition.¹¹⁸ Such a problem could, for example, arise in the context of competition between different telecommunications infrastructure networks, where a dominant operator may tend to charge unfairly low prices for access in order to eliminate competition from other emerging infrastructure providers.¹¹⁹

To determine if a price is predatory and prohibited under antitrust law, three cases should be distinguished according to the relationship between the price charged and its underlying cost.¹²⁰ These cost benchmarks¹²¹ are normally applied using cost data of the dominant company. Where however reliable information on the dominant company's costs is not available, the Commission may instead use cost data of apparently efficient competitors. In addition, where in general no reliable information on cost data is available to the Commission, it may nonetheless be able to build on other arguments a credible case of predatory abuse.

¹¹⁶ Vth Commission Report on Competition Policy 1975, para 76; XXIVth Commission Report on Competition Policy 1994, para 207; XXVIIth Commission Report on Competition Policy 1997, para 77.

¹¹⁷ O'Donoghue and Padilla (2006: Chapter 5). On the economics of predatory pricing, see Motta (2004:412-454), and with a particular focus on telecommunications: Haucap and Kruse (2004).

¹¹⁸ DG Competition Discussion Paper on exclusionary abuses, para 93.

¹¹⁹ Also, DG Competition has noted at para 98 of its Discussion paper that: Companies that are collectively dominant are less likely to be able to predate because it may be difficult for the dominant companies to distinguish predation against an outside competitor from price competition between the collective dominant companies and because they usually lack a (legal) mechanism to share the financial burden of the predatory action.

¹²⁰ Case 62/86 *Akzo* [1991] ECR I-3359, paras. 69-74. Also Commission Access Notice, para 110-116, DG Competition Discussion Paper on exclusionary abuses, para 93-133.

¹²¹ Commission Discussion paper on exclusionary abuses, para 64-65 and ERG Implementing Guidelines ERG(05) 29, section 4.1.3; Intven (2000:B 14).

Figure 2.7: Different cost benchmarks

Stand Alone Cost MC+ all fixed costs
Average Total Costs MC+ common fixed costs (allocated in proportion of the turnover achieved by each product)
Average Avoidable Cost MC+ fixed costs that are specific to the abuse
Average Variable Cost Average of the costs that vary directly with the output of the company
Marginal cost Cost of producing the last unit of output

First, if the price is below Average Variable Cost or Average Avoidable Cost,¹²² it is presumed to be predatory because each sale generates a loss, unless there are exceptional circumstances (e.g., where the low price is part of a one-off temporary promotion campaign to introduce a new product and where the duration and extent of the campaign are such that exclusionary effects are excluded). In recently liberalised network industries, the Commission used as the benchmark the (usually higher) Long-Run Average Incremental Costs because the use of an AVC or AAC benchmark would not reflect the specific economic realities of these industries showing very high fixed costs and very low variable costs and because liberalisation efforts should not be undermined by predatory behaviour by the incumbent dominant companies.¹²³

¹²² In the para 108 Discussion paper on exclusionary abuses, DG Competition proposes to rely on the AAC instead of the AVC because: Often the AAC benchmark will be the same as the AVC benchmark as in many cases only variable costs can be avoided. However, if the dominant company, for instance, had to expand capacity in order to be able to predate, then also the fixed or sunk investments made for this extra capacity will have to be taken into account and will filter into the AAC benchmark. In the latter case AAC will, for good reasons, exceed AVC.

¹²³ DG Competition Discussion paper on exclusionary abuses, para 126, Commission Access Notice, para 115. In the *Deutsche Post* decision, the Commission considered that DP has charged a predatory price because it was below the incremental cost: Commission Decision of 20 March 2001, Case 35.141 *Deutsche Post*, OJ [2001] L 125/27. On those cost concepts, see Section 3.2.1.D1.

Second, if the price is between the Average Variable Costs and the Average Total Cost it is presumed to be predatory when it is part of an eliminatory strategy. This can be shown with direct evidence (intent) or indirect evidence which together may prove such a strategy (e.g., pricing only makes commercial sense as part of a predatory strategy, the actual or likely exclusion of the prey, whether certain customers are selectively targeted, whether the dominant company actually incurred specific costs in order for instance to expand capacity, the scale, duration and continuity of the low pricing, the concurrent application of other exclusionary practices, the possibility of the dominant company to off-set its losses with profits earned on other sales and its possibility to recoup the losses in the future through (a return to) high prices).

Finally, if the price is above Average Variable Cost, it is presumed not to be predatory unless there are exceptional circumstances.¹²⁴ As noted by DG Competition,¹²⁵ an example of such exceptional situation is where a single dominant company operates in a market where it has certain non-replicable advantages or where economies of scale are very important and entrants necessarily will have to operate for an initial period at a significant cost disadvantage because entry can practically only take place below the minimum efficient scale. In such a situation, which is common in electronic communications, the dominant operator could prevent entry or eliminate entrants by pricing temporarily below the ATC of the entrant while staying above its own ATC. For such price cut to be assessed as predatory it has to be shown that the incumbent has a clear strategy to exclude, that the entrant will only be less efficient because of these non-replicable or scale advantages and that entry is being prevented because of the disincentive to enter resulting from specific price cuts.

In each case, there is no need to prove a possibility of recoupment.¹²⁶ Indeed, it is in general sufficient to show the likelihood of recoupment by investigating the entry barriers to the market, the (strengthened) position of the company and foreseeable changes to the future structure of the market. As dominance is already established this normally means that entry barriers are sufficiently high to presume the possibility to recoup.

¹²⁴ An example of such an exceptional situation is where companies in a collective dominant situation apply a clear strategy to collectively exclude or discipline a competitor by selectively undercutting the competitor and thereby putting pressure on its margins, while collectively sharing the loss of revenues: Cases C-359 & 396/96 P *Compagnie Maritime Belge* [2000] ECR I-1365.

¹²⁵ DG Competition Discussion paper on exclusionary abuses, para 129.

¹²⁶ *Ibidem*, para 122 and Case T-83/1991 *Tetra Pak II* [1994] ECR II-755, paras. 144-149

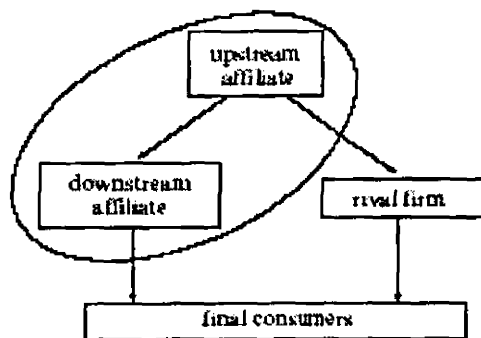
Figure 2.8: Benchmark for anti-competitive predatory pricing

$p < AVC (LRIC)$	$AVC < p < ATC$	$> ATC$
Prohibited unless exceptional circumstance	Prohibited if part of an elimatory plan	Allowed, unless exceptional circumstance

Price squeeze

One of the most often advanced complaints by telecommunications entrants is the presence of price squeeze which means that the margin between the wholesale price and the retail price is insufficient to make a reasonable profit.¹²⁷ More precisely, an anti-competitive price squeeze arises when a vertically integrated undertaking, with market power in the provision of an ‘essential’ upstream input, prices this input and/or its downstream product service, in such way and for a sufficiently long period of time to deny an equally or more efficient downstream rival a sufficient profit to remain in the market.¹²⁸

Figure 2.9: Price squeeze



Such anti-competitive margin squeeze may have several causes. (1) It may be due to an upstream price that is *excessive and discriminatory*, as the incumbent internally charges to itself a cost based prices whereas it charges to the rival a price above cost. Thus, discrimination is not a problem per se, and indeed it has been shown that the welfare effect of such practice is ambiguous. It is problematic because it led to the elimination of a more efficient competitor. (2) It may be due to an upstream price that is not discriminatory and above cost. It will then necessarily lead to a *cross-subsidisation* of the retail division by the wholesale division of the vertically integrated undertaking. Indeed, due to the insufficient

¹²⁷ On price squeeze in general, see O'Donoghue and Padilla (2006: Chapter 6), and with a focus on telecommunications, Brunekreeft et al. (2005).

¹²⁸ Crocioni and Veljanovski (2003:30).

margin, the retail division is making a loss that is compensated by the excessive profit in the wholesale division. Again, it is not the cross-subsidisation per se¹²⁹ that is a problem, but its consequence of eliminating a more efficient competitor. (3) It may be due to a downstream pricing that is *predatory*. Two sorts of predatory downstream price may be distinguished. The downstream price may be predatory independently of the level of the upstream price. In this case, the price does not cover the wholesale and the retail costs. Alternatively, the downstream price may be predatory only if the level of the upstream price (supposed to exceed costs) is taken into account. In this case, the downstream price covers the wholesale and the retail costs, but does not cover the excessive upstream price and the retail costs.¹³⁰ Thus, price squeeze is always due to discrimination, cross-subsidisation or predation, but the cost for the incumbent may be very different. Indeed, under the two first strategies (discrimination and cross-subsidisation), there is no short-term cost for the incumbent, whereas under the third (predatory price,) he should sacrifice short-term gain in prevision of higher long-term benefits.

Legally, the Commission considers that the price squeeze is an abuse on its own, independently of other forms of abusive practice (like predation, cross-subsidisation or discrimination.)¹³¹ Hence, it may be proved in two ways: (1) either by showing that the dominant company's own downstream operations could not trade profitably on the basis of the upstream price charged to its competitors by the upstream operating arm of the dominant company, or (2) by showing that the margin between the price charged to competitors on the downstream market (including the dominant company's own downstream operations, if any) for access and the price which the network operator charges in the downstream market is insufficient to allow a reasonably efficient service provider in the downstream market to obtain a normal profit (unless the dominant company can show that its downstream operation is exceptionally efficient.)¹³²

¹²⁹ Abbamonte (1998), Hancher and Buendia Sierra (1998).

¹³⁰ If the upstream price is regulated on cost-orientation basis (as it is often the case in regulated industries), only the first type of predatory downstream price may arise: see Bouckaert and Verboven (2004).

¹³¹ DG Competition Discussion paper on exclusionary abuses, para 220. The Community Courts have never explicitly addresses this issue: see the non conclusive statement in Case T-5/97 *Poudres sphériques* [2000] ECR II-3755, para 178-179. See also Kallaugher (2004).

¹³² Commission Access Notice, para 117-119.

Refusal to give access

As summarised in Figure 2.10 below, there are several situations (with different conditions) when a refusal to deal would be abusive.¹³³ This depends on the one hand on the type of refusal (termination, discrimination with third-party, or first refusal),¹³⁴ and on the other hand, on the type of infrastructures controlled (deployed under legal monopoly, necessary to ensure interoperability between products and services, developed under competitive conditions and not protected by IPR, or under competitive conditions and protected by IPR.)

The first hypothesis is when an operator has given access and then decides to terminate such agreement.¹³⁵ She may be condemned if (i) the refusal is likely to have negative effect on competition, which in turn depends on the pre-existing competition on the downstream market;¹³⁶ and (ii) if the termination can not be justified objectively or by efficiencies (e.g. the access seeker not able to provide the appropriate commercial assurances that it will fulfil its obligations).

The second hypothesis is when an operator has given access to third parties, but refuses to give access to another firm.¹³⁷ This would be dealt as a standard discriminatory practice and be dealt as such (see *infra*).

The third hypothesis is when an operator has not given access to any third parties and refuses to give access to an entrant. This is the most complex hypothesis, usually referred as the essential facilities cases. Different cases should be distinguished.

¹³³ In general, see O'Donoghue and Padilla (2006: Chapter 8).

¹³⁴ The Commission foresees looser conditions (i.e. easier to meet by the access seeker and the authority) in case of termination than in case of first time refusal, because the fact that the dominant company in the past has found it in its interest to supply an input to one or more customers shows that the dominant company at a certain point in time considered it efficient to engage in such supply relationships. This and the fact that its customers are likely to have made investments connected to these supply relationships create a rebuttable presumption that continuing these relationships is pro-competitive: Discussion paper on exclusionary abuses, para 217.

¹³⁵ DG Competition Discussion paper on exclusionary abuses, para 217-224; Commission Access Notice, para 99-100. Joined Cases 6 and 7/73 *Commercial Solvents* [1974] ECR 223.

¹³⁶ Para 222 of the Discussion paper notes that: In some cases, the termination of one customer may have a detrimental effect on the level of competition; in other cases the impact may be small to insignificant. For instance, if there are several competitors in the downstream market and the supplier of the input is not itself active in that market, the impact on competition of the termination may be small unless the exclusion is likely to lead to collusion. However, if the input owner is itself active in the downstream market and terminates supplies to one of its few competitors, it will normally be presumed that there is a negative effect on competition on the downstream market.

¹³⁷ Commission Access Notice, para 85-86.

(1) The first case is an infrastructure developed under legal monopoly. The conditions for an access refusal to be abusive are not yet clarified in the case-law, but there is indication that they would be less strict (i.e. easier to meet by the authority and access seeker) than for other facilities.¹³⁸

(2) The second case is a facility consisting of information necessary to ensure interoperability between products and/or services. The condition for an access refusal to be abusive are also less strict and more generic than for other facilities and amount to (i) determine whether the refusal would lead to an anti-competitive leveraging, and (ii) whether such refusal may be objectively justified.¹³⁹

(3) The third case is when the infrastructure has been deployed under competitive conditions and is not protected by an IPR. There are two conditions for an access refusal to be abusive:¹⁴⁰

(i) there should be no actual or potential alternative for an entrant that is equally efficient (enjoying the same economies of scale and scope at the retail level) as the incumbent and (ii) there should be no objective justification for the access refusal (such as low credit rating or security reason).

(4) The fourth case is when facility has been developed under competition conditions and is protected by an intellectual property right. There are three conditions for an access refusal to be abusive:¹⁴¹ (i) there should be no actual or potential alternative for an entrant that is equally

¹³⁸ Discussion paper on exclusionary abuses, para 236 and implicitly Opinion Advocate General Jacobs in *Bronner*, para 66.

¹³⁹ Commission Decision of 24 March 2004, case 37.792 *Microsoft*, para 779-784. See also the DG Competition Discussion paper on exclusionary abuses, para 241-242.

¹⁴⁰ Case C-7/97 *Bronner*, para 41: "not only that the refusal of the service comprised in home delivery be likely to eliminate all competition in the daily newspaper market on the part of the person requesting the service and that such refusal be incapable of being objectively justified, but also that the service in itself be indispensable to carrying on that person's business, inasmuch as there is no actual or potential substitute in existence for that home-delivery scheme." The Court proposes three conditions, but in my presentation I merger the first and the third conditions are essentially the same. These conditions are difficult to meet in practice and in *Bronner*, the Court held that a newspaper distribution scheme developed by the dominant newspaper company was *not* essential to a very small newspaper competitor with growing market shares. Also DG Competition Discussion paper on exclusionary abuses, para 225-236; Commission Access Notice, para 87-98

¹⁴¹ Case C-418/01 *IMS Health v NDC Health* [2004] ECR I-0000, para 52: "– the undertaking which requested the licence intends to offer, on the market for the supply of the data in question, new products or services not offered by the owner of the intellectual property right and for which there is a potential consumer demand; – the refusal is not justified by objective considerations; – the refusal is such as to reserve to the owner of the intellectual property right the market for the supply of data on sales of pharmaceutical products in the Member State concerned by eliminating all competition on that market." In the case, the Court held that a copyrighted division structure of Germany (the so-called 1860 brick structure) developed by a monopoly pharmaceutical information research firm was *not* essential to entrants in the same pharmaceutical information research because entrants were not providing a new product. Also DG Competition Discussion paper on exclusionary abuses, para 237-240.

efficient as the incumbent, (ii) the access seeker should aim to offer a new product,¹⁴² and (ii) there should be no objective justification for the access refusal.

Figure 2.10: Hypothesis for anti-competitive refusal to deal

	EXISTING OF PREVIOUS LEGAL MONOPOLY	COMPETITIVE CONDITIONS		
		Interoperability (Microsoft clause)	Physical property	Intellectual property
Termination	i. Negative effect on competition ii. No objective justification			
Discrimination	<i>See the conditions of the discriminatory abuse</i>			
First time refusal (essential facility variants)	Weaker, but not defined conditions	i. Lead to anti-competitive leveraging ii. No objective justification	i. Indispensability: no actual or potential alternative ii. No objective justification	i. Indispensability: no actual or potential alternative ii. New product iii. No objective justification

In sum, although the Community Courts have never explicitly endorsed the concept of essential facility, it has given some indications on a notion that is flexible and varies according to the type of facility. It covers mainly,¹⁴³ if not exclusively,¹⁴⁴ a natural monopoly situation.¹⁴⁵

Tying and bundling

Tying¹⁴⁶ occurs when the supplier makes the sale of one product (the tying product) conditional upon the purchase of another distinct product (the tied product) from the supplier or someone designated by the latter. Only the tied product can be bought separately. Bundling

¹⁴² One way to test that would be to forecast if the new product would create an expansion on the market: Ahlborn et al. (2005:1146).

¹⁴³ See Doherty (2001).

¹⁴⁴ As argued by Bergman (2001). A natural monopoly exists when the state of the technology and its associated cost structure and the level of the demand are such that one firm is able to produce a given set of outputs at a lower costs than two or more firms. In other words, it may happen that under free entry, the market would spontaneously lead to one operator only, and that is better for welfare than competition between several firms. More formally, an natural monopoly requires a strictly and globally subadditive cost function over the relevant range of output. i.e. every way of dividing output between two or more firms would result in higher total costs than if the output was produced by one firm: Sharkey (1982) and Viscusi et al. (2005: 401-428).

¹⁴⁵ Thus, it does not cover the two-ways access (interconnection) issues. For instance, fixed or mobile termination are *not* essential facilities, hence could not be dealt with a sector-specific regulation based on essential facility.

¹⁴⁶ In general, see O'Donoghue and Padilla (2006: Chapter 9). On the economics of tying and bundling, see Kühn et al. (2004), Motta (2004:460-483), Nalebuff (2003), Ordovery and Willig (1999). Case C-53/92 P *Hilti AG v Commission* [1994] ECR I-667; Case C-333/94 P *Tetra Pak v Commission* [1996] ECR I-5951, para 37.

refers to situations where a package of two or more goods is offered. Cases where only the bundle is available and not the components are referred to as pure bundling. Cases where both the bundle and the components are available on the market are referred to as mixed bundling if the bundle is sold at a discount to the sum of the prices of the components.¹⁴⁷ For instance, an incumbent may bundle access fixed line (where she is dominant) with a package of call minutes (where she may not be dominant any more).

For such practices to be prohibited under Article 82 EC, the presence of the following elements is usually required:¹⁴⁸ (1) First, the company concerned should be dominant in the tying market. It is not necessary that the company is also dominant in the tied market although dominance in both markets renders the finding of an abuse more likely. (2) Second, the tying and tied goods should be two distinct products, which is the case if, from the customers' perspective, the products are or would be purchased separately in the absence of tying or bundling.¹⁴⁹ Evidence that two products are distinct can include direct evidence that, when given a choice, customers purchase the products separately or indirect evidence that companies in competitive markets, tend not to tie the two products, presumably because this best serves the demand of the customers. A particular problem arises in determining whether a new product development integrating two products that previously were distinct would mean that the combination in the future should be considered to be one product. Deciding this entails evaluating whether consumer demand has shifted as a consequence of the product integration so that there is no more independent demand for the tied product. Such a scenario could be envisaged in cases of technological integration rather than in cases of contractual tying or bundling. (3) Third, the tying practice should be likely to have a market distorting foreclosure effect. In principle, the assessment of the foreclosure effect on the tied market can be considered to consist of two parts. On the one hand, establish which customers are "tied" in the sense that competitors to the dominant company cannot compete for their business. On the other hand, establish whether these customers "add up" to a sufficient part of the market being tied. However, an overall assessment of the likely foreclosure effect of the tying or bundling practice will be made, which will combine an analysis of the practice, its application

⁴⁷ DG Competition Discussion paper on exclusionary abuses, para 177.

⁴⁸ *Ibidem*, para 182-206.

⁴⁹ It is, however, not necessary that the two products belong to two separate product markets. In a market with differentiated products, two products may be sufficiently differentiated that a company can be said to tie or bundle two distinct products: DG Competition Discussion paper on exclusionary abuses, para 185.

in the market, and the strength of the dominant position. (4) Finally, as for any exclusionary abusive practice, the tying practice can not be justified objectively or by efficiencies.

Discrimination

A dominant access provider may not discriminate between the parties to different access agreements where such discrimination would restrict competition.¹⁵⁰ Any differentiation based on the use which is to be made of the access rather than differences between the transactions for the access provider itself would be contrary to Article 82 if the discrimination is sufficiently likely to restrict or distort actual or potential competition.¹⁵¹ This discrimination could take the form of imposing different conditions, including the charging of different prices, or otherwise differentiating between access agreements, except where such discrimination would be objectively justified, for example on the basis of cost or technical considerations or the fact that the users are operating at different levels. Such discrimination could be likely to restrict competition in the downstream market on which the company requesting access was seeking to operate, in that it might limit the possibility for that operator to enter the market or expand its operations on that market.

D. Repressive remedies

If the Commission found that an operator violated the antitrust rules, it may impose four types of sanctions:¹⁵² First and obviously, it imposes the end of the anti-competitive practice (and any anti-competitive agreements is null and void);¹⁵³ second, it may impose fines, whose level depends on the gravity and the duration of the infraction and is capped at 10% of the total turnover of the companies involved;¹⁵⁴ third, it may impose behavioural remedies (i.e. negative or positive actions) which are proportionate to the infringement committed and

¹⁵⁰ In general, see O'Donoghue and Padilla (2006: Chapter 11). On the economics of discrimination, see Motta (2004:491-511). Varian (1989)

¹⁵¹ Commission Access Notice, para 120-121, and Case C-18/93 *Corsica Ferries* [1994] ECR I-1783, para 43.

¹⁵² O'Donoghue and Padilla (2006: Chapter 15).

¹⁵³ Article 81(2) EC.

¹⁵⁴ Article 23(2) of Regulation 1/2003 and Commission Guidelines of 26 June 2006 on the method of setting fines, OJ [2006] C 210/2. In some Member States (like the United Kingdom or Ireland), the NCA may also impose criminal sanctions.

necessary to bring the infringement effectively to an end;¹⁵⁵ fourth, it may impose structural remedies (like divestiture) where there is no equally effective behavioural remedy or where any equally effective behavioural remedy would be more burdensome for the undertaking concerned than the structural remedy, i.e. where there is a substantial risk of a lasting or repeated infringement that derives from the very structure of the undertaking.¹⁵⁶ The Commission may also settle a case by accepting commitments from the undertakings that meet the concerns of the Commission. However, such commitment decisions do not establish the existence of an antitrust infringement, but merely conclude that there is no ground for action, hence the NCA and the National Courts are not precluded from establishing the existence of an infringement.¹⁵⁷ In addition, the National Courts may also award private damages to the victim of an antitrust infringement,¹⁵⁸ that should include not only actual loss (*damnum emergens*) but also loss of profit (*lucrum cessans*) plus interest.¹⁵⁹

2.2.2. Application of ex-post competition law to electronic communications

Since the British Telecom decision in 1982 which marked the beginning of European liberalisation program, there have been only two formal Commission Article 82 EC decisions in the electronic communications sector (against Deutsche Telekom and against Wanadoo in 2003). However, this is only the tip of the iceberg and does not reflect the role of *ex-post* antitrust in the sector. Indeed, the Commission opened many cases that have been informally settled with the operators or passed to the national regulatory authorities¹⁶⁰ and the national competition authorities have taken many cases under the European or the national antitrust laws.¹⁶¹ Regarding the cases adopted by the NCAs under EC antitrust, telecom cases represented 21% of the total (32) envisaged NCAs' decisions for the period between May 2004 and December 2004, and 10% of the total (76) envisaged decisions for the year 2005. In

¹⁵⁵ Article 7 of Regulation 1/2003.

¹⁵⁶ Article 7 and Recital 12 *in fine* of Regulation 1/2003.

¹⁵⁷ Article 9 and Recital 13 of Regulation 1/2003, formalising the previous practice of the Commission. Indeed, in the electronic communications, the Commission has settled informally many cases.

¹⁵⁸ Case C-453/99 *Courage v Crehan* [2001] ECR I-6297, para 27; Joined Cases C-295/04 to C-298/04, *Manfredi v Lloyd, Cannito v Fondiaria, Tricarico v Assitalia* [2006] ECR I-0000, para 91. For an overview of the possibilities to get damages across the different Member States, see Ashurst (2004).

¹⁵⁹ Joined Cases C-295/04 to C-298/04, *Manfredi v Lloyd, Cannito v Fondiaria, Tricarico v Assitalia*, para 95.

¹⁶⁰ Temple Lang (2006:7)

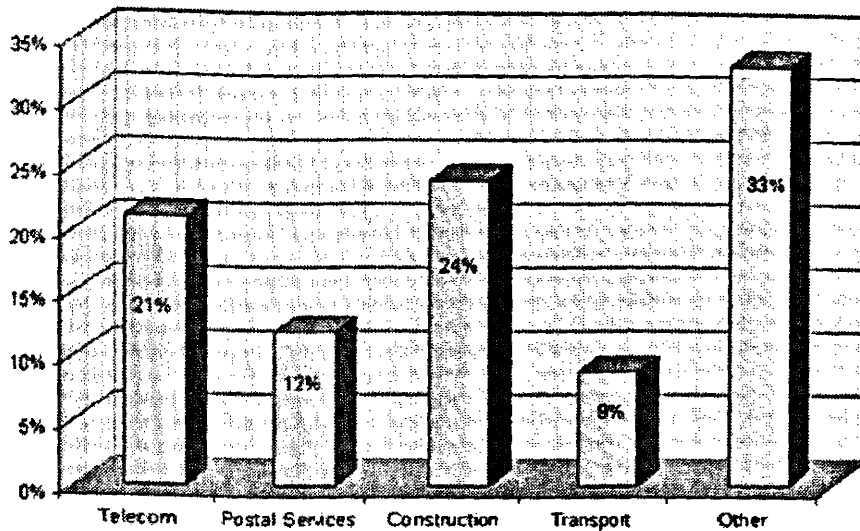
¹⁶¹ For a summary of some cases, see International Competition Network (2006:Appendix 1).

general, most cases relate to exclusionary practices, in particular price squeeze or win-back strategies.¹⁶²

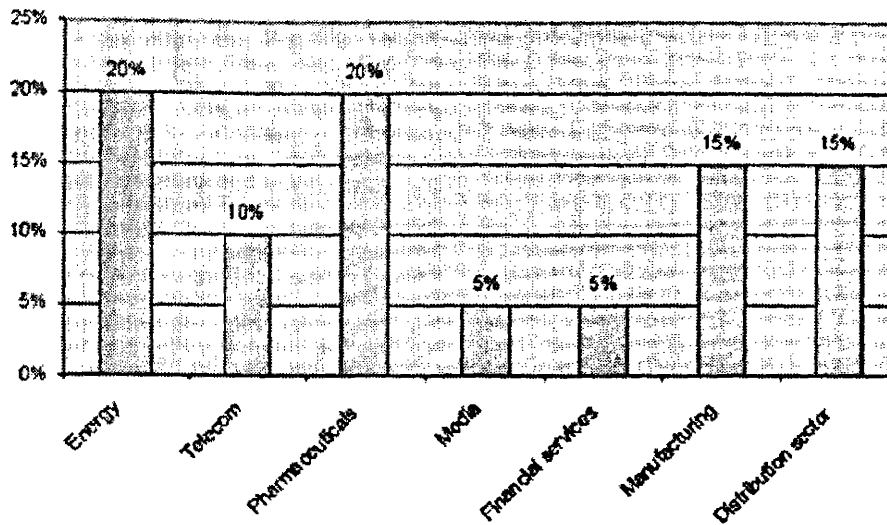
¹⁶² Commission Report on Competition Policy 2005, para 240 noting that almost 50% of all Article 82 cases in the ECN concerning telecommunications sector related to margin squeeze. On some of those cases, see Geradin and O'Donoghue (2005).

Table 2.2: ECN Cases

01/05/2004 - 31/12/2004



01/01/2005 - 31/12/2005



Source: European Competition Network

In the sector, the Commission intervened in three ways: first by issuing guidelines of general application explaining how it would apply antitrust if it were to open a case; second by collecting systematic information on specific problem in the industry with sector enquiries or quasi-sector enquiries;¹⁶³ and third by opening individual cases.¹⁶⁴

¹⁶³ I refer to quasi sector-enquiry when the Commission collected information on a broad industry basis, without relying formally on its sector enquiry power (as now enshrined in Article 17 of Regulation 1).

¹⁶⁴ Temple Lang (2006:9) adds a fourth means which is the publication of benchmarks setting prices charged by incumbents for comparable services noting that the mere publication of such price comparisons had the effect of

Since the beginning of the liberalisation, the Commission adopted three explanatory guidelines, which intended to clarify the legal position in advance, i.e. without waiting for formal Commission to be adopted and possibly challenged before the Community Courts. They are binding the Commission because of the principles of legitimate expectations and equal treatment and they may also bind the NCAs if they have discussed and agreed to apply them under the loyalty clause of Article 10 EC.¹⁶⁵ Thus in 1991 when the sector was only partially liberalised, the Commission issued guidelines¹⁶⁶ dealing in a very general way with the application of competition rules to the telecommunications sector: application of *ex ante* control in the context of the restructuring of the industry, and application of *ex post* control to the agreements or unilateral conducts of the incumbents still enjoying monopoly rights on the majority of telecom services markets (and able to leverage their protected market power to newly liberalised markets). In 1998 when the sector was just fully liberalised, the Commission adopted a more focused Notice¹⁶⁷ on the application of antitrust to infrastructure's access, which was the most critical problem to ensure effective competition. This Notice listed the multiple behaviours that may be abusive, ranging from refusal to give access¹⁶⁸ to access granted under unfair conditions.¹⁶⁹ Finally in 2000 at a time when high-speed Internet access was taking up in Europe, the Commission adopted an even more focused Communication¹⁷⁰ dealing with the specific problem of the unbundled access to the local loop (in effect, compulsory third party access to the least competitive bit of the telecom infrastructure). It stated that incumbents should in general give access to their local loop under reasonable conditions to comply with Article 82 EC (in particular the essential facilities doctrine).¹⁷¹

forcing the companies concerned to lower their prices to avoid measures which otherwise would certainly have been adopted. However, I consider that means more regulatory than competition law.

¹⁶⁵ Temple Lang (2006:9).

¹⁶⁶ Commission Guidelines on the application of EEC Competition rules in the Telecommunications sector, O.J. [1991] C 233/2.

¹⁶⁷ Commission Notice of 31 March 1998 on the application of competition rules to access agreements in the telecommunications sector, O.J. [1998] C 265/2, hereinafter *Access Notice*.

¹⁶⁸ An outright refusal would be abusive in three cases: when access been given and is withdrawn to the same firm (termination of an agreement); when access been given and is refused without justification to another firm (discrimination); and when access has not been granted and yet can be made compulsory in case of essential facilities

¹⁶⁹ prices that are excessive, predatory or creating a margin squeeze or conditions may also be discriminatory, or amount to an illegal tie-in of two separate products.

¹⁷⁰ Communication from the Commission of 26 April 2000 on the unbundled access to the local loop, O.J. [2000] C 272/55. See also: Vinje and Kalimo (2000).

¹⁷¹ However, this Communication was not effective enough to ensure the success of unbundling. The same issue was taken again in July 2000 under antitrust with the launching of a sector enquiry, and in December 2000 under sector-specific regulation with the adoption of a Council and European Parliament Regulation making unbundling compulsory as of January 2001: Regulation 2887/2000 of the European Parliament and of the Council of 18 December 2000 on unbundled access to the local loop, O.J. [2000] L 336/4.

However, these three general guidelines were not sufficient to avoid any abuse from the incumbents. When alleged abuses were particularly harmful to the success of the liberalisation program or to European consumers' interests, the Commission collected systematic information on incumbents' behaviours and opened individual cases. In the following I deal with the sector and quasi-sector enquiries and the European and national cases according to the market segments: fixed narrowband and broadband, leased lines, mobile, and associated services.¹⁷²

A. Fixed narrowband

At the national level, the Commission opened, in the fixed narrowband segment, a case against *Deutsche Telekom* in 1996.¹⁷³ It considered that the new retail business tariffs of DT would (1) have price squeezing effects on new entrants when compared with wholesale interconnection charges, (2) discriminate in favour of business vis-à-vis residential customers, and (3) represent a bundling of services, some being under legal monopoly and others being open to competition. The Commission settled the case and made the introduction of the new tariffs conditional to the allocation of two alternative infrastructure licences, the offer of access agreements at cost oriented prices and the separation of voice and Virtual Private Network services. In 1998, the Commission opened another case against *Deutsche Telekom*. It considered that DT's fees for carrier pre-selection and number portability¹⁷⁴ were excessive (in comparison with those charged in other Member States) thereby raising switching costs for final customers and impeding entry of new competitors. The file was closed when DT considerably reduced the fees (by 50% for carrier pre selection fees) and the German NRA agreed to take the case.

In 1997, the Commission collected data among all dominant operators in Europe on the tariffs for international phone calls in order to determine if the underlying wholesale charges paid

¹⁷² Note also the action in the directories segment: IP/97/292 of 11 April 1997; *ITT Promedia/Commission T-111/96 ECR* [1998] II-2937. See also: Richards (2003).

¹⁷³ IP/96/543 of 25 June 1996; IP/96/975 of 31 October 1996.

¹⁷⁴ IP/98/430 of 15 May 1998. Carrier selection and number portability are defined in the Glossary.

between operators (the so-called accounting rates) were cost-oriented.¹⁷⁵ On that basis, the Commission opened in 1998 seven cases for excessive accounting rates. They were passed to the NRAs for them to impose substantial reduction in the prices (by an average of 27% in Finland, Austria and Portugal for example).¹⁷⁶

At the national level, the Spanish NCA fined *Telefonica* for €57 million for discriminatory treatment of requests for pre-assignment, provision by Telefonica of certain services only on condition that customers had no pre-assignments with its competitors, and the use of commercial practices to win back customers that confused users.¹⁷⁷

B. Fixed broadband

At the European level, the Commission relied, in the fixed broadband segment, did in July 2000 a sector enquiry on the provision of access to and use of the residential local loop. In March 2002, an external expert report was presented.¹⁷⁸

On that basis in April 2003, the Commission adopted the first Article 82 EC condemning decision since the beginning of the liberalisation of the sector and fined *Deutsche Telekom* for €12.6 million because of a margin squeeze between the wholesale charge for full unbundling of the local loop and the retail prices for access lines, although both charges were regulated by the NRA with a price cap. To prove that, the Commission compared upstream access to the local loops with a bundle of different types of retail offerings (namely analogue, ISDN and ADSL connections) and, in order to achieve a coherent comparison, used a weighted approach taking into account the numbers of DT's retail customers for the different access types on retail level.¹⁷⁹ Such comparison revealed, for the period 1998 through 2001, that DT charged

¹⁷⁵ IP/97/1180 of 19 December 1997. To do so, Commission compared these accounting rates with the national interconnection charges (using operators' rates and the EU best practice) plus additional costs specific to the international routes.

¹⁷⁶ IP/98/763 of 13 August 1998 which listed the cases: OTE of Greece, Post & Telekom Austria, Postes et Télécommunications Luxembourg; Sonera of Finland, Telecom Eireann of Ireland, Telecom Italia, and Telecom Portugal; IP/99/279 of 29 April 1999.

¹⁷⁷ Decision of 1 April 2004, Case 557/03 *Astel v Telefonica*, cited in Commission Report on Competition Policy 2004, vol. 2, p. 124.

¹⁷⁸ IP/00/765 of 12 July 2000. Report done by Squire-Sanders-Dempsey, Legal Study on Part II of the Local Loop Sectoral Inquiry, February 2002, available at http://www.europa.eu.int/comm/competition/antitrust/others/sector_inquiries/local_loop/.

¹⁷⁹ Thus para 107 of the Decision reads: (...) there is an abusive margin squeeze if the difference between the retail prices charged by the dominant undertaking and the wholesale prices it charges its competitors for

competitors more for unbundled access at wholesale level than it charged its subscribers for access at the retail level, hence a clear case of margin squeeze. As of 2002, prices for wholesale access were lower than retail subscription prices but the difference was still not sufficient to cover DT's own downstream product-specific costs for the supply of the end-user services. This decision has been criticised on substantive and on institutional grounds. On substantive ground, Haucap (2006) submits that the decision is not based on sound economic approach because it failed to recognise the complementarity between the access line and the telephone calls, hence it made no sense to focus only the price of the access line. On institutional grounds, many authors (see Section 4.41.2.B) submit that the Commission should not have condemned Deutsche Telekom for what was mainly a regulatory squeeze. To be sure, Deutsche Telekom enjoyed some discretion in the margin of regulation that would have allowed a reduction of the squeeze, but it remains that the main responsible was the German authority.

This DT saga continued in 2004 when the Commission found another margin squeeze between the wholesale charges for shared access of the local loop and the retail access lines. In this case, the Commission did not fine Deutsche Telekom but settled the case by accepting commitments from the operator to petition the NRA for a lowering of the line sharing tariffs on a lasting basis.¹⁸⁰ In order to comply with these commitments and following an approval of the NRA for one year, DT decreased its monthly line sharing fee (from €4,77 to €2,43), and subsequently, several companies rolled out their networks in order to provide broadband services via line sharing. However in May 2005, DT re-applied for a shared access charge at €4,77 to the NRA and the Commission services found again that such a fee would lead to a margin squeeze. Therefore, it requested DT to file an application in compliance with its commitments and DT has recently done so by applying for a monthly line sharing fee of €2,43.¹⁸¹

Again in July 2003, the Commission fined *Wanadoo* (the ISP subsidiary of France Telecom) for €10.35 million because of predatory prices in the retail market for Internet access. The Commission found that *Wanadoo's* prices were below average variable cost from January 2001 until October 2002 while *Wanadoo's* market share rose from 46% to 72% on a market

comparable services is negative, or insufficient to cover the product-specific costs to the dominant operator of providing its own retail services on the downstream market..

¹⁸⁰ IP/04/281 of 1 March 2004.

¹⁸¹ IP/05/1033 of 3 August 2005.

which saw more than a five-fold increase in its size and one ADSL service provider (Mangoosta) went out of business. The abuse came to an end in October 2002, with the entry into force of new wholesale prices charged by France Télécom, more than 30% down on the previous prices charged. Since then, the French high-speed Internet access market was growing much more rapidly and in a more balanced way. The Commission applied the AKZO-rule on a flexible way, hence taking into account that it concerned a new product but Wanadoo's pricing policy was part its strategic plan, which became clear out of Wanadoo's internal documents. Further on, concerning the applicability of the predation concept to a growth sector, the Commission states:

301. [...] that nothing in Article 82 of the Treaty or in the Community case-law on the subject provides for an exception to the application of the competition rules to sectors which are not yet fully mature or which are considered to be emerging markets. To subordinate the application of the competition rules to a complete stabilisation of the market would be to deprive the competition authorities of the power to act in time before the abuses established have exerted their full effect [...]

Unsurprisingly, both DT and Wanadoo decisions are currently under appeal at the Court of First Instance due to the paucity of the case-law in telecommunications and the consequent many legal uncertainties.

In December 2003, the Commission opened a case against *TeliaSonera*¹⁸² for predatory price in bidding for the construction and operation of a fibre-optic broadband network for the provision of high-speed Internet access and other services on behalf of a regional housing association. This case was closed in November 2004 as the Commission concluded that it could not be established with sufficient certainty that *TeliaSonera* held a dominant position in the relevant markets at the time when the bid was submitted¹⁸³.

Finally in February 2006,¹⁸⁴ the Commission opened a case against *Telefonica* for price squeeze as, since 2001, the spread between *Telefónica's* prices for wholesale broadband access requested from its competitors and the downstream tariffs for broadband Internet access to be paid by the consumers has been insufficient to cover *Telefónica's* own costs for the supply of such retail services (and retail broadband prices in Spain are high and well

¹⁸² IP/03/1797 of 19 December 2003.

¹⁸³ Commission Report on Competition Policy 2004, para 48.

¹⁸⁴ MEMO/06/91 of 22 February 2006.

above EU average and the roll out of alternative infrastructures in Spain is far behind the EU-average).

At the national level, the French Competition Council has been extremely active, in particular in opening of the local access market to stimulate broadband development.¹⁸⁵ The Swedish NCA found that *TeliaSonera* abused its dominant position by committing a price squeeze (i.e. a difference not covering the company's incremental costs for retail sales) between the wholesale and the retail ADSL prices.¹⁸⁶

C. Leased lines

At the European level, the Commission launched, in the leased lines segment, another sector enquiry in October 1999 because leased lines are an important building block of the information highways (as they are used by fixed new entrants and mobile telecom operators, Internet Service Providers and large business users). In September 2000, the Commission presented its preliminary assessment.¹⁸⁷ The enquiry was closed in December 2002.

On that basis in November 2000, the Commission opened five cases for excessive international leased lines prices¹⁸⁸ because the control of the prices of international leased lines were not covered by the sector-specific regulation¹⁸⁹ (hence NRA could not act), and they were inherently of Community interest. These cases were progressively closed after significant decrease in the price of the international leased lines.¹⁹⁰ The Commission had also concerns for short distance leased lines (in terms of prices and services provisioning) but relied on the NRAs to act.

¹⁸⁵ Bourreau (2003). Competition Council Decision 00-MC-01 of 18 February 2002, *9Telecom/France Telecom I*, upheld by the Appeal Court of Paris decision in 30 March 2000, and Competition Council Decision 04-D-18 of 13 April 2004, *9Telecom/France Telecom II*, upheld by the Appeal Court of Paris in 11 January 2005; Competition Council Decision 05-D-59 of 7 November 2005, *9Telecom/France Telecom III*.

¹⁸⁶ Decision of December 2004, cited in Commission Report on Competition Policy 2004, vol. 2, p. 132.

¹⁸⁷ IP/99/786 of 22 October 1999; Commission services Working Document of 8 September 2000 on the initial results of the leased lines sector inquiry; IP/00/1043 of 22 September 2000; IP/02/1852 of 11 December 2002.

¹⁸⁸ Against the incumbents of Belgium, Greece, Italy, Portugal and Spain: Sauter (2001).

¹⁸⁹ In particular, the Directive 92/44 as amended.

¹⁹⁰ Average price decrease of 30 to 40% for the 2Mbits lines, the most commonly used bandwidth: IP/02/1852 of 11 December 2002.

D. Mobile

At the European level, the Commission collected in the mobile telephony segment in 1998 systematic information on the high prices for fixed to mobile and mobile to fixed calls.¹⁹¹ On that basis, cases were opened for excessive fixed termination charges,¹⁹² excessive fixed retention charges,¹⁹³ and excessive mobile termination charges.¹⁹⁴ The cases were passed to NRAs when they had jurisdiction to intervene under national telecommunication law, and otherwise were closed after the operators agreed substantial reduction of their charges (from 30 to 80%.)¹⁹⁵

The particular issue of excessive mobile termination charges came again in 2002 in the Netherlands when the Commission opened a case against the incumbent *KPN* following a complaint of WorldCom (now part of Verizon). However this time, the Commission decided to tackle the case under constructive refusal to access to *KPN* mobile network, margin squeeze between mobile termination charges and retail prices offered to VPN customers and discrimination on the mobile termination charge in favour of *KPN*.¹⁹⁶ It did not rely on the (supposedly more difficult to prove) unfair pricing abuse. The Commission closed the case in 2004 because on the one hand, the Dutch regulator had ensured that *KPN* Mobile offered a direct interconnection with all mobile operators and that its termination rates decreased over time (because of an intervention of the competition authority) and went under the control of the NRA, and on the other hand, the existence of a margin squeeze in the specific context of the Mobile virtual private network could not be proved.¹⁹⁷

In January 2000, the Commission launched another sector enquiry on the high international roaming prices.¹⁹⁸ In November 2000, the Commission presented its preliminary findings and

¹⁹¹ IP/98/1036 of 26 November 1998. In the case of mobile-to-fixed calls, the fixed termination charge is the fee paid by the mobile operator to the fixed operator for terminating the call. In case of fixed-to-mobile calls, the mobile termination charge is the fee paid by the fixed operator to the mobile operator for terminating the call, and the fixed retention charge is the fee kept by the fixed operator for originating the call.

¹⁹² Four cases: Deutsche Telekom, *KPN* of the Netherlands, Telefonica of Spain, Telecom Italia: IP/98/707 of 27 July 1998.

¹⁹³ Eight cases: Belgacom of Belgium, Telecom Eireann of Ireland, Deutsche Telekom, *KPN* of the Netherlands, Telefonica of Spain, Telecom Italia, BT, P&T Austria: IP/98/707 of 27 July 1998.

¹⁹⁴ Cases opened in two countries: all the mobile operators in Germany and in Italy: IP/98/141 of 9 February 1998; IP/98/707 of 27 July 1998.

¹⁹⁵ IP/98/1036 of 26 November 1998; IP/99/298 of 4 May 1999.

¹⁹⁶ IP/02/483 of 27 March 2002.

¹⁹⁷ Commission Report on Competition Policy 2004, para 47.

¹⁹⁸ IP/00/111 of 4 February 2000; Commission services Working Document of 13 December 2000 on the initial findings of the sector inquiry into mobile roaming charges; MEMO/01/262 of 11 July 2001. Note that in 1997,

identified several possibilities of excessive prices (on the basis of discrimination, benchmarking, and an analysis of the pattern of changes of the price over a four years period). On that basis, the Commission opened in July 2004 two cases against Vodafone and O2 for excessive wholesale international roaming prices in United Kingdom.¹⁹⁹ It opened a similar case against Vodafone and T-Mobile in Germany in February 2005.²⁰⁰ The Commission is also looking at the competitive effects resulting from the creation of strategic mobile alliances Freemove and Starmap.²⁰¹

At the national level, French authority has heavily fined the three mobile operators for market sharing and information exchange.²⁰² The French NCA condemned FT Mobile and SFR for price squeeze (i.e. the difference did not cover the variable costs of providing the services) between the wholesale mobile termination charges and the retail fixed-to-mobile prices for business customers.²⁰³ The Dutch NA condemned the five mobile operators (KPN Mobile, Vodafone Libertel, Orange/formerly Dutchtone, Telfort/formerly O2 and T-Mobile/formerly Ben) for a concerted practice and/or agreement between the operators on adjusting/lowering the standard connection fee (bonus) that they pay to dealers for concluding prepaid and post-paid subscriptions for mobile telephony.²⁰⁴

the Commission gave its approval in a comfort letter to the GSM MoU standard international roaming agreement, whose some clauses may be the source of the current concerns; XXVIIth Commission Report on Competition Policy 1997, p. 139. International roaming tariffs are the charges that a mobile customer has to pay while giving and receiving call abroad using another network than the one to which he is affiliated.

¹⁹⁹ IP/04/994.

²⁰⁰ IP/05/161.

²⁰¹ Commission Report on Competition Policy 2004, p. 34.

²⁰² Competition Council Decision 05-D-65 of 30 November 2005. Note that according to the statistics of the ECN, the French NCA is the most with 29 envisaged decision between May 2004 and December 2006.

²⁰³ Decision of 14 October 2004, 04-D-48. This decision has been reformed by a decision of the Paris Court of Appeal of 12 April 2005.

²⁰⁴ Cited in Commission Report on Competition Policy 2004, vol. 2, p. 132.

Summary

Table 2.3: Commission Abuse of dominant cases

	Fixed narrowband	Fixed broadband	Leased lines	Mobile
Sector and quasi-sector enquiries	Tariffs for international phone calls (1997)	unbundling of the local loop (2000)	Provision of leased lines (1999)	- Retail and wholesale tariffs on fixed to mobile calls (1998) - Retail and wholesale international roaming (2000)
Exploitative abuses	Excessive accounting rates: OTE, ETP, Austria Telekom, Finland, Telecom Italia, Ireland, Portugal (1998)		Excessive prices for international leased lines: Belgium, Italy, Spain (2002)	- Excessive mobile termination: Germany and Italy (1999) - Excessive wholesale roaming charges: O2 and Vodafone UK (2004) T-Mobile and Vodafone Germany (2005)
Exclusionary pricing	Price squeeze between interconnection charges and retail business tariffs: Deutsche Telekom (1996) Excessive price for carrier pre-selection and number portability: Deutsche Telekom (1998)	- <i>Price squeeze between full unbundling charges and retail ADSL tariffs: Deutsche Telekom (2003)</i> - Price squeeze between shared access charges and retail access tariffs: DT (2004) - <i>Predatory retail ADSL price: Wanadoo (2003)</i> - Price squeeze between national/regional wholesale products and ADSL tariffs: Telefonica (2006)		Price squeeze between mobile termination charges and retail mobile tariffs: KPN (2002)

Case in italics led to a formal decision of the Commission

2.2.3. Overview of ex ante competition law

After having described the application of *ex-post* competition law in the electronic communications sector, I now turn of the application of *ex-ante* competition law, following the same structure: overview of the system and then application in the sector according to the different market segments.

A. Market Definition

Under *ex-ante* antitrust, the principles (and the difficulties of application) of the market definition are similar than under *ex-post* antitrust, although the analysis is prospective in the former and not in the latter. During the last decade, the Commission adopted numerous joint venture and merger decisions where it has defined markets in the electronic communications sector.²⁰⁵ At a general level, several observations could be made. First, most of the definitions related to retail markets. They are defined in a segmented way, on the basis of different customers categories (residential, SME, large corporation) and their respective needs. Second, demand substitution was more taken into account than supply substitution because it constrained more directly pricing behaviours. Third, market definitions evolved over time according to technological and commercial developments. Fourth, most definitions have actually been left open as they were not necessary to decide the case.

B. Significant Lessening of Competition

The substantive test: Significant impediment to effective competition

The test to review concentration has been reformed by the new Merger Regulation to cover cases leading to the creation and the strengthening of a dominant position and also cases leading to a post-merger price increase without the creation of a dominant position but merely by non-coordinated effects between operators (the so-called gap cases). Thus Article 2(3) of the Merger Regulation states that

A concentration which would *significantly impede effective competition*, in the common market or in a substantial part of it, *in particular as a result of the creation or strengthening of a dominant position*, shall be declared incompatible with the common market. (emphasis added)

And Recital 25 clarifies that

In view of the consequences that concentrations in oligopolistic market structures may have, it is all the more necessary to maintain effective competition in such markets. Many oligopolistic markets exhibit a healthy degree of competition. However, under certain circumstances,

²⁰⁵ For an overview: Bellemany and Child (2001); Bartosch (2002); Bird and Bird (2002); Faull and Nikpay (1999); Europe Economics (2002); Garzaniti (2003); Squire-Sanders-Dempsey and WIK Consult (2002).

concentrations involving the elimination of important competitive constraints that the merging parties had exerted upon each other, as well as a reduction of competitive pressure on the remaining competitors, may, even in the absence of a likelihood of coordination between the members of the oligopoly, result in a significant impediment to effective competition.

The Community courts have, however, not to date expressly interpreted Regulation (EEC) No 4064/89 as requiring concentrations giving rise to such non-coordinated effects to be declared incompatible with the common market. Therefore, in the interests of legal certainty, it should be made clear that this Regulation permits effective control of all such concentrations by providing that any concentration which would significantly impede effective competition, in the common market or in a substantial part of it, should be declared incompatible with the common market. *The notion of 'significant impediment to effective competition' in Article 2(2) and (3) should be interpreted as extending, beyond the concept of dominance, only to the anti-competitive effects of a concentration resulting from the non-coordinated behaviour of undertakings which would not have a dominant position on the market concerned.* (emphasis added)

To assess such test, the Commission should start by classifying the effects of the merger: horizontal (i.e. between competitors on the same level of the value chain), vertical (between enterprises on different levels of the value chain), or conglomerate (between undertakings that are not directly related.)²⁰⁶ In case of horizontal effects, a concentration may significantly affect competition in two ways:²⁰⁷ (a) by eliminating important competitive constraints on one or more firms, which consequently would have increased market power, without resorting to coordinated behaviour (*non-coordinated effects*), in turn this may be due to the creation of the strengthening of a dominant position or the disappearance of a maverick firm in the market;²⁰⁸ and (b) by changing the nature of competition in such a way that firms that previously were not coordinating their behaviour, are now significantly more likely to coordinate and raise prices or otherwise harm effective competition. A merger may also make coordination easier, more stable or more effective for firms which were coordinating prior to the merger (*coordinated effects*).

²⁰⁶ The Commission is expected to adopt Guidelines on the assessment of vertical and conglomerate mergers.

²⁰⁷ Commission Guidelines on the assessment of horizontal mergers, para 22.

²⁰⁸ *Ibidem*, para 25.

In the electronic communications sector, the Commission has already reviewed one case creating a non-coordinated effects without dominance because of the disappearance of a maverick operator.²⁰⁹ It has also adopted several decisions where the concept of collective dominance has been applied. For instance, it was considered that the characteristics of mobile telephony market in Germany and in Belgium²¹⁰ may lead to tacit collusion. But in general, few electronic communications appears to fulfil the conditions of collective dominance, particularly since the concerns about the likelihood of tacitly collusive behaviours by operators in setting bilateral termination charges have been abated by recent economic researches.²¹¹

The standard of proof of the significant impediment to effective competition

As explained before, the standard of proof is the level of probability that an antitrust authority should show to prove that a merger would significantly impede the effective competition. There are more indications in the case-law on the standard of proof applicable for the merger control than for the Article 81 or 82 control. In *Kali and Saltz*, the Court of Justice referred to the need for a 'sufficiently cogent and consistent body of evidences' and also held that the merger's effect must be assessed with a 'sufficient degree of probability' and for that the Commission must rely on a rigorous analysis.²¹² In *Tetra Laval*, the Court of Justice held that:

42. A prospective analysis of the kind necessary in merger control must be carried out *with great care* since it does not entail the examination of past events – for which often many items of evidence are available which make it possible to understand the causes – or of current events, but rather a prediction of events which are more or less likely to occur in future if a decision prohibiting the planned concentration or laying down the conditions for it is not adopted. (emphasis added)

The Commission argues for a low standard of proof and submits that the *TetraLaval* judgement upholds the Commission's view that the requisite standard of proof in all merger

²⁰⁹ Case M.3926 *T-Mobile/tele.ring*.

²¹⁰ Respectively *Vodafone/AirTouch*, para 28 (the criteria to find collective dominance were: highly regulated market entry because licences were limited by reference to the amount of available radio frequencies, and market transparency); and *France Telecom/Orange*, para 26 (the criteria were: behaviours parallelism for the previous four years and transparent pricing).

²¹¹ *Armstrong* (2002).

²¹² Joined Cases C-68/94 and C-30/95 *Kali and Saltz*, para 228 and 246. See also *Airtours* at para 63 and 294 referring to 'convincing' and 'cogent' evidence.

cases is that of a balance of probabilities.²¹³ However, as President Vesterdorf (2005a:23) submitted : “the case law of the Community courts does not reveal, with any degree of clarity, whether the standard of proof incumbent upon the Commission is one of balance of probabilities, beyond reasonable doubts or any other intermediate standard”. He argues in favour of a intermediate standard because on the one hand, the inherently complex and forward-looking nature of the merger control as well as the time constraints imposed by the Merger Regulation militate against the high standard of ‘beyond reasonable doubt’, and on the other hand, the benefit of doubt should lean towards authorising the merger in cases that are ‘too close to call’.

Similarly (although not exactly for the same reason)²¹⁴ in his Opinion in *Tetra Laval*, Advocate General Tizzano favoured an intermediate standard of high probability:

74. It therefore cannot be claimed that in order to prohibit a concentration the Commission must establish with absolute certainty that the concentration would lead to the creation or strengthening of a dominant position as a result of which effective competition would be significantly impeded in the common market or in a substantial part of it. *It seems to me sufficient for that purpose if, on the basis of solid elements gathered in the course of a thorough and painstaking investigation, and having recourse to its technical knowledge, the Commission is persuaded that the notified transaction would very probably lead to the creation or strengthening of such a dominant position. If the Commission is not so convinced, it must on the contrary authorise the merger.*

75. Unlike the Commission, I believe that application of such a test is not contrary to the perfectly symmetrical nature of the legal requirements laid down by Article 2(2) and (3) of the Regulation for a declaration that a concentration is or is not compatible with the common market.

76. As a matter of fact, I consider that the symmetry of those requirements cannot be absolute, seeing that there is, between the cases in which the notified transactions would very probably create or strengthen a dominant position within the meaning of Article 2 and the cases in which those transactions very probably would not create or strengthen such a dominant position, a ‘grey area’: *an area, that is to say, in which cases are to be found where it is especially difficult to foresee the effects of the notified transaction and where it is therefore impossible to arrive at a clear distinct conviction that the likelihood that a dominant position will be created or strengthened is significantly greater or less than the likelihood that such a position will not be created or strengthened.* The system laid down by [Merger Regulation]

²¹³ Commission Report on Competition Policy 2005, para 382.

²¹⁴ Vesterdorf rejects the asymmetry of the merger control argued by Tizzano at para 76.

must therefore necessarily provide a yardstick for the solution of those cases which are of doubtful or difficult classification.

77. I believe that in *such cases the most correct solution is quite certainly to authorise the notified transactions.* (emphasis added)

However, the difficult question is whether the standard of proof should be higher or lower in an *ex-ante* case than in an *ex-post* case and they are conflicting arguments related to the type of assessment (and the related *risk* of error) and the type of remedies (and the related *cost* of error.)²¹⁵ Thus, the first set of arguments relates to the fact that merger assessment is prospective. On the one hand, this pleads for a high burden of proof because the risk of error is high (the error being of type I: prohibiting a pro-competitive merger, or of type II: authorising an anti-competitive merger.)²¹⁶ On the other hand, prospective assessment pleads for a low burden of proof because high degree of probability is more difficult to achieve.²¹⁷

The second set of arguments relates to the fact that merger remedies are usually structural but are never criminal (as it is the case in some countries for violating cartel provisions). On the one hand, this pleads for high burden of proof because the cost of error of structural remedies may be high (and higher than the cost of error of behavioural remedies that may be more easily removed.)²¹⁸ On the other hand, the fact that no criminal remedy may be imposed pleads for a low burden of proof.

In the end, it may be difficult and useless to give precise theoretical indications on the burden of proof in a merger case because that will depend of the context and the specificities of the case at hand. Suffice to say that the standard is not a 'beyond reasonable doubt' and that it may be higher than the balance of probabilities depending of uncertainties of the anti-competitive effects (like the timeframe of the assessment, the novelty of the economic theories used).

²¹⁵ Linking the appropriate standard of proof with the risk and the cost of type I and II errors in the antitrust decision has already been proposed by several authors (recently Evans and Padilla, 2004 or Kühn et al., 2004) and dated back of the Chicago School. This is becoming recognised by the European lawyers as Vesterdorf (2005a:26).

²¹⁶ This is the thrust of the high burden of proof imposed in the *Tetra Laval* and the quoted para of the Opinion of Tizzano. In this sense also, see Völcker (2003).

²¹⁷ That may be the reason why the economists (inter alia Motta, 2004) argue that the collective dominance may be used to intervene in a merger case, but not in a abuse cases.

²¹⁸ Although Rey (2003) is more nuanced and shows that the cost of error of a behavioural remedy may be as high than the cost of error of a structural remedies.

C. Preventive remedies

If the Commission found that a proposed concentration would significantly impede effective competition in the common market, the notifying parties may propose remedies to remove the Commission's concerns.²¹⁹ In general, a distinction is made between structural remedies (like divestiture) that are one-off and modify the structure of the market and behavioural remedies (like compulsory access) that need a permanent monitoring and do not directly modify market structure. Because the merger control deals with structural problems, the former type of remedies should be preferred to the latter. However, the Community Courts underline the difficulty to distinguish both types of remedies in practice. In *Gencor*, the Court of First Instance held that²²⁰

319. The categorisation of a proposed commitment as behavioural or structural is therefore immaterial. It is true that commitments which are structural in nature, such as a commitment to reduce the market share of the entity arising from a concentration by the sale of a subsidiary, are, as a rule, preferable from the point of view of the Regulation's objective, inasmuch as they prevent once and for all, or at least for some time, the emergence or strengthening of the dominant position previously identified by the Commission and do not, moreover, require medium or long-term monitoring measures. Nevertheless, the possibility cannot automatically be ruled out that commitments which *prima facie* are behavioural, for instance not to use a trademark for a certain period, or to make part of the production capacity of the entity arising from the concentration available to third-party competitors, or, more generally, to grant access to essential facilities on non-discriminatory terms, may themselves also be capable of preventing the emergence or strengthening of a dominant position.

Following this logic the Commission states, in a Notice on acceptable remedies,²²¹ its preference for divestiture, but underlines that others types of remedies may be necessary where a divestiture of a business is impossible or where competition problems result from specific features, such as the existence of network effects. In practice, horizontal concerns are usually addressed with divestiture whereas vertical concerns are addressed with access

²¹⁹ See Drauz (1997), Larouche (2004), Monti (2002). For an US perspective, Parker and Balto (2000).

²²⁰ Case T-102/96 *Gencor* [1999] ECR II-753, para 319. See also Case T-114/02 *Babyliiss* [2003] ECR II-1279, para 170; Case T-158/00 *ARD* [2003] II-3825, para 193; Case C-12/03P *Tetra Laval*, para 85; Case T-87/05 *Energias de Portugal v Commission* [2005] ECR II-0000, para 100. Also: Katz (2004:247).

²²¹ Commission Notice on remedies acceptable under Council Regulation 4064/89/EEC and under Commission Regulation 447/98/EC. O.J. [2001] C 68/3, in particular para 26.

remedies.²²² An ex-post study done by the Commission services observes²²³ that, when considering the competition effectiveness of each type of remedy, exit to an existing joint-venture remedies was the most effective type of remedy, while the effectiveness of access remedies was weak. In particular on access remedies, the study notes that they have only worked in a very limited number of instances,²²⁴ mainly because of the inherent difficulties in setting the terms for effective access and in monitoring them. In view of this, it might be advisable to limit the use of access remedies to those situations where inherent difficulties can be effectively minimised and, in any case, review clauses should always be included in these types of remedies.

2.2.4. Application of ex-ante competition law to electronic communications

In electronic communications, the Commission relies more on the merger control than ex-post antitrust to control market power because it was faced with numerous notifications of alliances as the industry went under massive restructuring²²⁵ and because it has adopted a more interventionist stance in electronic communications than in other sectors (see Table 2.5 at the end of this Chapter). In the remaining part of this section, I analysed the Commission decisions imposing remedies and present them according the market segment.²²⁶

²²² Commission Merger Remedies Study of October 2005, p. 139.

²²³ *Ibidem*, p. 171.

²²⁴ *Ibidem*, p. 165.

²²⁵ Curwen (2003); Le Blanc and Shelanski (2003).

²²⁶ For a full description of all the cases: Garzaniti (2003:Ch. 8) and also Bellamy and Child (2001: Chapter 14), Faull and Nikpay (1999: Chapter 11). Note that until March 1998 (first modification of the Merger Regulation), the scope of Article 81 EC control was broad as it covers all joint ventures, even the full function autonomous ones, that had the object of effect to co-ordinate the competitive behaviours of the parents (this explains why the joint ventures set up between incumbents during mid-nineties to provide global telecom services were analysed under Article 81 EC). After May 2004 (abandonment of the ex-ante notification under Article 81 EC), no more case were analysed ex-ante under Article 81 EC.

Table 2.4a: List of ex ante decisions with remedies, under Merger Regulation and Article 81 EC (as of April 2006)

Case	Date	No	Legal basis(*)	Publication (**)	Cat ***
<i>Eirpage</i>	18 Oct. 1991	32.737	81.3 EC	O.J. [1991] L 306/23	2
<i>BT/MCI</i>	27 July 1994	34.857	81.3 EC	O.J. [1994] L 223/36	1
<i>Atlas</i>	17 July 1996	35.337	81.3 EC	O.J. [1996] L 239/23	1
<i>Phoenix/Global One</i>	17 July 1996	35.617	81.3 EC	O.J. [1996] L 239/57	1
<i>RTL/Veronica/Endemol II</i>	17 July 1996	M. 553	8.2 MR	O.J. [1996] L 294/14	3
<i>BT/MCI (II)</i>	14 May 1997	M. 856	8.2 MR	O.J. [1997] L 336/1	1
<i>Unisource</i>	29 Oct. 1997	35.830	81.3 EC	O.J. [1997] L 318/1	1
<i>Obligations repealed in Unisource (II)</i>	29 Dec. 2000	36.841		O.J. [2001] L 52/30	
<i>Uniworl</i>	29 Oct. 1997	35.738	81.3 EC	O.J. [1997] L 318/24	1
<i>WorldCom/MCI</i>	8 July 1998	M. 1069	8.2 MR	O.J. [1999] L 116/1	1
<i>NC/Canal+/CDPQ/BankAmerica</i>	3 Dec. 1998	M. 1327	6.2 MR		1
<i>BT/AT&T</i>	30 March 1999	JV. 15	8.2 MR		1
<i>TPS</i>	3 March 1999	36.237	81.3 EC	O.J. [1999] L 90/6	3
Upheld in Metropole	18 Sept. 2001	T-112/99		ECR [2001] II-2459	
<i>Cégétel+4</i>	20 May 1999	36.592	81.3 EC	O.J. [1999] L 218/14	1
<i>Vodafone/AirTouch</i>	21 May 1999	M. 1430	6.2 MR		2
<i>AT&T/MediaOne</i>	23 July 1999	M. 1551	6.2 MR		1
<i>Télécom Développement</i>	27 July 1999	36.581	81 EC	O.J. [1999] L 218/24	1
<i>BiB/Open</i>	15 Sept. 1999	36.539	81.3 EC	O.J. [1999] L 312/1	3
<i>Telia/Telenor</i>	13 Oct. 1999	M. 1439	8.2 MR	O.J. [2001] L 40/1	1
<i>Orange/Mannesmann</i>	20 Dec. 1999	M. 1760	6.2 MR		2
<i>TelekomAustria/Libro</i>	28 Feb. 2000	M. 1747	6.2 MR		1
<i>BSkyB/KirchPayTV</i>	21 March 2000	JV. 37	6.2 MR		3
Upheld in ARD	30 Sept. 2003	T-158/00		ECR [2003] II-3825	
<i>BT/Esat</i>	27 March 2000	M. 1838	6.2 MR		1
<i>EADS</i>	11 April 2000	M. 1745	6.2 MR		
<i>Vodafone/Mannesmann</i>	12 April 2000	M. 1795	6.2 MR		2
<i>Vodafone/Vizzavi/Canal+</i>	20 July 2000	JV. 48	6.2 MR		3
<i>FranceTelecom/Orange</i>	11 Aug. 2000	M. 2016	6.2 MR		2
<i>AOL/TimeWarner</i>	11 Oct. 2000	M. 1845	8.2 MR	O.J. [2001] L 268/28	3
<i>Vivendi/Canal+/Seagram</i>	13 Oct. 2000	M. 2050	6.2 MR		3
<i>YLE/TDF/Digita</i>	21 June 2001	M. 2300	6.2 MR		3
<i>Pirelli/Telecom Italia</i>	20 Sept. 2001	M. 2574	6.2 MR		1
<i>Modification remedies</i>	5 Aug. 2002			IP/02/1183	
<i>Telia/Sonera</i>	10 July 2002	M. 2803	6.2 MR		1
<i>NewsCorp/Telepiù</i>	2 April 2003	M. 2876	8.2 MR	O.J. [2004] L 110/73	3
<i>DaimlerChrysler/DI</i>	30 April 2003	M. 2903	8.2 MR	O.J. [2003] L 300/62	3
<i>UK Network sharing</i>	30 April 2003	38.370	81.3 EC	O.J. [2003] L 200/59	2
<i>Network Sharing Rahmenvertrag</i>	16 July 2003	38.369	81.3 EC	O.J. [2004] L 75/32	2
Partly annulled in O2 Germany	2 May 2006	T-328/03		ECR [2006] II-0000	
<i>Telenor/Canal+</i>	29 Dec. 2003	38.287	81.3 EC		3
<i>Telefonica/O2</i>	10 Jan. 2006	M. 4035	6.2 MR		2
<i>T-Mobile/tele.ring</i>	26 April 2006	M. 3916	8.2 MR		2

Table 2.4b: List of ex-ante decisions - prohibition

Case	Date	No	Legal basis	Publication	
<i>MSG Media Service</i>	9 Nov. 1994	M. 469	8.3 MR	O.J. [1994] L 364/1	2
<i>Nordic Satellite Distribution</i>	19 July 1995	M. 490	8.3 MR	O.J. [1996] L 53/20	2
<i>RTL/Veronica/Endemol (I)</i> Upheld in appeal Endemol	20 Sept. 1995 28 April 1999	M. 553 T-221/95	8.3 MR	O.J. [1996] L 134/32 ECR [1999] II-1299	3
<i>Bertelsmann/Kirch/Premiere</i> Appeal removed	27 May 1998	M. 993 T-123/98	8.3 MR	O.J. [1999] L 53/1	3
<i>Deutsche Telekom/BetaResearch</i>	27 May 1998	M. 1027	8.3 MR	O.J. [1999] L 53/31	3
<i>MCIWorldCom/Sprint</i> Annulled in MCI WorldCom	28 June 2000 28 Sept. 2004	M. 1741 T-310/00	8.3 MR	O.J. [2003] L 300/1 ECR [2004] II-3253	1

(*) 6.2 MR: Merger Regulation, Remedies in phase I
 8.2 MR: Merger Regulation, Remedies in phase II
 81.3 EC: EC Treaty, individual exemption

(**) If no mention, the decision is published on the web site of DG Competition

(***) Category 1: Fixed (incl. Internet or cable) or fixed and mobile services
 Category 2: Mobile services
 Category 3: Content-related services

A. Fixed narrowband and broadband

In the mid-nineties, the European incumbents notified to the Commission several alliances between themselves and with US operators to provide global telecom services. Three clusters of ventures were concluded. The first was initiated in 1994 by BT (not surprisingly as the UK was the first Member State to liberalise its market), which joined the American long distance company MCI (now part of Verizon) to set up the Concert venture for the provision new international value added telecom services for large multinationals. In *Concert*, the Commission had concerns on the market for global telecom services as BT and MCI were potential competitors on that market. However, the venture was exempted for several years with very light conditions because Concert would be able to offer better global services than either BT or MCI alone, the venture would face significant competition from strong players, and the existing telecom regulation to which BT and MCI were subject in their own countries would prevent cross-subsidisation and discrimination in favour of the joint venture. Later this deal was abandoned following WorldCom's successful take-over bid over MCI, and BT turned in 1999 to the other long distance American operator AT&T to create a joint venture (again branded Concert) to provide global telecom services to multinationals and international carriers services to other telecom companies. In *BT/AT&T*, the Commission did not any more had concerns for the competition on the global telecom services because of the increase

competition on international route and the increased regulation of the last mile infrastructure. It had only concerns for the co-ordination of the behaviours of the parents BT and AT&T on neighbouring markets than those where Concert would be active (mainly several UK telephony markets). To exclude any risk of co-ordination, AT&T undertook to divest some of its UK assets (like ACC UK providing long distance telecom services). The venture broke up again in 2001 and the Concert assets were divested back to its parents companies.

The second strand of alliances was reflecting the Franco-German couple, where France Télécom and Deutsche Telekom set up in 1996 the Atlas venture to provide non reserved –at that time- global telecom services to large users in Europe. In parallel, Atlas and Sprint from the US notified the Phoenix/Global One venture, which was an extension of Atlas services world-wide. In its twin decisions *Atlas* and *GlobalOne*, the Commission had concerns on the market for global telecom services as FT and DT were potential competitors and could use their dominance in national markets to favour the venture. These alliances was exempted for five and seven years under much more stringent conditions than *Concert* due to the different regulatory context:²²⁷ France and Germany (at the time, the major shareholders of FT and DT) undertook to liberalise alternative infrastructures to make Atlas' competitors less dependant of the networks of its parents; the parties agreed to postpone the transfer of their domestic data transmission networks to Atlas pending full liberalisation of French and German infrastructures, and in addition, took several behavioural commitments (no discrimination or cross-subsidisation in favour of Atlas, no exchange of confidential information, no tying and use of separate analytical accounts). Three years later in 1999, the Commission intended to remove some obligations and allow GlobalOne to provide all telecom services (including voice telephony), due to the market developments and in particular the entry of substantial competitors such as the BT/AT&T venture.²²⁸ Later on, the deal was abandoned and the Global One network was merged with the one of Equant, solely controlled by FT.

The third strand of incumbents' alliance was the Unisource venture in 1997 between Telia from Sweden, KPN from the Netherlands and Swiss Telecom to provide mobile, satellite, data and corporate services on a global basis. In parallel, Unisource and AT&T notified the

²²⁷ Contrary to the UK, at the time of the notification, telecom and alternative infrastructures were not yet liberalised in France and Germany and telecom regulators were in their infancy.

²²⁸ XXIXth Commission Report on Competition Policy 1999, Global One II, p. 141. However, the Commission did not intend to review the conditions relating to the behaviour of the parent companies (like the requirements not to cross-subsidise or discriminate in favour of GlobalOne).

Uniworld venture, which was an extension of Unisource services world-wide. In its twin decisions *Unisource* and *Uniworld*, the Commission granted an exemption for five years after the parties took similar commitments than those imposed in *Atlas*. Four years later in 2001, the Commission repealed in *Unisource II* all the obligations previously imposed following the reduction of Unisource's scope to valued added services to multinationals, the increased competition on the markets, and the additional regulatory safeguards in the Netherlands and Sweden.

However, these alliances have been very unstable over time as most of the initial deals have been abandoned by now. Moreover, they were limited to new international services and did not match the objectives of the Commission when liberalising the market, i.e. the creation of fully integrated pan-European groups. The first of these more ambitious operations took place only in the 1999 in the Nordic market²²⁹ when Telia decided to merge all its activities with Telenor of Norway in a deal of \$47 billion. In *Telia/Telenor*, the Commission had concerns on several Swedish and Norwegian markets for telecom services and for television services²³⁰ because of the loss of potential competition and the possibilities of the merging entity to foreclose entry by raising rival costs (with increase of interconnection tariffs) and bundling products across a wider geographical area. The Commission only approved the merger after the parties agreed to divest any overlapping telecom interests and their cable TV activities. Moreover, the Swedish and Norwegian governments (which were the major shareholders of the merging parties) committed to implement local loop unbundling in their countries, which was then imposed on 1 January 2001 on a more general basis in all Members States. However, the deal was abandoned due to a disagreement between the boards of directors of the parties.

Two years later in 2002, Telia turned to Sonera of Finland to integrate their activities. In *Telia/Sonera*, the Commission considered that the merger would strengthen the dominant position on several Finnish and Swedish telecom markets²³¹ because of overlapping activities, loss of potential competition and the possibility to leverage market power from the mobile

²²⁹ For an overview of the electronic communications market in the Nordic region, which is the most integrated in the European Union, see Nordic Competition Authorities (2004).

²³⁰ Telecom markets: fixed switched telephony, PABX distribution, mobile telephony, Internet access, and local telephone directories; and media markets: wholesale rights to content, content buying, satellite transponder capacity, technology for scrambling and unscrambling of TV signals, retail distribution of TV services.

²³¹ Finnish markets (mobile services, international roaming and WLAN) due to the overlapping activities of the parties, and on the Swedish and Finnish markets (for fixed international calls, fixed termination, mobile services, international roaming and mobile termination, and business data communications)

and fixed markets. Therefore, the Commission only cleared the merger after the parties agreed to divest any overlapping business (mobile and WLAN activities of Telia in Finland) and their cable TV in Sweden. In addition as the unbundling was not very successful to alleviate leverage from the local loop to other telecom markets, the Commission went further than in *Telia/Telenor* and imposed a legal separation between the operation of networks and services of their fixed and mobile activities in Sweden and in Finland, as well as a non discriminatory access to fixed and mobile termination for three years with a fast track dispute resolution procedure.²³²

In parallel of this European consolidation, the big American Internet companies were also restructuring themselves, in particular under the leadership of WorldCom. In 1998, it merged with MCI, a deal of \$40 billion. In *WorldCom/MCI*, the Commission was concerned that merging firms would control a critical mass (more than 50%) of the market for the provision of 'top-level' or 'universal' Internet connectivity so that they would be able to secure and reinforce their dominant position through network effects and quality degradation. Indeed once a network reaches a certain size or if there is a marked disparity between it and other networks, it grows further because it may have incentives and possibilities to offer its customers a better and more varied services. The merger was cleared on the conditions that the MCI's Internet network would be divested. The network was sold to Cable & Wireless, but with many problems due to the high integration between Internet and non-Internet business of MCI.²³³ Two years later in 2000, WorldComMCI wanted to absorb the other US operator Sprint. In *WorldComMCI/Sprint*, the Commission considered again that the merger would create a dominant position in the market for top-level universal Internet connectivity.²³⁴ Due to the problems of the previous MCI's Internet business divestiture, the Commission considered that the parties' proposal to divest Sprint's Internet business was insufficient, and in agreement with the US competition authorities prohibited the merger.

Thus, in its appraisal of the early global telecom services joint ventures, the Commission tried to reach a delicate balance by exempting the alliances as they permitted global services to be offered more quickly and imposing severe conditions to alleviate any leveraging from the

²³² The remedies were accepted by the Commission on 19 May 2003: IP/03/702.

²³³ See the testimony of the CEO of Cable & Wireless M. McTighe before the Commerce Committee of the US Senate on 8 November 1999.

²³⁴ For an economic model supporting the rationale of the Commission, see Cremer et al. (2000).

control of basic infrastructure into the emerging markets of global telecom services. In practice, as the Commission noted:²³⁵

The Commission is favourably disposed towards this process of adjustment. Such restructuring is on the whole necessary if firms are to benefit fully from liberalization, carry out the necessary research and development, launch new services and reduce costs. On the other hand, the liberalization process must not be called into question by restructuring operations which would have the effects of perpetuating excessive price levels, preventing new companies from entering previously monopolistic markets, or any other abuse or strengthening of a dominant position. Competition policy as it relates to the information society is therefore a balance between, on the one hand, a liberal attitude towards restructuring and, on the other, the need to keep a watchful eye on how such restructuring is carried out, or even impose a ban in some case; There is also a link between the degree of actual liberalisation of the relevant markets, which evolves over time, and the conditions which may be attached to restructuring operations.

For full mergers between incumbents, the Commission had to reach a similar balance. It favoured such mergers as enhancing the internal market but feared that they would create or strengthen dominant position in several telecom and media markets because of overlapping activities, loss of potential competition, and possibility of leveraging the dominant position in the home country of one incumbent to increase market power in the home country of the other merging incumbent. Thus such mergers were cleared under very stringent conditions: divestiture of any overlapping business, divestiture of cable TV in order to stimulate infrastructure competition, and third party access to telecom infrastructure (with additional conditions ensuring compliance) to stimulate service and infrastructure competition.

B. Mobile

Even though the mobile industry developed under different and more competitive conditions than the fixed industry, it went also under two phases of consolidations. The first phase took place at the end of the nineties. In 1999, Vodafone acquired the US mobile operator AirTouch in a deal of \$74.7 billion. In *Vodafone/AirTouch*, the Commission had concerns on the German mobile market because the merging entity would have had interest in two of the main three German mobile operators (D2 partially owned by AirTouch and E-Plus partially owned by Vodafone) which would have led to a duopolistic market situation amounting to a

²³⁵ XXVIth Commission Report on Competition Policy 1996, para 66; and Commission Guidelines of 1991, cited at note 38, para 129-138. See further: Larouche (1998); Styliadou (1997).

collective dominant position. Thus, the merger was cleared under condition that E-Plus was divested (sold to BellSouth and then to KPN). One year later in 2000, the British company continued its expansion and in the most important concentration between mobile operators (amounting to \$180 billion) acquired the German Mannesmann. In *Vodafone/Mannesmann*, the Commission had concerns on three markets: creation of dominance in the English and Belgian mobile markets because of the overlapping activities; and creation of a dominant position on the emerging market for seamless pan-European mobile services to corporate customers because of the footprint of the parties in most of the European countries and their ability to integrate their national mobile networks to develop pan-European services. The merger was cleared on conditions that the merging entity divested Orange (operating on UK and Belgium) and granted third party access for three years on a non-discriminatory basis to their integrated networks (wholesale services like interconnection and roaming) with a fast track dispute resolution procedure.

The second phase of consolidation of the mobile industry took place after the recover of the telecom bubble burst. In 2006, the Spanish incumbent Telefonica wanted to acquire O2, the previous mobile arm of BT mainly active in the UK, Ireland, and Germany. In *Telefonica/O2*, the Commission has concerns that the concentration would impede competition on two markets: the wholesale market for international roaming and the emerging retail market for advanced seamless pan-European mobile telecom services for Multi-national companies because O2 would leave the international alliances of the smaller operators StarMap to enter into a already strong alliance Freemove (comprising *inter alia* Telefonica, France Telecom, Deutsche Telekom and Telecom Italia). To remove such concerns, Telefonica committed to leave the Freemove alliance and not re-integrate it before 2011 without the prior agreement of the Commission.

Again in 2006, the second mobile Austrian operator T-Mobile (owned by the Deutsche Telekom group) wanted to acquire the fourth mobile operator tele.ring. This case was the first 'gap' case where the Commission considered that the merger would significantly impede competition on the market, although no single dominant would be created. Indeed in *T-Mobile/tele.ring*, the Commission considered that the merger would create coordinated effects on the retail market for basic mobile telephony services (voice and basic data) because of the absorption of tele.ring the only maverick firm on the market. To address such concerns, the

parties agree to divest frequencies and mobile sites to the smallest operator in the market H3G for it to become the new maverick firm.

Next to the industrial consolidation, the other major change of the mobile sector was the introduction of the third generation (3G or UMTS) mobile services which provides a much higher data transmission capacities than the previous second generation (2G or GSM). This new technology is promising, but its roll-out has been much slower than expected²³⁶ due to the financial difficulties of the sector at the turn of the century, the huge sums paid in getting the spectrum licences and the delay of the equipment manufacturer. To save costs and ensure a quicker roll-out of 3G services, several operators decided to joint their forces by sharing some parts (like the masts) of a network built together or by concluding national roaming agreement (such that one party built the network and the customers of the other party may use this network to give and receive their calls).

Thus, T-Mobile of Deutsche Telekom and O2 (part of BT at the time) entered into agreements to share site and to roam on their 3G networks in the UK and Germany. In its 2003 twin decisions *UK Network Sharing* and *Network Sharing Rahmenvertrag*, the Commission considered that site sharing did not restrict competition because the parts of the network to be shared were limited to basic infrastructure (such as masts and power supply) not involving network intelligence part. On the other hand, the Commission considered that national roaming restricted network-based competition, but exempted the agreements for 4 and 5 years (depending of the geographical areas) because it was limited to less economic areas (like rural or small cities) where it led to better and quicker 3G coverage. However the parties in the German case appealed the decision as they submitted that their agreement did not lessen competition under the terms Article 81.1 EC (hence did not necessitate the granted exemption under Article 81.3 EC.) The main question was whether a thorough analysis of the effects of the agreement should be done under Article 81.1 or Article 81.3 EC. In 2006,²³⁷ the Court of First Instance went for the former and annulled the provisions of the German network sharing agreement related to national roaming as it considered that the Commission did not sufficiently prove that the agreement was lessening competition under Article 81.1 EC.²³⁸ The

²³⁶ Communication from the Commission of 11 June 2002, Towards the Full Roll-Out of Third Generation Mobile Communications on 3G, COM (2002)301, and Commission 11th Implementation Report.

²³⁷ Case T-328/03 *O2 Germany v Commission* [2006] ECR II-0000.

²³⁸ Para 65-73 of the Case. In particular at para 66, the Court of First Instance notes that: "In order to assess whether an agreement is compatible with the common market in the light of the prohibition laid down in Article

interesting point for the sector is that the Court underlined the possible pro-competitive effect of the agreement as enabling the small operator O2 to enter more easily in the emerging 3G market.²³⁹ So although the Commission applies sometimes more strictly the antitrust rules in new markets, the Court of First Instance notes that emerging market may, on the contrary, be an argument for a more refined economic analysis.

C. Content related

The third broad segment of the electronic communications sector involves infrastructure and content, which is more politically sensitive as it touches upon pluralism and cultural diversity. After two early ventures that were famous as they were blocked, mainly two streams of ventures have been notified to the Commission; first, alliances relating to the TV to develop new digital pay-TV platform and emerging advanced interactive digital TV services,²⁴⁰ and second alliances relating to Internet.

The two early ventures took place in the Netherlands and in Scandinavia. RTL (of the broadcasting Group CLT, now part of Bertelsmann), Veronica (a Dutch commercial broadcaster) and Endemol (the largest independent producer of TV programmes in the Netherlands) set up the venture Holland Media Groep to pack and broadcast television programme. In *RTL/Veronica/Endemol I*, the Commission considered the alliance would create dominance on three markets (free-to-air broadcasting, TV advertising, and independent production) because of the broad range and the vertical links of the venture's activities. The transaction was prohibited in 1995 as no sufficient remedies were proposed. The parties appealed the decision at the Court of First Instance because they had already implemented the concentration at the time of the prohibition. In 1999, the Court confirmed the Commission decision. In the meantime, the parties also modified their transaction as Endemol withdrew from the venture and got the approval of the Commission in 1996 in *RTL/Veronica/Endemol II*.

81(1) EC, it is necessary to examine the economic and legal context in which the agreement was concluded, its object, its effects, and whether it affects intra-Community trade taking into account in particular the economic context in which the undertakings operate, the products or services covered by the agreement, and the structure of the market concerned and the actual conditions in which it functions".

²³⁹ Para 110 of the Case noting that: "That particular context, resulting from the specific characteristics of the relevant emerging market, was not taken into account in the assessment of whether the agreement was compatible with the common market under Article 81(1) EC".

²⁴⁰ Veljanovski C. (1999), Schaub et Lovergne (1999)

In Scandinavia, Norsk Telecom (with interest in cable, satellite capacity, and pay-TV operation), TeleDenmark (the Danish telecom incumbent, with the largest cable capacity in its country), and Kinnevik (a Swedish conglomerate, which was the most important provider of Nordic satellite TV programmes and a major pay-TV distributor) set up the Nordic Satellite Distribution venture to transmit satellite TV programmes in the Nordic region. In *Nordic Satellite Distribution*, the Commission found that venture would create a dominant position on three markets (transponder capacity for TV broadcasting to the Nordic region, the Danish cable market, and satellite pay-TV channels distribution) because the vertically integrated nature of the operation would have allowed the parties to foreclose the Nordic satellite TV markets. The merger was blocked in 1995 as no suitable remedies were proposed.

As regard to the stream of alliances related to digital TV, the first venture took place in Germany. In 1994, Bertelsmann and Kirch (two media group that were controlling the main pay TV Premiere) and Deutsche Telekom formed the Media Service GmbH venture to provide technical and administrative handling of pay TV services (for instance the management of the set-top boxes). In *MSG Media Service*, the Commission had concerns on three markets: MSG would acquire a dominance on administrative and technical pay-TV services because it would be the first supplier of such services and the parties could leverage their market power from the content, infrastructure and pay-TV markets to foreclose any entry by third party, Premiere would reinforce its dominance on the German pay-TV, and DT would strengthen its dominance on the German cable TV market because the parties controlling technical services (hence enjoying a gate keeper function) could impede entry on related markets. The merger was prohibited as no sufficient remedies were proposed. Four years later in 1998, the same three German actors joined their forces again and notified two agreements: joint control of the Premiere channel by Bertelsmann and Kirch, and joint control of BetaResearch (holding IPRs on set top boxes) by the three parties. This double operation was thus more extensive than MSG as it covered pay-TV distribution in addition to technical services. In the twin decisions *Bertelsmann/Kirch/Premiere* and *Deutsche Telekom/Beta Research*, the Commission had concerns on three markets following the same rational than in MSG: Premiere would become the only German pay-TV operator, BetaResearch would become the main supplier of set top boxes technology, and DT would reinforce its dominance on German cable-TV. Again, the concentration was blocked as the parties (in particular Bertelsmann) were not ready to accept sufficient commitments.

Then, the Kirch group continued to develop on its own pay-TV channel. However, due its financial difficulties at a time when money was needed to develop interactive digital services, BSkyB (of Murdoch's NewsCorp) acquired 24% of KirchPay TV in 1999. In *BSkyB/KirchPayTV*, the Commission had concerns on two markets: reinforcement of dominance on the established markets for pay-TV because of the financial influx of BSkyB, and creation a dominant position on the emerging markets for interactive services and the related technical services as Kirch would benefit from the experience of BSkyB and could foreclose any entry due to its control of technical access services and pay-TV markets. The merger was cleared on condition aiming at securing entry on interactive services market with compulsory third party access to technical services (via access to API, use of open standardised API, simulcrypt, and compulsory licence), and entry to the pay TV market. Despite this influx of capital and experience from the UK, the Kirch Group went bankrupt in 2002 partly due to the very high sums paid for premium content rights, and Premiere was sold in 2003 to a group of financial investors.

In the United Kingdom, BSkyB (the dominant UK pay TV operator), BT (the dominant telecom operator owing most of the copper loops and some cable TV), Midlands (now HSBC, an important banking institution) and Matsushita (a producer of electronic equipment and technology) were setting up in 1999 the venture British Interactive Broadcasting (later renamed Open). The ventures aims to provide digital interactive TV services (like information services, home shopping, home banking) by means of digital satellite broadcasting with a telecommunication return path, and the related technical services with a set-top box to be provided to consumers on a subsidised basis. In *BiB/Open*, the Commission had concerns on four markets: the venture would be dominant on the emerging set-top boxes market and could maintain this position through leverage from the parents' position on the pay-TV and interactive TV services markets; this control on the set-top boxes would allow the parties to foreclose entry on the emerging market of interactive TV services; the market power on pay TV market could be enhanced by the power on interactive services by bundling both products together; and finally BT would have less incentive to upgrade its cable TV or copper pairs in order to enable them to provide interactive services. The joint venture was exempted in 1999 for seven years under several conditions to ensure equal entry on TV interactive services markets: open access to the set top boxes (including simulcrypt agreement and supplying of technical information) and a legal separation between Open's activities with respect to the

boxes and those related to interactive services; possibility of BSkyB channels to include other interactive services than the one of Open; no bundling of Open and BSkyB's services; and divestiture of BT cable interest (with Commission monitoring whether the BT's participation was not impeding the supply of broadband service on telecom infrastructure and a possibility to require if necessary BT to choose between its continued participation in Open and the provision of unbundled access to its local loop).

In Italy, Stream (the Italian pay TV controlled by NewsCorp and Telecom Italia) acquired in 2003 Telepiù (the other Italian pay TV owned by Vivendi) to form the main combined satellite pay-TV platform (later re-branded Sky Italia). In *NewsCorp/Telepiù*, the Commission²⁴¹ considered that the merger would create a quasi-monopoly in the Italian pay-TV market with adverse effect on related markets like conditional access systems or acquisition of programming rights and channels. The concentration was cleared after imposing extensive remedies aimed to ensure competition from other satellite platforms and other digital TV platforms like terrestrial: divestiture of terrestrial broadcasting activities, compulsory third-party access to premium content and to the new Sky's platform, with an arbitration procedure to ensure their effective implementation. Interestingly, the Italian NRA supervises the remedies for the matters within its competence.

With regard to the stream of alliances related to Internet services, the French communications group Vivendi (controlling Canal+) set up with Vodafone the Vizzavi venture to provide a multi-access Internet portal thorough Europe (providing customers with a seamless environment for web-based interactive services, across a variety of platforms such as fixed and mobile telephones, PCs and palm-tops and TV sets). In *Vodafone/Vizzavi/Canal+*, the Commission had concerns on two markets: Vizzavi would get a dominant position on the emerging markets for TV-based Internet portals and for pan-European mobile phone based internet portals because of the range of parties activities in mobile networks, content and television platforms, allowing them to foreclose competing content providers and portal providers. The merger was cleared on condition that consumers may access third party portal, and even change the default portal if they wish to do so.

²⁴¹ Caffara and Coscelli (2003). A similar merger was referred to the Spanish authorities in Commission Decision of 14 August 2002, *Sogecable/Via Digital*, M. 2845, upheld in Joined Case T-346/02 and T-347/02 *Cableuropa* [2003] ECR II-4251. See also the recent merger decision between CanalSat and TPS.

Then in the midst of the convergence hype, Time Warner (one of the world's biggest media and entertainment companies) and AOL (the leading Internet access provider, with links with the content provider Bertelsmann) merged in a deal of \$160 billion their activities in 2000 to create the first Internet vertically-integrated content provider, distributing TW branded content through AOL's Internet distribution network. In *AOL/TimeWarner*, the Commission had concerns on two markets: the new entity would acquire a dominant position on the emerging markets for Internet delivery on-line music and for music player software because of the privileged access to Time Warner and Bertelsmann's content. The merger was cleared with a package of remedies whose ultimate goal was to break the links between AOL and Bertelsmann.²⁴²

In a parallel move, Vivendi (which had links with Fox studio via its interests in BSkyB) bought in 2000 Seagram (a Canadian conglomerate, controlling the Universal Studio) in a deal of \$40 billion. In *Vivendi/Canal+/Seagram*, the Commission had concerns on three markets: Canal+ would strengthen its dominance on the established market for pay-TV because the integrated group could leverage its position from the films content rights of Universal and Fox; and Vizzavi would acquire a dominant position on the emerging pan-European market for portals and market for on-line music because of the privileged access to Universal's music content. The merger was cleared with extensive remedies aiming at alleviating any leverage: pay-TV competitors' compulsory access to Universal's film production and co-production, divestment of stake in BSkyB (thus breaking the link with Fox), and rival portals access to Universal's online music content for five years.

In 2003, DaimlerChrysler and Deutsche Telekom set up the Toll Collect venture to operate a system for the collection of road toll from heavy trucks in Germany, which may be used in the future as a platform to provide telematics services. The Commission had concern on one market: DaimlerChrysler would become dominant on the emerging market for telematics systems for transport and logistics businesses in Germany. The merger was cleared under conditions aiming at guaranteeing a level playing field for all providers of telematics systems: the parties commit to the formation of an independent Telematics Gateway company (not controlled by the parties) operating a central interface through which telematics services can

²⁴² The *AOL/Time Warner* was also cleared in the US, but with several additional conditions. On 14 December 2000, the FTC imposed an open access on the TimeWarner cable to competing ISPs; and on 11 January 2001, the FCC imposed in addition compulsory access to the 'advanced' instant messaging of the merging parties.

be fed into the Toll Collect System, to the development an interface for connection to third party peripherals, and to the development a toll collection module to be integrated into third party telematics devices. Interestingly, DailmerChrysler was prohibited to offer any telematics services until the above mentioned remedies were in place.

Thus for the digital TV cases, the Commission was first extremely cautious (and interventionist) as it was concerned that the parties would leverage their market power from the traditional content or infrastructure markets to the new TV services, foreclose entry on these markets and mutually reinforce their dominant positions. Moreover, the Commission aimed for intra platform competition, and wanted to ensure that condition for such competition were in place. However, in the more recent Italian decision (as well as the Spanish referral), the Commission was less strict as it understands that competition within each platform sounds economically unfeasible and that inter-platform competition may be sufficient to ensure the best possible deal to consumers. In any case, the Commission is stricter in media than in telecom because the geographical dimension of most markets are still national for cultural reasons, regulation and monopoly are still prevailing, and important objectives of cultural diversity and pluralism are at stake. For the Internet cases,²⁴³ the Commission was concerned that the vertically integrated group would leverage its market power on the content side to foreclose entry on the emerging Internet distribution markets, and then mutually reinforce their position on these two types of markets. Thus remedies were imposed to impede any possibilities of leveraging and ensure an equal access to Internet distribution markets.

²⁴³ Abbamonte and Rabassa (2001).

2.3. INSTITUTIONAL DESIGN

After having described the substantive law of antitrust and its application to the electronic communications sector, I now turn to the institutional design. I first review the national bodies (competition authorities and Courts) and then turn to the European bodies (Advisory Committees, European Competition Network, Commission, and Community Courts).

2.3.1. National level

A. National competition authorities (NCA)

Tasks and tools of the National Competition Authorities

The first national actor, whose role has been considerably increased with the 2004 decentralisation, are the National Competition Authorities, which apply the European antitrust law,²⁴⁴ and where relevant, the national antitrust law. Because of the procedural autonomy of the Member States, European law leaves them a lot of discretion to determine the characteristics and the powers of their NCAs. Thus Member States are free to choose between the monist model where only one authority instructs and then decides the case (as in Germany) or the dualist model where both functions are exercised by different bodies (as in France.)²⁴⁵ They are two kinds of limits however. Some limits derive from the general principle of Community law: NCAs should ensure that EU antitrust law is applied effectively and with equivalence to national law,²⁴⁶ which implies that they should have sufficient independence and expertise and be adequately staffed.²⁴⁷ Moreover, the rules of due process should be respected. Other limits derived specifically from the EU antitrust law: NCAs should have the power to bring an antitrust infringement to an end, to order interim measures, to accept commitments and to impose fines or any other penalty.²⁴⁸ In the electronic

²⁴⁴ Article 35(1) of Council Regulation 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Article 81 and 82 of the Treaty, O.J. [2003] L 1/1.

²⁴⁵ Commission Notice of 30 March 2004 on cooperation within the Network of Competition Authorities, O.J. [2004] C 101/43, para 2. On the different models and their application in the Member States, see Cooke (2004:641-643).

²⁴⁶ Both principles of effectivity and equivalence derived from Article 10 EC, and the principle of effectivity is recalled in Article 35(1) of Regulation 1.

²⁴⁷ According to Cooke (2004:640 and 653) the independence and the expertise of the various NRAs are generally satisfactory, but NRAs are often insufficiently staffed.

²⁴⁸ Article 5 of Regulation 1.

communications sector, the NCAs play a dual role as explained in Section 3.3.1.B: first, they take antitrust cases (for some examples, see Section 2.2.2), and second they participate in the making of (antitrust-based) regulation by advising the national regulatory authorities when doing their market analysis.

Horizontal coordination between the National Competition Authorities

To ensure that the decentralisation of European antitrust and the increased powers of the NCAs do not take place at the expense of a consistent application of the rules, enhanced cooperation mechanisms have been set at every stage of the decisional process. To ensure that the cooperation functions smoothly, the NCAs and the Commission may exchange information and have the power to provide one another with and use evidence in any matter of fact or of law, including confidential information, provided the rights of defence and the protection of confidential information are guaranteed.²⁴⁹

First, when an NCA commences a formal investigation measure, it must inform the Commission, and when relevant the other NCAs,²⁵⁰ in order to be able to determine the optimal allocation of case among the 26 competition authorities (the 25 NCAs and the Commission). Usually the competition authority that starts investigation after receiving a complaint or launching *ex officio* proceeding retains responsibility for the case. Yet, the issue of a possible re-allocation arises, for instance, if a single practice affecting trade between Member States is subject to multiple procedures carried out at the same time by several NRAs who would be interested to deal with the case. In such situations these authorities start discussions between them about a possible re-allocation with a view to a quick and efficient sharing of work. There must be a close connection between the infraction and the territory of a Member State, in order for the competition authority of that Member State to consider itself "well placed" to handle the case. When the case has been allocated, the other NCAs and the Commission may then reject any complaint they would receive in the same case or suspend an

²⁴⁹ Article 12 of Regulation 1 and Commission Notice on cooperation within the Network of Competition Authorities, para 26-28. For some difficulties of application, in particular the serious problem of languages and translation of the NCAs decisions, see Cooke (2004:654-655).

²⁵⁰ Article 11(3) of Regulation 1, and Commission Notice on cooperation within the Network of Competition Authorities, para 16-19 noting that any re-allocation issues should normally be decided within two months from the date of the first information sent to the ECN.

already started procedure.²⁵¹ Second, when an NCA intends requiring that an infringement be brought to an end, accepting commitments or withdrawing the benefit of a block exemption Regulation, it must inform the Commission, and the other NCAs when relevant, at least one month before the adoption of the decision.²⁵² The Commission and the NCAs may comment on the draft measure and discuss inside the Advisory Committee,²⁵³ and more radically, the Commission may even remove the case from the NCA and decide itself (see *infra*).

B. National Courts

The three possible roles of the Courts

The other national actors, whose role has also been increased with the 2003 decentralisation, are the national Courts. They may have different roles.²⁵⁴ The first role is to be the appeal body of the NCAs' decision. In that regard, European antitrust law does not contain any specific provision, but the general principle of Community law requires that the NCA follow due process in applying European antitrust, hence that their decisions are reviewable by an independent body.²⁵⁵ The second role of the national Courts is to be the adjudicator of lawsuits between private parties. In that regard, European law provides that Articles 81 and 82 EC have direct effect and should be applied by the national courts in private dispute between them.²⁵⁶ In addition, a Member State may designate a national Court as the competition authority. In that regard, Community law explicitly provides that a Member State may

²⁵¹ Article 13 of Regulation 1 and Commission Notice on cooperation within the Network of Competition Authorities, para 20-25, Joint Statement of the Council and the Commission of 12 December 2002 on the functioning of the Network of Competition Authorities. According to the Commission cooperation Notice (that has been endorsed by all the NCAs), the allocation is decided according to three cumulative criteria: (1) where the agreement or practice has substantial direct actual or foreseeable effects on competition, is implemented within or originates; (2) where the authority is able to effectively bring to an end the entire infringement, i.e. it can adopt a cease-and-desist order the effect of which will be sufficient to bring an end to the infringement and it can, where appropriate, sanction the infringement adequately; (3) where the authority can gather, possibly with the assistance of other authorities, the evidence required to prove the infringement. In practice, work sharing is not an issue in the majority of cases and very few cases are re-allocated: The Commission Report on Competition Policy 2005, para 211-214 notes that two hypothesis may pose a question of work sharing: (1) very early stage of cartel in which the next step to be organised are inspections, and (2) complaints received by both the Commission and NCAs.

²⁵² Article 11(4) of Regulation 1.

²⁵³ Article 14(7) of Regulation 1 and Commission Notice on cooperation within the Network of Competition Authorities, para 61-62.

²⁵⁴ Commission Notice of 30 April 2004 on the co-operation between the Commission and the courts of the EU Member States in the application of Articles 81 and 82 EC OJ [2004] C 101/54, para 2.

²⁵⁵ Temple Lang (1998b:307) citing Case C-2/92 *R. v Ministry of Agriculture, Fisheries and Food ex parte Bostock* [1994] ECR I-955.

²⁵⁶ Article 6 of Regulation 1 and Case 127/73 *BRT v SABAM* [1974] ECR 51.

designate a national Court as a competition authority, and in particular that the decrease power of the Commission will apply in a monist model with regard to a judicial body.²⁵⁷

Horizontal coordination between national Courts

The first and standard means for the Courts to ensure a common interpretation of EU antitrust law is the possibility to refer a question to the Court of Justice under Article 234 EC.²⁵⁸ Some criticised such possibility as being too slow and giving only answers to abstract questions, leaving the referring judge to apply the law *in concreto*. If the first critique is founded, Lenaerts and Gerard (2004:339) argue that the second one is less convincing because, although the Court of Justice is not competent to decide upon the materiality of the disputed facts, it plays an important role in qualifying the facts reported and is entitled to determine whether a specific fact is relevant or not for the determination of the antitrust offences under Community law.

In addition and similarly to what was done for the NCAs, enhanced cooperation mechanisms between national Courts and with the Commission have been set up to ensure that their increased role does not take place at the expense of a consistent application of EU antitrust and legal certainty. However, the coordination between national Courts is more difficult to set up because of the necessary independence of the judiciary,²⁵⁹ hence a grouping such as the European Competition Network could not be established within national courts.

First before a judgment is adopted, any court of the Member States may ask the Commission²⁶⁰ its opinion on economic, factual and legal questions concerning the application of the Community competition rules in proceedings for the application of Article 81 or Article 82 EC.²⁶¹ In this case, the Commission has endeavoured to provide its opinion within four months from the request date. Thus, the opinion of the Commission is quicker and

²⁵⁷ Article 35(3) and (4) of Regulation 1.

²⁵⁸ The responsibility of the State may in certain circumstances be invoked when a Supreme Court refuses to ask a preliminary question: Case C-224/01 *Gerhard Köbler v Republik Österreich* [2003] ECR I-10239, para 53-55 and Case C-173/03 *Traghetti del Mediterraneo v Repubblica italiana* [2006] ECR I-0000, para 43.

²⁵⁹ Lenaerts and Gerard (2004:317).

²⁶⁰ It may also ask the opinion of its own NCA: Article 15(3) of Regulation 1.

²⁶¹ Article 15(1) of Regulation 1 and Commission Notice on the co-operation between the Commission and the courts, para 27-30. This option derived from Article 10 EC and the obligation of loyal cooperation between the Member States and the Commission: See Case C-234/89 *Stergios Delimitis v Henninger Bräu* [1991] ECR I-935, para 53.

sometimes more concrete than a preliminary judgement of the Court of Justice, yet it can not impede the independence of the national court (hence will not bind it) and is without prejudice of the preliminary ruling. In 2005, the Commission has given 6 opinions, none of them concerning the electronic communications sector.²⁶² In addition, the Commission may on its own initiative submit written observations or make oral observations before a national Court where the coherent application of Articles 81 or 82 of the Treaty so requires.²⁶³ When playing this role of *amicus curiae*, the Commission should remain neutral and respect the independence of the judicial institutions.²⁶⁴ This new means is original and should be welcomed, although it raises several problems²⁶⁵ of due process (parties should be able to respond on Commission opinion in the national legal proceedings), of information (the Commission relies on the benevolence of national courts' registrar to be aware of the pending cases). Indeed since its application in May 2004, the Commission has not yet had recourse to this device.²⁶⁶

Second when a national judgement is adopted, the national Court should forward a copy to the Commission.²⁶⁷ This will enable the Commission to follow the national implementation of the EU antitrust rules and possibly to become aware in a timely fashion of cases for which it might be appropriate to submit observations where one of the parties lodges an appeal against the judgement. To disseminate practice, the Commission posts on its website the forwarded national judgement in original language, provided it is not confidential and makes a summary of the most important cases in its Annual Competition Report.²⁶⁸

In addition more informal mechanisms exist to promote a common competition culture. The Commission co-finances several projects for continuing training and education of national

²⁶² Commission Report on Competition Policy 2005, para 225-236.

²⁶³ Article 15(3) of Regulation 1 and Commission Notice on the co-operation between the Commission and the courts, para 31-35. The Regulation leave the procedural organisation of this *amicus curia* role to the Member States. In practice, this does not pose any difficulty as the Commission is granted the status of a *sui generis* non-part intervener with sufficient interest to submit observations, albeit not in support of one of the parties like a regular intervener and only a few countries felt necessary to amend their existing rules of civil procedure: Cooke (2004:657).

²⁶⁴ Cooke (2004:659).

²⁶⁵ Van Bael and Bellis (2005:1192); Lenaerts and Gerard (2004:333-334).

²⁶⁶ Commission Report on Competition Policy 2004, para 115 and Commission Report on Competition Policy 2005, para 223.

²⁶⁷ Article 15(2) of Regulation 1 and Commission Notice on the co-operation between the Commission and the courts, para 37.

²⁶⁸ http://ec.europa.eu/comm/competition/antitrust/national_courts/index_en.html. As of August 2006, more than 100 judgements are in the database, and Commission Report on Competition Policy 2004, Part 2, p. 137-162.

judges in EU competition law.²⁶⁹ The Association of European Competition Law Judges (AECLJ) groups many national judges that seek contact with their peers to exchange best practices.

2.3.2. European level

A. Advisory Committees

The Advisory Committee on Restrictive Practices and Dominant Positions has been set up by Regulation 1.²⁷⁰ It is chaired by the Commission and composed of representatives of the national competition authorities. An additional Member State representative competent in competition matters may be appointed for meetings in which issues other than individual cases are being discussed. The Committee aims to discuss and deliver an opinion on the preliminary Commission draft antitrust decision, which should be duly taken into account by the Commission and may be published at the request of the Committee. It may also discuss (but without delivering an opinion) the important cases of the NCAs, general issues of Community competition law, and draft Commission regulation and other implementing measures.

Similarly, another Advisory Committee on Concentration has been set up by the Merger Regulation.²⁷¹ It is chaired by the Commission and composed of representatives of the competent authorities of the Member States, whose at least one of the representatives of a Member State shall be competent in matters of restrictive practices and dominant positions. It aims to discuss and deliver an opinion on the preliminary draft merger decision of the Commission, which should be duly taken into account by the Commission and appended to the draft decision.

²⁶⁹ Action 3C the Decision 791/2004 of the European parliament and of the Council of 21 April 2004 establishing a Community action programme to promote bodies active at European level and support specific activities in the field of education and training, O.J. [2004] L 138/31. In 2005, the Commission co-financed 12 projects for an amount of 600 000 EUR: Commission Report on Competition Policy 2005, para 224

²⁷⁰ Article 14 of Regulation 1 and Commission Notice on cooperation within the Network of Competition Authorities, para 58-68.

²⁷¹ Article 19 of the Merger Regulation.

B. European Competition Network (ECN)

A more original body in the EU institutional landscape is the European Competition Network which has been set up in the context of the 2004 decentralisation.²⁷² It is composed of the Commission and the competition authorities designated by the Member States. It aims to agree on working arrangements and cooperation methods to provide an efficient framework for the obligatory and optional information exchange mechanisms, and more broadly to build a common competition culture approach by establishing a continued dialogue between the different enforcers.

The work takes places in four different fora:²⁷³ first, an annual meeting of the heads of competition authorities; second the plenary meetings where general issues of common interest relating to antitrust policy are discussed and where exchanges of experiences and know-how take place; third, there are six horizontal working group; and fourth there are 13 sectoral subgroups dedicated to particular sector (whose one is dedicated to telecom and has discussed on price squeeze in 2005 and bundling in 2006.)²⁷⁴ There are no voting rules, because this type of cooperation relies on consensus building. The work of the ECN is not very transparent to the outside world because its members cannot disclose outside the Network any information received pursuant to Regulation 1/2003, unless it is necessary to prove an infringement of Articles 81 and 82 EC.

C. European Commission

The Commission is the pivotal institution of the European antitrust rules²⁷⁵ and has several roles in the application of *ex ante* and *ex post* antitrust rules: first, it applies directly the antitrust rules; second, it steers the development of competition policy across Member States through its leadership role in the Advisory Committees and the European Competition Authorities; and third, it controls the application of Community rules by the Member States and their competition authorities.

²⁷² Joint Statement of the Council and the Commission of 12 December 2002 on the functioning of the Network of Competition Authorities, point 2; and Commission Notice on the co-operation between the Commission and the courts, para 1. See the website at http://ec.europa.eu/comm/competition/antitrust/ecn/ecn_home.html.

²⁷³ Commission Report on Competition Policy 2005, para 203-206.

²⁷⁴ Commission Report on Competition Policy 2005, para 240.

²⁷⁵ Article 85 EC.

CI. Commission as the European Competition Authority

The first role of the Commission is to apply directly the Community antitrust rules against private enterprises as the only competition authority at the EU level. It applies *ex-post* as well as *ex-ante* antitrust rules.

Regarding *ex-post* antitrust, the Commission apply Article 81 and 82 EC and may take decisions requiring that an infringement be brought to an end, ordering interim measures, accepting commitments, imposing fines, periodic penalty payments or any other penalty provided for in their national law.²⁷⁶ To do so, it enjoys important investigations powers,²⁷⁷ and it should respect due process, in particular the right of defence and the professional secrecy.²⁷⁸ The Commission applies *ex-post* antitrust concurrently with the NCAs and the National Courts²⁷⁹ but has prevalence over these national institutions.²⁸⁰ On the one hand, the Commission prevails over the NCAs in two ways. When a case has not yet been decided by an NCA, the Commission may remove a case from a national authority and decides the case instead, although it commits to do that only exceptionally in several well defined circumstances and indeed, the Commission has never used this power so far.²⁸¹ When a case has already been decided by the Commission, the NCA cannot take a decision which would run counter the Commission decision.²⁸² On the other hand, the Commission has also some prevalence over national courts in two ways. When a case has not yet been decided by the Commission, national Courts must avoid giving decisions which would conflict with a decision contemplated by the Commission in proceedings it has initiated and may assess whether it is necessary to stay its proceedings (this obligation is without prejudice to the rights and obligations under Article 234 EC.)²⁸³ When the case has already been decided by the

²⁷⁶ Article 5 of Regulation 1.

²⁷⁷ Articles 17-21 of Regulation 1. On those powers, see Van Beal and Bellis (2005:1037-1086).

²⁷⁸ Articles 27-28 of Regulation 1 and Commission Notice of 13 December 2005 on the rules for access to the Commission file, OJ [2005] C 325/7.

²⁷⁹ Article 4 of Regulation 1.

²⁸⁰ In practice, the Commission also use the antitrust case to indirectly control the NRAs (see Section 3.3.2.C3).

²⁸¹ (a) The ECN members envisage conflicting decisions in the same case; (b) the ECN members envisage a decision which is obviously in conflict with consolidated case law; concerning the assessment of the facts (e.g. market definition), only a significant divergence will trigger an intervention of the Commission; (c) the ECN member(s) is (are) unduly drawing out proceedings in the case; (d) there is a need to adopt a Commission decision to develop Community competition policy in particular when a similar competition issue arises in several Member States or to ensure effective enforcement; (e) the NCA(s) concerned do not object: Article 11(6) of Regulation 1 and Commission Notice on cooperation within the Network of Competition Authorities, para 54.

²⁸² Article 16(2) of Regulation 1 which codifies the case-law of the Court of Justice.

²⁸³ Article 16(1) of Regulation 1 codifying the case-law of the Court: Case C-234/89 *Delimitis*, para 52.

Commission, the national courts cannot take decisions running counter to the Commission decision.²⁸⁴

Regarding *ex-ante* antitrust, the Commission applies the Merger Regulation and should approve or prohibit concentration having a Community dimension. In doing so, the Commission enjoys important powers (request for information, powers of inspection, fines)²⁸⁵ and should respect due process, in particular the rights of defence and the professional secrecy.²⁸⁶ Contrary to *ex-post* antitrust, the Commission has the exclusive competence to review the merger having a Community dimension.²⁸⁷ However, the notifying parties or the Member States may ask the Commission to refer a merger having Community dimension to the Member State when the concentration affects significantly competition in a market within that Member State which presents all the characteristics of a distinct market.²⁸⁸ Conversely, the notifying parties or a Member State may request the Commission to review a merger that does not have a Community dimension, notably when the merger should be notified to several national authorities.²⁸⁹

C2. Commission as a coach: steering competition policy inside the European Competition Network

The second role of the Commission is to steer the development of competition law, ensure a consistent application of the Community rules and develop a common competition culture through its leadership role in the Advisory Committees, but more importantly in the European Competition Network. Many horizontal and sectoral issues are discussed in the ECN and the Commission with his long experience of antitrust rules plays a useful pedagogical role in particular with regard to the NCA from the small Member States or which have only been recently created.

²⁸⁴ Article 16(1) of Regulation 1 codifying the case-law of the Court: *Case C-344/98 Masterfoods*, para 52.

²⁸⁵ Articles 11-15 of the Merger Regulation.

²⁸⁶ Articles 16-18 of the Merger Regulation and Commission Notice of 13 December 2005 on the rules for access to the Commission file, OJ [2005] C 325/7.

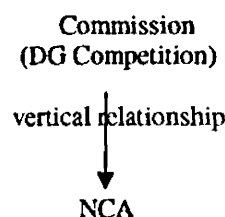
²⁸⁷ Article 21(2) and (3) of the Merger Regulation, and Commission Draft of 28 September 2006 on Consolidated jurisdictional Notice under Council Regulation 139/2004 on the control of concentrations between undertakings. This was the case of the merger between *Sogecabale* and *ViaDigital* referred by the Commission to the Spanish competition authority.

²⁸⁸ Articles 4(4) and 9 of the Merger Regulation and Commission Notice on Case Referral in respect of concentrations, OJ [2005] C 56/2. This was the case of the merger between *RTL/Veronica/Endemol* referred by the Dutch authorities to the Commission.

²⁸⁹ Articles 4(5) and 22 of the Merger Regulation and Commission Notice on Case Referral in respect of concentrations, OJ [2005] C 56/2.

C3. Commission as a referee: monitoring the Member States and the National Competition Authorities

Finally, the third role of the Commission is to control, in a vertical relationship, the implementation of Community antitrust rules by the Member States and their NCAs with several means.



First, the Commission ensures that the Member States (and its NCAs) respect the European antitrust rules (as required by Article 10 in conjunction with Articles 81 and 82 EC) and if it is not the case, the Commission may open an ex-post infringement case against that Member State under Article 226 EC.²⁹⁰ As this means is slow, the European legislature has provided in the context of the decentralisation Regulation another ex-ante means to control the NCAs: the NCA draft decision should be notified to the Commission and if it feels that the decision would blatantly violate EC law, the Commission may decessate an NCA and decide the case instead.²⁹¹

Moreover particularly, if a Member States law or decision would create a special or exclusive right or be directed to a public undertaking, the Commission may directly adopt an infringement decision under Article 86 EC without having to go to the Court.²⁹² The Commission may also adopt Directives on the basis of Article 86.²⁹³ Indeed to open the telecommunications markets, the Commission adopted a suite of liberalisation directives that

²⁹⁰ However, the Commission has never so far launched an Article 226 action against a Member State on the basis of the combination of Articles 10 and 81 EC or the combination of Articles 10 and 82 EC. Until now, such cases were brought to the Court of Justice through preliminary rulings and concerned Article 81 cases: *Geradin* (2004:1551).

²⁹¹ Article 11(6) of Regulation 1.

²⁹² See Commission Decision of 4 October 1995, *GSM Italy*, OJ [1995] L 280/49 and Commission Decision of 18 December 1996, *GSM Spain*, OJ [1995] L 76/20. On Article 86 EC in general, see Buendia Sierra (1999).

²⁹³ Case C-202/88 *France and others v Commission (Terminal equipment Directive)* [1991] ECR I-1223, and Joined Cases C-271/90 C-281/90 C-289/90 *Spain and others v Commission (Service Directive)* [1992] ECR I-5833.

were consolidated in 2002.²⁹⁴ If a Member State does not fulfil such Directive, the Commission may take infringement procedures on the basis of the Directive.

D. Community Courts

The Community Courts in Luxemburg (Court of First Instance and Court of Justice) have three roles that I examine in turn: deciding on infringement procedures, on annulment procedure and on preliminary ruling questions.

Infringement procedures against the Member States

The first role of the Community Courts is to decide the infringement actions launched by the Commission against a Member State (or its NCA) under Article 226 EC or 228 EC, which takes on average 20 months to be decided.²⁹⁵ The Court has never decided a case for violation of Article 10 combined with Articles 81 or 82 EC, but it has decided several cases for violation of the Liberalisation Directive that are still relevant because the current Liberalisation Directive merely consolidates the previous ones.²⁹⁶ Under the 2003 Framework, the Court has already decided some cases.²⁹⁷

Annulment procedures against a Community act

The second role of the Courts is to control Commission decisions under Article 230 EC. The admissibility of a case depends of the type of complainant. Antitrust decisions addressed to operators (based on Articles 81, 82 EC or the Merger Regulation) or addressed to Member States (based Articles 86 EC) may be appealed by any Member State which does not have to

²⁹⁴ Commission Directive 2002/77/EC of 16 September 2002 on competition in the markets for electronic communications networks and services. OJ [2002] L 249/21. On the previous suite of Directive, see Larouche (2000a:Chapters 1 and 2).

²⁹⁵ Annual Report of the Court of Justice 2004, p. 174.

²⁹⁶ Case C-59/98 *Commission v Luxembourg* [1999] ECR I-1181 (liberalisation of satellite communications); Joined Cases C-396/99 and C-397/99 *Commission v Greece* [2001] ECR I-7577 (liberalisation of DECT and licensing of DCS 1800); Case C-146/00 *Commission v France* [2001] ECR I-9767 (financing of universal service); Case C97/01 *Commission v Luxembourg* [2003] ECR I-5797 (rights of ways); Case C-500/01 *Commission v Spain* [2004] ECR I-583 (retail tariffs re-balancing); Case C-334/03 *Commission v Portugal* [2005] ECR I-8911 (right of ways).

²⁹⁷ Case C-299/04 *Commission v Greece* [2005] ECR I-0000; Case C-394/04 *Commission v Luxembourg* [2005] ECR I-0000.

prove to prove any special interest.²⁹⁸ They may also be appealed by the private party to which the decision is addressed.²⁹⁹ Finally, they may be appealed by another private party provided she proves a concern which is individual (i.e., the decision affects her in an individual manner by reason of certain attributes which are particular to her and distinguish her just as in the case of the person to which the decision is addressed) and direct (i.e., the decision has a direct impact on her economic situation.)³⁰⁰ To meet these conditions, the Court of Justice has set a very high threshold in general.³⁰¹ However in antitrust, it set a looser standard and has accepted appeal from competitors of the addressees of a merger decision, especially when they have actively participated in the administrative procedure by submitting observations.³⁰²

Once an appeal is admissible, the next question is the standard of review, which is the level of intensity that the Court uses to scrutinise an antitrust decision under appeal. Two different standards are used. (1) A full control under which the Court scrutinizes closely and possibly annuls a decision for any mistake done by the antitrust authority. (2) A restrained control under which the Court only annuls a decision in case of manifest error of the authority. This standard derives from the fact that the antitrust control in Europe is an administrative one (and not a judicial one like in the US) and that a Court should review the legality of the appealed case, not its merits.³⁰³

The Community Courts use the full control standard in three cases:³⁰⁴ when assessing the respect of procedural law (and in particular the right of defence like the right to be heard and the access to file); of the substantive law (like the concept of single or collective dominance, each of type of abusive practices, the significant lessening of competition); and of the establishment of the facts. Conversely, the Courts used the restrained control standard in one

²⁹⁸ Article 230(2) EC that considers Member State as privileged applicant.

²⁹⁹ Article 230(4) EC.

³⁰⁰ Article 230(4) EC.

³⁰¹ Case 25/62 *Plaumann* [1963] ECR 95, as firmly reaffirmed in Case C-50/00P *Union de Pequeños Agricultores* [2002] ECR I-6677, para 36 and Case C-263/02P *Jégo-Quéré* [2004] I-3425, para 45. See Lenaerts et al. (2006:250-264).

³⁰² See Lenaerts et al. (2006:264-267). In the electronic communications sector: Case T-158/00 *ARD* [2003] ECR II-3825, para 64.

³⁰³ As pointed by the Advocated General Tizzano in his Opinion in *Tetra Laval*: "89. The rules on the division of powers between the Commission and the Community judicature, which are fundamental to the Community institutional system, do not however allow the judicature to go further, and particularly (...) to enter into the merits of the Commission's complex economic assessments or to substitute its own point of view for that of the institution."

³⁰⁴ *Vesterdorf* (2005a) and (2005b).

case: when assessing the (usually complex economic) assessment of the established facts (like whether an observed behaviour is the result of the competition on the merits or of an anti-competitive device, or whether a merger, given the current established market conditions, leads to significant lessening of competition in the future, which involves the use of complex and sometimes uncertain economic theories. For an *ex-post* antitrust decision, the Court of Justice held in *Aalborg Portland*³⁰⁵ that

279. (...) Examination by the Community judicature of the complex economic assessments made by the Commission must necessarily be confined to verifying whether the rules on procedure and on the statement of reasons have been complied with, whether the facts have been accurately stated and whether there has been any manifest error of appraisal or misuse of powers.

The same standard was transposed in the merger control and the Court of Justice held in *Tetra Laval* that:³⁰⁶

39. Whilst the Court recognises that the Commission has a margin of discretion with regard to economic matters, that does not mean that the Community Courts must refrain from reviewing the Commission's interpretation of information of an economic nature. Not only must the Community Courts, *inter alia*, establish whether the evidence relied on is factually accurate, reliable and consistent but also whether that evidence contains all the information which must be taken into account in order to assess a complex situation and whether it is capable of substantiating the conclusions drawn from it (...).

Some, including Community judges,³⁰⁷ have argued that the Court of First Instance increased the level of scrutiny, in particular with the three annulment of merger decisions in 2002 (*Airtours/First Choice*, *Schneider/Legrand*, *Tetra Laval/Sidel*) and that was one of the reason why the Commission appealed the *TetraLaval* judgment to the Court of Justice. In an unprecedented statement, the President of the Court of First Instance rejected such extension and considered that his Court has only adjusted the classic standard of review to the

³⁰⁵ Joined Cases C-204/00 P, C-205/00 P, C-211/00 P, C-213/00 P, C-217/00 P and C-219/00 P *Aalborg Portland and Others v Commission* [2004] ECR I-123. See also Case 42/84 *Remia and Others v Commission* [1985] ECR 2545, para 34, and Joined Cases 142/84 and 156/84, *BAT and Reynolds v Commission* [1987] ECR 4487, para 62. See Bailey (2004).

³⁰⁶ Note that in Case T-210/01 *General Electric v Commission* ECR [2005] II-0000, para 64, the Court of First Instance seems to lean towards a stricter standard of judicial review in *ex-ante* antitrust than in *ex-post* when noting that: "Although those principles apply to all appraisals of an economic nature, effective judicial review is all the more necessary when the Commission carries out a prospective analysis of developments which might occur on a market as a result of a proposed concentration."

³⁰⁷ Lenaerts and Gerard (2004:340) arguing that the "manifest error of appraisal" standard for reviewing Commission's decisions has considerably evolved over time towards a "full review standard".

peculiarities of each merger case it has to look at.³⁰⁸ This is also the position of the Court of Justice which considered that the Court of First Instance has not increased the level of judicial review in *Tetra Laval*.³⁰⁹ However in this very case, the Court of Justice may itself have slightly tightened the restrained control standard by requiring that the Court of First Instance must check whether *all* the relevant information have been taken into account. Thus the Court of First Instance would need to check whether other factors not mentioned by the Commission, or mentioned but to which the Commission did not pay proper attention, should be taken into account and whether there are other obvious elements which should be taken into account.³¹⁰

In practice, the distinction between law, establishment of facts, and assessment of facts is not easy to make and has to be decided on a case-by-case basis depending of the context. As President Vesterdorf (2005a:16) puts it: “whenever an issue involves a complex assessment which may lead two reasonable persons to disagree as to the conclusion to be draw, we are not in the realm of pure fact but in the realm of appreciation of facts where a margin of appreciation ought to be left to the Commission as the institution entrusted with making those complex assessments.” In any case, the intensity of judicial control, even under a classic judicial review standard, fluctuates depending on the underlying standard of proof incumbent to the antitrust authority, the context of the case at hand and the complexity of the issues rose.

In the electronic communications sector, several antitrust decisions adopted under Article 82 EC³¹¹ or under Merger Regulation or Article 81 EC³¹² have been challenged at the Courts. In most of the cases, the Community Courts have endorsed the Commission position.

³⁰⁸ Vesterdorf (2005a:19). However, the some judge agrees that the creation of the Court of First Instance in 1988 has reinforced the standard of review: See the Opinion of Judge Vesterdorf acting as Advocate General in Case T-1/89 *Rhone-Poulenc v Commission* [1990] ECR II-637: “the very creation of the Court of First Instance as a Court of both first and last instance for the examination of facts in cases brought before it is an invitation to undertake an intensive review in order to ascertain whether the evidence on which the Commission relies in adopting a contested decision is sound”.

³⁰⁹ Case C-12/03P *Tetra Laval*, para 45.

³¹⁰ Vesterdorf (2005b:17).

³¹¹ BT condemning decision upheld in *BI (I)* 41/83 [1995] ECR I-873; the ITT complaint rejection upheld in *ITT* T-111/96 [1998] ECR II-2937; Max.Mobil complaint rejection upheld in *Max.Mobil* T-54/99 [2002] ECR II-313, partly reformed in C-41/02P [2005] I-0000.

³¹² RTL/Veronica/Endemol prohibition decision upheld in *Endemol* T-221/95 [1995] ECR II-1299; TPS go-ahead decision upheld in *Metropole* T-112/99 [2001] ECR II-2459, BskyB/KirchPayTV go-ahead decision upheld in *ARD* T-158/00 [2003] ECR II-3825; Sogecable/ViaDigital referral decision upheld in *Cableuropa* T-346/02 and 347/02 [2003] ECR II-4251; Worldcom/MCI/Sprint prohibition decision annulled for procedural reasons in *Worldcom* T-310/00 [2004] ECR II-3253.

Preliminary ruling

The third role of the Courts is to answer preliminary ruling questions from national courts under Article 234 EC, thereby ensuring a common interpretation of European antitrust law and controlling National Courts. In practice, many questions have been asked to the Court of Justice (and many more are expected after the decentralisation) but so far, no specific question was related to case in the electronic communications sector.

An interesting issue is whether a national competition authority may directly ask a question to the Court. That would surely save time and proceedings but that may quickly lead to an overflow of questions in Luxemburg.³¹³ To decide whether an authority is a Court within the meaning of Article 234 EC, the Court relies on a number of criteria as held in *Syfait*³¹⁴

29. (...) in order to determine whether a body making a reference is a court or tribunal for the purposes of Article 234 EC, which is a question governed by Community law alone, the Court takes account of a number of factors, such as whether the body is established by law, whether it is permanent, whether its jurisdiction is compulsory, whether its procedure is *inter partes*, whether it applies rules of law and whether it is independent³¹⁵ (...) Moreover, a national court may refer a question to the Court only if there is a case pending before it and if it is called upon to give judgment in proceedings intended to lead to a decision of a judicial nature.³¹⁶

In effect, the main question is to determine whether the national institution is a judicial authority (in which case, it may refer a question to the Court), or is an administrative enforcement agency (in which case, it may not refer the question). Relying on the mentioned criteria, the Court of Justice will thus determine on a case-by-case basis whether a specific requesting NCA is of judicial nature.

³¹³ Para 45 of the Opinion of Jacobs in the *Syfait* case cited below. In general, see Komminos (2004). Note that the Community are reluctant to transfer the preliminary ruling in antitrust matters to the Court of First Instance as possible under Article 225(3) EC because the nature of the preliminary ruling does not fit with the culture of the Court of First Instance and because of the importance of competition law in the Treaty: Cooke (2005:2), Lenaerts and Gerard (2004:341-342).

³¹⁴ Case C-53/03 *Syfait and Others v GlaxoSmithKline* [2005] ECR I-4609. On those criteria, see Lenaerts et al. (2006:36-39).

³¹⁵ See also Case C-54/96 *Dorsch Consult* [1997] ECR I-4961, para 23; Joined Cases C-110/98 to C-147/98 *Gabalfria and Others* [2000] ECR I-1577, para 33; Case C-195/98 *Österreichischer Gewerkschaftsbund* [2000] ECR I-10497, para 24; Case C-516/99 *Schmid* [2002] ECR I-4573, para 34.

³¹⁶ See, in particular, Case C-134/97 *Victoria Film* [1998] ECR I-7023, para 14, and Case C-195/98 *Österreichischer Gewerkschaftsbund* [2000] ECR I-10497, para 25.

In 1992, the Court has allowed a question from the Spanish NCA without any discussion.³¹⁷ However in 2005 after the decentralisation of antitrust rules and the enlargement of the Union, and probably to alleviate a flow of questions from the NCA, the Court refused a question of the Greek NCA for three main reasons:³¹⁸ first, the authority was not fully independent from the competent Minister; second, there was no functional independence between the secretariat instructing a case and the Commission deciding the case; and third, since the antitrust decentralisation the Commission may always decrease a NCA from a case removing any judicial character of the final decision. It is not clear if the three elements have to be taken together, in which case some NCAs (mainly those of the dualist system) may still be able to refer a preliminary ruling to the Court,³¹⁹ or if only one element would suffice to declare the question inadmissible, in which case no NCA in Europe would be able to ask a preliminary ruling question to the Court of Justice (and the *Spanish Bank* case would have been effectively reversed) since the Commission removal power applied to all NCAs.³²⁰

³¹⁷ Case C-67/91 *Dirección General de Defensa de la Competencia v Asociación Española de Banca Privada and others (Spanish Banks)* [1992] ECR I-4785.

³¹⁸ Case C-53/03 *Syfait*, para 30 to 37. This was decided contrary to the opinion of its Advocate General Jacobs, Para 31 and 32.

³¹⁹ This is the position of the European Commission in its Report on Competition Policy 2005, para 246. Similarly Cook (2004:640) notes that some NCAs may be able to refer a preliminary ruling to the Court of Justice.

³²⁰ As submitted by Lenaerts et al. (2006:41) noting that the question of the Greek NCA was declared inadmissible on grounds which make the admissibility of future references of national competition authorities very doubtful.

E. Summary

Figure 2.11: Procedural antitrust steps

	National action	Means to safeguard harmonisation
Investigation	NCA opens a case	Notification to the Commission and NCAs for a possible re-allocation of the case according to the best placed authority <i>(Article 11.3 of Regulation 1)</i>
	Large investigation powers (for the Commission, request for information, power to take statements, inspection, fines)	- Exchange of information in the ECN <i>(Article 12 Regulation 1)</i> - Possibility for an NCA to conduct fact-finding measure on behalf of another NCA <i>(Article 22 of Regulation 1)</i>
	Parallel investigations	
Decision	NCA intends to adopt decision of infringement, commitment	Notification to the Commission and other NCAs <i>(Article 11.4 of Regulation 1)</i>
	Suspension during 1 month	Commission may decrease the NCAs to ensure consistency of European antitrust law <i>(Article 11.6 of Regulation 1)</i>
Appeal		- National courts may ask the Commission opinion <i>(Article 15.1 of Regulation 1)</i> - Commission may submit written or oral observations as <i>amicus curiae</i> <i>(Article 15.3 of Regulation 1)</i>
		Notification to the Commission of the final judgement <i>(Article 15.2 of Regulation 1)</i>

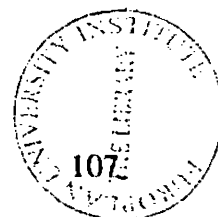
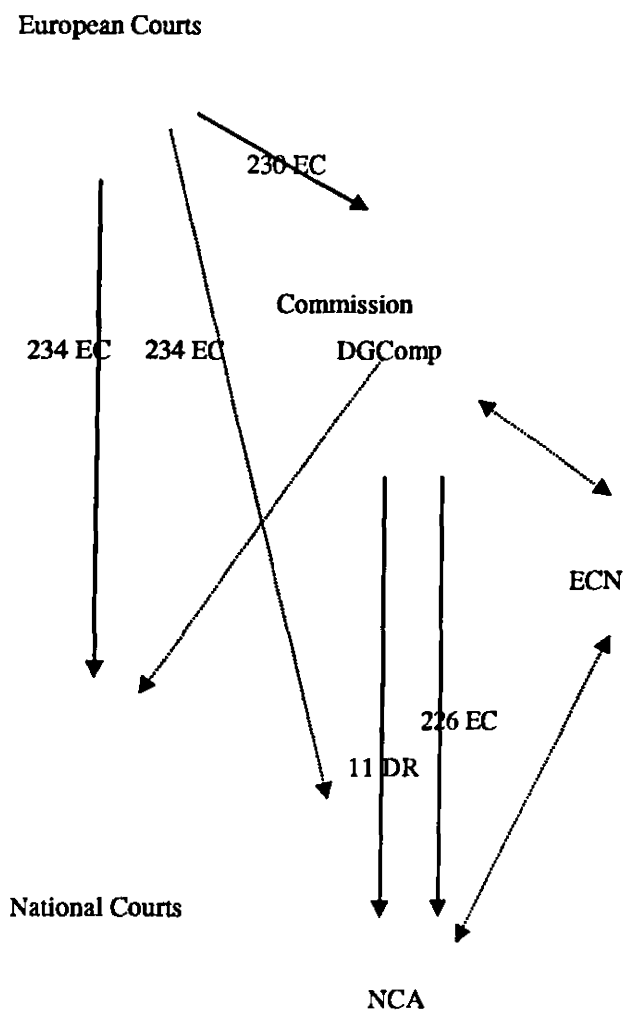


Figure 2.12: Relationship between public actors



Straight line: Strict control and dotted line: Loose control

EC: EC Treaty

DR: Decentralisation Regulation 1/2003

ECN: European Competition Network

DG Comp: Competition Directorate-General of the European Commission

2.4. ASSESMENT: TOWARDS A REGULATORY COMPETITION LAW

To conclude this overview of the cases, we may observe that the use of competition law in electronic communications has been very extensive, surely more than in traditional sectors.³²¹ That is blurring the lines between antitrust and regulation, and between the different roles of the Commission as a competition authority or as regulator. The evolution may thus be analysed at the substantive and the institutional levels.

A. Substantive level

At the substantive level, the *ex post* antitrust intervention of the Commission in the electronic communications sector was peculiar. First, the types of cases were different than in other sectors: the Commission opened many exploitative excessive prices cases although in general the Commission does not wish to behave as price setting authority. Second, the way of intervening was also different: the Commission mainly adopted general guidelines that were not based a stock of previous cases,³²² or collected data on a broad basis, which makes its intervention closer to a policy making body or an industrial regulator. It is only in a second stage that the Commission opened individual cases, whose the vast majority have been passed to the NRAs or settled with the Commission.

On the other hand with *ex-ante* control, the Commission has intervened more in the electronic communications than in the other sectors of the economy, as shown in Table 2.5. Indeed since the implementation of the Merger Regulation in 1990 until end-2005, the Commission has blocked 2.2% of cases in electronic communications sector (mainly in media) whereas it has only blocked 0.6% of cases on average, and it has imposed remedies in 8.4% of cases in the sector whereas it has only do so in 7% of cases on average.

³²¹ Larouche (2000a:316-321); Garzaniti (2003:545).

³²² See Commission Access Notice, para 6.

Table 2.5: Statistics of merger cases

	ALL CASES			ELECTRONIC COMMUNICATIONS CASES*		
	Total	With remedies	Prohibition	Total	With remedies	Prohibition
1990	12	0	0	0	0	0
1991	63	6	1	1	0	0
1992	60	7	0	3	0	0
1993	58	2	0	3	0	0
1994	95	4	1	6	0	1
1995	110	6	2	14	0	2
1996	131	3	3	12	1	0
1997	172	9	1	15	1	0
1998	235	16	2	26	2	2
1999	292	27	1	28	5	0
2000	345	40	2	56	9	1
2001	335	23	5	43	2	0
2002	279	15	0	17	1	0
2003	212	17	0	9	2	0
2004	249	16	1	13	0	0
2005	313	15	0	29	0	0
TOTAL	2661	206	19	275	23	6
	100%	7,0%	0,6%	9,3%		
				100%	8,4%	2,2%

NACE code I.64.20 (Telecommunications) and O.92.20 (Radio and Television activities)

Source: European Commission

he rationale of the Commission has been to prevent a dangerous circle of self re-inforcing market power between related markets, whereby parties leverage their power from established markets to secure a dominant position on emerging markets, and in turn, leverage back from the emerging markets to strengthen their power on the established markets. Thus contrary to the practice in other sectors, the Commission was equally worried, if not more worried, of vertical agreements rather than horizontal alliances or concentrations.³²³ To alleviate the vicious circle, the Commission imposed structural remedies that stimulate infrastructure competition (like cable divestiture or unbundling of the local loop) for the parties to lose their dominant position on the traditional markets and their ability to leverage and foreclose entry in emerging markets. As the effects of these measures could only take place with time, the Commission complemented them with behavioural remedies aiming at forcing access to key facilities like content, fixed telecom infrastructure (in particular the local loop), mobile infrastructure, technical services for pay TV or interactive TV services. Moreover in some circumstances, these behavioural remedies may be preferable than structural ones when there

Ehlermann (2000:xli).

is large fixed costs and a limited number of participants (like in some instances of the *Telia/Telenor* merger.)³²⁴

Thus, it is uncontroversial that the Commission (and the NCAs) intervene more with competition law instruments in the electronic communications sector than on average. It is more difficult to assess if such antitrust activism is economically justified because the sector cumulated two characteristics that may lead to opposite policy conclusions.

On the one hand, European electronic communications markets were previously monopolised. This justifies an extensive public intervention (under competition law or sector-specific regulation) on static grounds (lots of dominant operators) and this argument is not undermined by dynamic considerations (because dominance is not the result of private investment decisions taken in a competitive environment and whose incentives should be preserved.)³²⁵ Moreover in sectors where effective competition does not exist but is possible in the future, there may be a case for antitrust to actively promote competitors entry because it may pay in the long run to have many actors in the market competing with each other.³²⁶ This was implicitly endorsed by the Court of First Instance in *Energias de Portugal*³²⁷ noting that:

91. (...) the entry of new competitors on markets where it is not disputed that EDP and GDP hold very strong dominant positions constitutes one essential aim of competition in the context of the application of Article 2(3) of the Merger Regulation. Accordingly, the essential objective pursued by the Commission in its refusal to modify its position in the light of the commitments falls squarely within the framework of the Merger Regulation.

That said, it is more efficient to subsidize entry with the general tax system rather than making the incumbent bear the costs of funding the subsidies.³²⁸ Similarly, Temple Lang (2006:34) submitted that competition law should never require help to be given to a less-than-efficient company and that only regulation may supplement competition law in this way, or

³²⁴ Rey (2003) and Jenny (2003).

³²⁵ Fingleton (2006), Hancher and Buendia Serra (1998); Katz (2004:251); Motta and de Stree (2006:124). See however, some cases where the extensive (mis)use of antitrust to achieve regulatory purposes was not justified cited in Temple Lang (2006:31-33).

³²⁶ DG Competition discussion paper on exclusionary abuses, para 67, Conseil de la Concurrence français (2003:72). Similarly, Grout (2002) notes that in an industry where it is anticipated that there will be an enormous degree of competition, regulator is justified to positively enhance competitors in its choice of regulatory devices (for example, using LRIC model instead a ECPR to set access price, relying extensively on price squeeze actions).

³²⁷ Case T-87/05 *Energias de Portugal v Commission* [2005] ECR II-0000.

³²⁸ Katz (2004:249).

that (p. 43), a dominant company has no duty to compensate an entrant for the benefits of its economies of scale and scope.

On the other hand, parts of the electronic communications sector present the features of what is generally referred in the literature as the new economy markets (i.e., they present economies of scale, networks effects, consumer lock-in, high rates of innovation). The role of antitrust in such markets is hotly debated, especially in the wake of the US and EC *Microsoft* cases. This debate is nicely summarised in Giorgio Monti (2004). The neo-structuralists (a revival of the Harvard Structure-Conduct-Performance School) argue for a stricter antitrust enforcement in new economy markets for three reasons. First, a lot of markets are only emerging and their development should not be controlled by a particular company. Second these markets are evolving very quickly and any anti-competitive behaviour could have rapid and irreversible effects. Third, most of the markets are characterised by network effects, that lead to path dependency with early developers (first mover advantage) becoming dominant by capturing new growth (bandwagon affect) so inefficient solution may be adopted³²⁹. This position was followed by the American (at least under the Clinton administration) and the European antitrust agencies,³³⁰ and broadly endorsed by the Courts. Conversely, the neo-Schumpeterians (a revival of the Schumpeterian idea and to some extent a prolongation of the confidence in market correction mechanisms developed by the Chicago school) argue for a looser enforcement of antitrust in new economy markets because innovation is prevalent, monopolies are fragile but necessary to give incentive to undertake risky investment, and antitrust agencies do not act with sufficient speed and expertise.³³¹ A middle ground may be to maintain a strong antitrust enforcement, but adapt the methodologies to the dynamic character of the market.

Yet taking these arguments into account, the Commission practice (in particular the *ex ante* control of vertical alliances) appears to be too stringent or at least insufficiently motivated.³³² Economic literature³³³ has shown that leverage should be based on a monopoly and is only

³²⁹ Commissioner Monti (2000): "Competition rules are all the more necessary in the area of the Internet (...) The rapid growth of Internet may unduly reward first movers onto these markets, closing down subsequent competition, and it is this that we should be concerned about". See also, Shapiro and Varian (1999), Rohlfs (2005).

³³⁰ See the speech of the previous Competition Commissioner Mario Monti (2000), and FTC (1996)

³³¹ See for instance Evans and Schmalensee (2001), Posner (2001: Chapter 8), Veljanovski (2001).

³³² In particular with regard to the high standard of proof set in the Case C-12/03P *TetraLaval* and Case T-464/04 *Impala*.

³³³ Hart and Tirole (1990); Motta (2004: Chapter 6); Rey et al. (2001); Rey and Tirole (2003); Salop (1999).

rational when there is no other way to reap the monopoly rent. Therefore, the Commission should have based its analysis on the markets where access obligations were imposed (content, fixed and mobile networks) by showing that they were enduringly monopolised, instead of focusing on the new emerging markets (like global telecom services, interactive TV services, Internet distribution platforms) and their risks of foreclosure.

In addition, as noted by Temple Lang (2006:8) one senior official at the time, the Commission approach was very experimental.

Liberalisation therefore made it necessary to use, or at least to be ready to use, all of the tools in the armoury of the Community. Even when these tools were well known and already frequently used, the competition questions which arose were often new and difficult. [...] None of these questions could be answered in the abstract, as issues of principle. They had to be answered case by case, on the basis of the information available at the time. Managing restructuring in an industry is one of the most difficult tasks of a competition or regulatory authority, especially in an industry which is changing very rapidly as a result of technological developments as well as liberalisation. Managing restructuring necessitates trying to foresee the future, and reconciling conflicting or at least diverging aims. In the case of large wealthy enterprises, assessing potential competition realistically means judging what the enterprises are reasonably likely to do, not merely what they are capable of doing, and means assessing what companies they might acquire as well as how they might develop themselves.

And indeed in several cases, the actual market developments turned out to be substantially different from what has been anticipated by the Commission at the time of the merger decisions, in that the rapid growth of emerging markets that has been predicted failed to materialise.³³⁴ For instance, the converged market predicted in *AOL/TimeWarner* or in *Vivendi/Seagram* did not happen (the latter group has even been divested), or the announced market of advanced seamless pan-European mobile telecom services for multinationals announced in 2000 is still emerging in 2006.³³⁵

³³⁴ Merger Remedies Study of the European Commission, p. 164.

³³⁵ Respectively Case M.1795 *Vodafone/Manesmann* and Case M.4035 *Telefonica/O2*, para 28-29.

B. Institutional level

At the institutional level, the Commission used its strong antitrust power to maintain the existing competitive level, but also to increase that level and support its regulatory liberalisation agenda.³³⁶ As noted by Ungerer, one of the key senior Commission officials:³³⁷

The (exploitative excessive prices actions) aimed particularly at passing on rapidly the advantages of liberalisation in terms of price reductions and service developments to consumers – a major objective in order to show as rapidly as possible the effective consumer benefits and to *secure sustained public support for liberalisation*.

A major factor in the success of the liberalisation programme was the screening of the major strategic alliances which started to take shape during the mid-nineties in anticipation of liberalisation and which commanded substantial Member States interests and attention (...). The basic situation was that in the existing pre-1998 market environment (with monopolies still persisting) these preparatory moves by the large incumbents would not have qualified for exemption under Article 81(3), given the potential of leveraging existing monopoly power into the new markets shaped by liberalisation and technological development. However, instead of taking a static approach, a dynamic solution was chosen. The Member States concerned were encouraged to change market conditions (by accelerating liberalisation), in order to make a clearing of the alliances (with conditions) possible. The dynamics of the process thus created a parallelism of interest (in accelerating liberalisation) between incumbents (in order to have their alliances cleared), Member States (in order to allow the development of the potential of their national markets) and the Commission (in order not to be obliged to block new services and new technologies). This was probably the turning point in the liberalisation exercise. *It created substantial political impetus for rapid implementation of the legislative liberalisation framework by key Member States*, both in Council and at national level for preparing national legislation in time and creating a national infrastructure of National Regulatory Authorities.

Thus, merger remedies have been used to help the adoption of sector-specific legislation by the Member States. They have also paved the way for the future regulation. For instance, local loop unbundling was first imposed in *Telia/Telenor* and two years later by a European Regulation. Remedies could also go further than regulation but aim at the same objective. For example, the cable divestiture imposed in *Telia/Telenor*, in *Telia/Sonera* or in *BiB/Open* goes

³³⁶ Bavasso (2003:Ch. VI), Garzaniti (2003:545), Larouche (2000a), Giorgio Monti (2004:53).

³³⁷ Ungerer (2001:7-8).

one step further than the cable Directive that just imposes separate legal entities.³³⁸ Conversely, regulation has been taken into account when deciding the appropriate remedies.³³⁹ If the behaviours of the parties to a joint venture are strictly controlled by a sector specific authority, there is less risk of abuse and leverage, hence remedies could be less intrusive like in *Concert* or *Unisource II*.

The Commission also used its antitrust power to control NRAs in diagonal conflicts (see Section 3.3.2.C3). Indeed, the three antitrust guidelines mentioned above aimed to influence the practice of the NCAs but also the NRAs when applying antitrust concepts. Moreover, the Commission closed abuse cases only after the NRAs had intervened satisfactorily from the Commission view. Otherwise, the Commission settled the case itself or even condemned the dominant undertaking (like in *Deutsche Telekom*). Thus, the Commission behaved as a complement to the national regulators when they may not act under national law but also as a regulator of the regulators.

These various uses of Commission antitrust power may be problematic for at least two reasons. First, the political mandate and the not-fully-open procedures to be followed by DG Competition when dealing with a case are not suited for such a pro-active role in the market.³⁴⁰ Indeed, operators are very often under no position to negotiate, and the clearance process turns into a game of regulatory extortion.³⁴¹ Second, it upsets the institutional balance at the European level, as the Commission is taking power from the Member States and their NRAs and behaving as European regulatory authority, even though such authority was rejected by the European legislator during the adoption of the 2003 regulatory framework to which I now turn.³⁴²

³³⁸ Commission Directive 1999/64/EC of 23 June 1999 amending Directive 90/388/EEC in order to ensure that telecommunications networks and cable TV networks owned by a single operator are separate legal entities. O.J. [1999] L 175/39.

³³⁹ Garzaniti (2003:547).

³⁴⁰ Larouche (2000a:353-358).

³⁴¹ Geradin and Sidak (2005).

³⁴² Garzaniti (2003:546).

CHAPTER 3: THE 2003 EUROPEAN REGULATORY FRAMEWORK FOR ELECTRONIC COMMUNICATIONS

After having described the role of competition law in the electronic communications sector, this Chapter turns to the other main instrument for public intervention, the sector-specific regulation. Here, I follow the structure of the previous Chapter. In a first general section, I overview the main instruments of the 2003 regulatory framework, its objectives and regulatory principles. Then in a second section, I analyse the substantive law by explaining the different steps of the Significant Market Power regime and by analysing its implementation in the Member States so far. In the third section, I focus on the institutional design distinguishing the national and the European levels. Finally in the fourth section, I take a critical look at the implementation of the regulation by analysing if the good governance principles have been met, why some of them have actually not been met, and note the ever closer relationship between sector-specific regulation and competition law.

3.1. TYPES OF REGULATION, OBJECTIVES, AND PRINCIPLES

3.1.1. The 2003 regulatory framework and its three types of regulation

A. The 2003 Regulatory Framework³⁴³

The scope of application

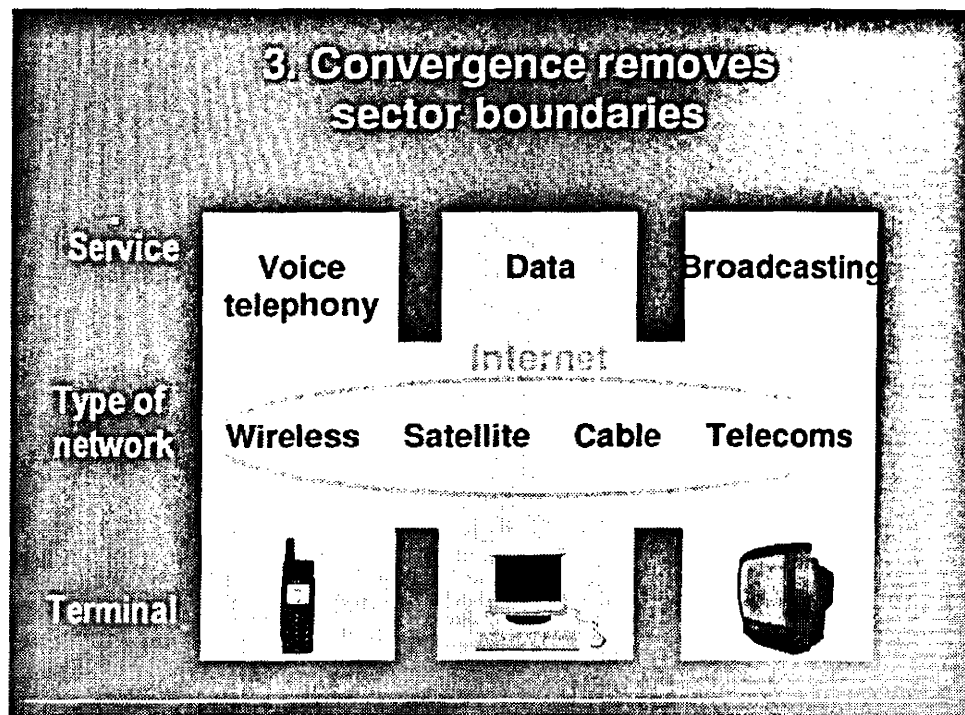
As we have seen, next to European competition law which applies to all economic sectors of the economy, electronic communications are also regulated by a set of European sector rules that have to be transposed into national laws. These sector rules aim to ensure the best possible deal for the European consumers and complement antitrust law in ensuring that companies would not abuse their market position.

To account for the technological convergence and the fact that every service may be provided on every type of infrastructure,³⁴⁴ the European legislature decided to abandon its previous

³⁴³ For an account of the previous regulatory framework, see Bergman et al. (1998), Garzaniti (2000), Larouche (2000a), Walden and Angel (2001). For an account of the 2003 framework: Garzaniti (2003), Nihoul and Rodford (2004), Scherer (2005), Walden and Angel (2005).

silos approach where each infrastructure was regulated by different rules and move towards a horizontal approach where all infrastructures are regulated by the same set of rules and the dividing line is between infrastructure and content.

Figure 3.1: The technological convergence



Source: European Commission presentation

Thus, the scope of the 2003 European regulatory framework for electronic communications covers not only telecommunications but also all electronic communications networks, services and associated facilities.³⁴⁵ It applies to (1) all networks permitting the conveyance of signals (being wire or wireless, circuit or packet switched, used for telecom, broadcasting or other services),³⁴⁶ (2) all the services consisting of the conveyance of signals on these networks,³⁴⁷

³⁴⁴ Green Paper of the Commission of 3 December 1997 on the convergence of the telecommunications, media and information technology sectors, and the implications for regulation, COM(97) 623.

³⁴⁵ Articles 1 and 2 of the Framework Directive.

³⁴⁶ Electronic communications network is defined a transmission systems and, where applicable, switching or routing equipment and other resources which permit the conveyance of signals by wire, by radio, by optical or by other electromagnetic means, including satellite networks, fixed (circuit- and packet-switched, including Internet) and mobile terrestrial networks, electricity cable systems, to the extent that they are used for the purpose of transmitting signals, networks used for radio and television broadcasting, and cable television networks, irrespective of the type of information conveyed (Article 2a of the Framework Directive).

³⁴⁷ Electronic communications service is defined as a service normally provided for remuneration which consists wholly or mainly in the conveyance of signals on electronic communications networks, including

and (3) all facilities that are associated with them (like conditional access systems contained in the set-top boxes used to receive digital television or the electronic program guides).³⁴⁸

On the other hand, the framework does not cover the terminal equipments that are connected to the public network (for instance the fixed terminals or the mobile handsets) and which are regulated by separate directives.³⁴⁹ It does neither cover the content of services delivered over electronic communications networks such as broadcasting or e-commerce services.³⁵⁰

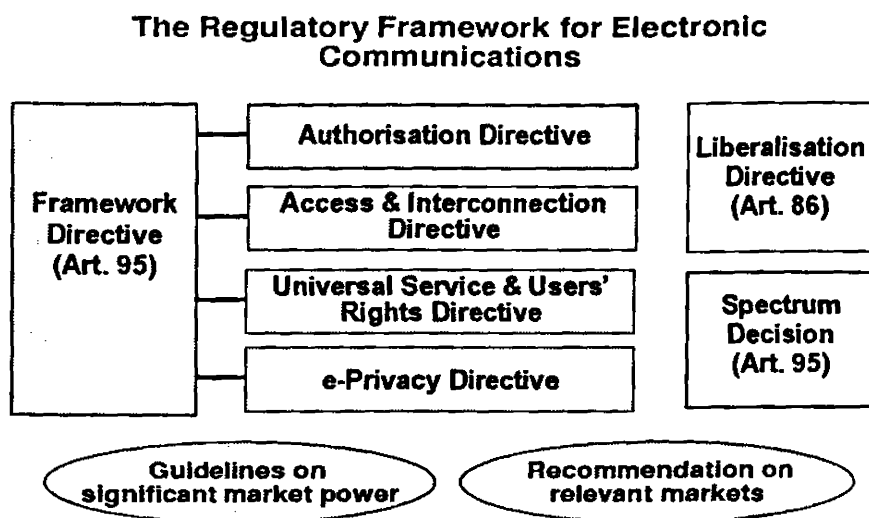
telecommunications services and transmission services in networks used for broadcasting, but exclude services providing, or exercising editorial control over, content transmitted using electronic communications networks and services; it does not include information society services, as defined in Article 1 of Directive 98/34/EC, which do not consist wholly or mainly in the conveyance of signals on electronic communications networks (Article 2c of the Framework Directive).

³⁴⁸ Associated facilities are defined as the means those facilities associated with an electronic communications network and/or an electronic communications service which enable and/or support the provision of services via that network and/or service. It includes conditional access systems and electronic programme guides (Article 2e of the Framework Directive).

³⁴⁹ Commission Directive 88/301/EEC of 16 May 1988 on competition in the markets in telecommunications terminal equipment, OJ [1988] L 131/75 as amended by Directive 94/46; and Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity, OJ [1999] L 91/10.

³⁵⁰ Recital 5 of the Framework Directive. However, the in-between issues like the CAS are covered by the 2003 regulatory framework. The broadcasting services are regulated by the Directive 89/552 of the Council of 3 October 1989 on the coordination of certain provisions laid down by Law, Regulation or Administrative Action in Member States concerning the pursuit of television broadcasting activities (Directive Television Without Frontiers), OJ [1989] L 298/23, as amended by Directive 97/36. This Directive is currently under review: Proposal from the Commission of 13 December 2005 for a Directive amending the Directive 89/552 (which will then be called the Audiovisual Media Services Directive). The e-commerce services are regulated by the Directive 2000/31 of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce'), OJ [2000] L 178/1.

Figure 3.2: The 2003 Regulatory Framework³⁵¹



Source: Commission Impact assessment on the Review 2006, p. 31.

The 2003 regulatory framework is composed of two set of rules. On the one hand, liberalisation rules were adopted by the Commission acting alone on the basis of Article 86 EC. They consist of a *consolidated Liberalisation Directive*³⁵² which codifies the previous successive liberalisation Directives and was adopted in September 2002. It prohibits any special and exclusive rights in the sector.³⁵³

On the other hand, harmonisation rules were adopted by the European Parliament and the Council of Ministers on the basis of Article 95 EC. They mainly consist in four Directives adopted in March 2002 and whose national transposition measures were due to be transposed by the Member States in July 2003.³⁵⁴ First, there is a *Framework Directive* which comprises (i) the general provisions on the institutions and their co-ordination to ensure a European regulatory culture, (ii) the provisions on the assessment of Significant Market Power which is the threshold to impose the majority of the obligations set out in the other specific directives, and (iii) some provisions on the facilities needed to operate in a telecom market (such as

³⁵¹ Commission Impact assessment on the Review 2006, p. 31.

³⁵² Commission Directive 2002/77/EC of 16 September 2002 on competition in the markets for electronic communications networks and services, OJ [2002] L 249/21.

³⁵³ Article 2 of the Consolidated Liberalisation Directive.

³⁵⁴ However, many Member States were late in the implementation and some were condemned by the Court of Justice: see section 4.3.2.C.

numbering, naming and addressing, rights of way).³⁵⁵ Two important soft-law instruments of the Commission are attached to the Framework Directive: the *Recommendation on relevant markets*³⁵⁶ which lists the markets susceptible to sector-specific regulation and that should be analysed by the national regulators; and *Guidelines on market analysis*³⁵⁷ which aims to help the national authorities when analysing market to determine if they should impose sector-specific regulation.

Then, there are three specific directives: the *Authorisation Directive* which organises market entry and rolls back any unnecessary red tape;³⁵⁸ the *Access and Interconnection Directive* which organises the wholesale markets (i.e. relationships between providers of electronic communications networks and services) and aims at ensuring a true single and effectively competitive market;³⁵⁹ and the *Universal Service Directive* which organises the retail markets (i.e. relationships between operators and end-users) and aims at ensuring the best possible deal for the European citizens.³⁶⁰ One soft-law instrument of the European Regulators Group (a forum of all the national regulatory authorities and the Commission) is attached to the specific directives: the *Revised Common Position on remedies* which gives indications on the principles and methods to choose the obligations imposed on operators having Significant Market Power.³⁶¹

In addition, the 2003 regulatory framework is also composed of an *ePrivacy Directive*³⁶² that aims to protect the privacy on the electronic communications networks and a *Spectrum*

³⁵⁵ 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, OJ [2002] L 108/33. See Braun and Capito (2002).

³⁵⁶ Commission Recommendation of 11 February 2003 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, O.J. [2003] L 114/45, hereinafter *Recommendation on relevant markets*.

³⁵⁷ Commission Guidelines of 9 July 2002 on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services, OJ [2002] C 165/6.

³⁵⁸ Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services, OJ [2002] L 108/21.

³⁵⁹ Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and services, OJ [2002] L 108/7. See Koenig and Loetz (2002).

³⁶⁰ Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services, OJ [2002] L 108/51.

³⁶¹ European Regulators Group Revised Common Position of May 2006 on the approach to appropriate remedies in the new regulatory framework, ERG(06) 33.

³⁶² Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector, OJ [2002] L

*Decision*³⁶³ that aims to facilitate the emergence of a coordinated policy for spectrum, both of which are not analysed in this dissertation.

B. Types of regulation

The 2003 regulatory framework may be divided in three type of regulation, according to their objectives.³⁶⁴ First, entry regulation deals with entry on the market and the allocation of scarce resources like spectrum frequencies, numbering or right of ways. It provides that Member States should grant general authorisation for the provision of electronic communications networks and services under a limited list of conditions³⁶⁵ and may only provide for specific rights of use in case of radio frequencies and numbering.³⁶⁶ These rules are the scope of the Authorisation Directive

Second, economic regulation aims at ensuring the functioning of an effective competitive market taking into account the characteristics of the electronic communications sector, thereby maximising economic efficiency. In particular, it takes account of the presence of infrastructure deployed with exclusive or special rights and/or financed with public funds, the important economies of scale and scope, the externalities generated by network effects. In fact, the economic regulation mainly aims to regulate market power when antitrust law would be insufficient to do so. As shown in the following, economic regulation may be divided in three sub-layers: the Significant Market Power regime, the interconnection clause, and the associated facilities regulation. These rules are the scope of the Access Directive and of part of the Universal service Directive. They are the focus of this Chapter.

Third, social regulation aims to ensure that the needs of the citizens considered to be important by the legislature are satisfied although they are not necessarily guaranteed by the mere functioning of the market. Hence, it covers an enhanced consumer protection and the

201/37, as amended by Directive 2006/24 of the European Parliament and of the Council of 15 March 2006 on the retention of data generated or processed in connection with the provision of publicly available electronic communications services or of public communications networks, OJ [2006] L 105/54.

³⁶³ Decision 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Union, OJ [2002] L 108/1

³⁶⁴ On the different categories of regulation, see also Prosser (1997), ICN (2006). Some consider only tow types of regulation (economic and social) considering that entry regulation is part of economic regulation.

³⁶⁵ Article 3 and Part A of the Annex of the Authorisation Directive.

³⁶⁶ Article 5 and Parts B and C of the Annex of the Authorisation Directive.

universality of access to some basic electronic networks and services. These rules are the scope of the Universal Service Directive.³⁶⁷

Figure 3.3: The Directives according to the types of regulation

	Entry regulation	Economic regulation	Social regulation	
			Universal service	Consumer protection
Retail markets	CLD AD	USD (Ch. III)	USD (Ch. II)	USD (Ch. IV)
Wholesale markets		AID	---	----
	FWD (Ch. III)	FW (Ch. IV)	---	----

CLD: Consolidated Liberalisation Directive

FWD: Framework Directive

AD: Authorisation Directive

AID: Access and Interconnection Directive

USD: Universal Service Directive

C. Overview of the economic regulation

The economic regulation may be divided in three sub-types as shown in Figure 3.4. (1) The most important part is the Significant Market Power (SMP) regime which applies generally to wholesale and retail markets and aims to stimulate or mimic effective competition.³⁶⁸ (2) There is a related interconnection clause which aims to ensure end-to-end connectivity between end-users. However, most interconnection issues are normally dealt with the SMP regime, and the interconnection clause is only a safeguard rarely used.³⁶⁹ (3) Finally, there are specific rules for the associated facilities for digital TV like Conditional Access System (CAS), Application Program Interfaces (API) and Electronic Programme Guides (EPG), which aims to ensure effective competition but also pluralism and accessibility of digital radio and TV channels specified by Member States.

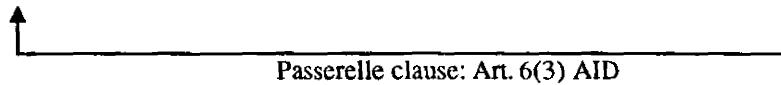
³⁶⁷ Chapters II, IV and V of the Universal Service Directive.

³⁶⁸ Bavasso (2004:87).

³⁶⁹ With the exception of the Netherlands, see *infra*.

Figure 3.4: The economic regulation in the 2003 framework

	SMP regime		Interconnection clause	Associated facilities for digital	
	Wholesale markets	Retail markets		CAS	API and EI
Legal basis	Art. 14-16 FWD Art. 8-13 AID	Art. 14-16 FWD Art. 16-19 USD	Art. 5(1a) AID	Art. 6(1) AID	Art. 5(1b) AIE
Objective	Effective competition (stimulating or mimicking)		End-to-end connectivity	- Effective competition - Pluralism	
Regulated operators	- Market definition (selection and delineation) - SMP/dominance	- Market definition (selection and delineation) - SMP/dominance - Insufficiency of wholesale remedies	All operators that control access to end-users	All operators of CAS	All operators of APIs and/or EI
Remedies	- Transparency - Non-discrimination - Accounting separation - Compulsory access and interconnection - Price control and cost accounting - Others	All obligations necessary to ensure effective competition (incl. price control, non-discrimination, cost accounting)	All obligations necessary to ensure end-to-end connectivity (incl. interconnection)	- Compulsory access on fair, reasonable and non-discriminatory basis - Accounting separation	All obligations necessary to ensure accessibility of digital radio and TV broadcasting services specific by the Member State



Significant Market Power regime

The part of the regulation devoted to the control of market power is the so-called Significant Market Power regime. The aim of the regime is twofold: (1) stimulate effective competition in market segments where it is possible, and (2) ensure sufficient access to wholesale inputs and protect against any behavioural abuses in the other segments where monopoly is inevitable.³⁷⁰ Regulatory obligations are imposed in three steps which should be repeated periodically (every two to three years) to reflect market evolution.

In the first step, markets to be analysed are defined in two sequences. The Commission adopts a Recommendation that defines, in accordance with the principles of competition law, the product and service markets within the electronic communications sector, the characteristics of which may be such as to justify the imposition of regulatory obligations. In practice, the Commission starts by selecting the markets justifying ex ante regulation because of their structural problems³⁷¹ and then, delineate the boundaries of these markets on the basis of

³⁷⁰ ERG Revised Common Position on remedies, Chapter 4.

³⁷¹ The market selection has been described by Valcke et al. (2005:9) as the hidden step of the regime.

antitrust methodologies. Taking account of this Recommendation on relevant markets and the Commission Guidelines on market analysis, each NRA then defines markets appropriate to their national circumstances, in particular the geographical dimension within its territory, in accordance with the principles of competition law.

In the second step, the NRA analyses the defined markets to determine whether they are, or are not, effectively competitive. This amounts to determining whether one or more operators enjoy SMP on the market. In turn, this SMP assessment amounts to determining whether one or more undertakings enjoy a prospective dominant position or could leverage a dominant position from a closely related market.³⁷²

In the third step, if the market is effectively competitive, the NRA withdraws any obligation that is in place and do not impose or maintain any new one.³⁷³ Conversely, if the market is not effectively competitive, the NRA imposes on the SMP operators the appropriate specific regulatory obligations to be chosen from a menu provided in the Access Directive. In case of a retail market, the conditions of regulation are more stringent as it has to be shown in addition of SMP on the retail market that an intervention on a wholesale market could not solve the identified retail problem. Indeed, as most of retail anti-competitive behaviours stem from the exercise of market power on a upstream wholesale market, it is more appropriate to regulate this intermediate market (the source of the problem) than the retail market (the symptom). When justified, NRA should rely on the non-exhaustive list of remedies provided in the Universal Service Directive.

Safeguard interconnection clause

Article 5(1a) of the Access Directive³⁷⁴ provides that

(...) without prejudice to measures that may be taken regarding undertakings with significant market power in accordance with Article 8, national regulatory authorities shall be able to impose: to the extent that is necessary to ensure end-to-end connectivity, obligations on

³⁷² As I detail in Section 3.2.1.B, the SMP is not completely equivalent to the dominant position under competition law.

³⁷³ See Article 8(3) of the Access Directive, reversing the solution of the previous 1998 regulatory framework: Case C-79/00 *Telefónica de España v Administración General del Estado* [2001] ECR I-10075.

³⁷⁴ In addition, Article 4(1) of the Access Directive provides for an obligation to negotiate interconnection for the purpose of providing publicly available electronic communications services, in order to ensure provision and interoperability of services throughout the Community.

undertakings that control access to end-users, including in justified cases the obligation to interconnect their networks where this is not already the case.

Thus, the NRAs may impose on undertaking controlling access to end-users on the basis of unique numbers or addresses any type of obligation (in particular interconnection)³⁷⁵ to ensure end-to-end connectivity. Most of the interconnection (or two-ways access in the economic terminology) issues are dealt under the SMP regime,³⁷⁶ hence the interconnection clause should only be seen as a safeguard when the NRA is not able to ensure end-to-end connectivity under the SMP regime. It has however a enormous potential impact because the terms of 'control access to end-users' and 'ensure end-to-end connectivity' are not strictly defined in the Access Directive, hence may be interpreted extensively by the NRAs to increase their powers. Thus, the Commission has reminded the NRAs that such provision should be used with the greatest caution.³⁷⁷

Regime for digital TV associated facilities

Finally, there is a specific regime for digital TV associated facilities because it aims to ensure pluralism in addition to effective competition.³⁷⁸

First, the NRAs impose on all operators of Conditional Access System (CAS)³⁷⁹ several obligations, and in particular access to the CAS on fair, reasonable and non-discriminatory terms to all broadcasters enabling the broadcasters' digitally-transmitted services to be received by viewers or listeners authorised by means of decoders administered by the service operators.³⁸⁰ A passerelle clause provides that Member States may decide to move the specific regime for CAS towards the general SMP regime provided it does not undermine on the one hand the prospects of effective competition in the markets for retail digital TV and radio

³⁷⁵ Interconnection is defined as the physical and logical lining of public communications networks used by the same or a different undertaking in order to allow the users of one undertaking to communicate with the users of the same or another undertaking. Services may be provided by the parties involved or other parties who have access to the network. Interconnection is a specific type of access implemented between public network operators (Article 2b of the Access Directive).

³⁷⁶ Under the market for fixed termination and for mobile termination.

³⁷⁷ Case NL/2003/17.

³⁷⁸ Under the previous regulatory framework that did not take into account convergence, the regime for digital TV associated facilities was organised by a separate Directive: Directive 95/47/EC of the European Parliament and of the Council of 24 October 1995 on the use of standards for the transmission of television signals, OJ [1995] L 281/51. On the current regime, see Helberger (2005:Chapter 4).

³⁷⁹ Conditional Access System is defined as any technical measure and/or arrangements whereby access to a protected radio or television broadcasting service in intelligible form is made conditional upon subscription or other form of prior individual authorisation (Article 2f of the Framework Directive).

³⁸⁰ Article 6(1) and Part I of Annex I of the Access Directive.

broadcasting services and for CAS and other associated facilities, and on the other hand, the pluralism objective.³⁸¹ It seems to me that would rarely be the case because the SMP only aims to ensure effective competition and effective competition does not necessarily lead to pluralism.³⁸²

Second, the NRAs may impose on all operators of Application Programmes Interface (API)³⁸³ and Electronic Programmes Guides (EPG) all type of obligations necessary to ensure accessibility of digital radio and TV broadcasting services specified by the Member State.³⁸⁴ Contrary to CAS, there is no passerelle clause for such type of associated facilities because the remedies are merely facultative (and not compulsory as for CAS).

Institutional Design

The institutional design of the economic regulation is a system of managed decentralisation.³⁸⁵ The primary actors are the National Regulatory Authorities that should undertake the market analysis and choose the appropriate remedies. To balance this important discretion, several checks and balances are provided. At the national level, NRAs should conduct public consultation, coordinate with the National Competition Authorities and their decisions may be appealed to an appeal body. At the European level, the NRAs coordinate themselves inside the European Regulators Group and are under a triple control of the Commission (direct ex-post control with the standard infringement procedures, direct ex-ante control with a new review mechanism of the NRAs draft decisions and indirect ex-post control with the EU antitrust decision). At the top of the pyramid, the European Courts in Luxembourg control the application of the Community law by the Members States (and their NRAs) and by the Commission when deciding infringement and annulment procedures and when answering preliminary ruling questions.

³⁸¹ Article 6(3) of the Access Directive.

³⁸² This is explicitly stated in Recital 10 of the Access Directive. On the relationship between competition law, effective competition and pluralism, see Arino (2005:Chapter 6), Valcke (2005).

³⁸³ Application Programme Interface is defined as the software interfaces between applications, made available by broadcasters or services providers, and the resources in the enhanced digital television equipment for digital television and radio services (Article 2p of the Framework Directive).

³⁸⁴ Article 5(1b) of the Access Directive.

³⁸⁵ Following the expression of Geradin and Petit (2004:16). Also Slot and Skudder (2001:96).

3.1.2. Objectives and regulatory principles³⁸⁶

A. Objectives of the 2003 regulatory framework

Article 8 of the Framework Directive provides for three broad policy objectives to be followed by the NRAs:

2. The national regulatory authorities shall *promote competition* in the provision of electronic communications networks, electronic communications services and associated facilities and services by inter alia:

- (a) Ensuring that users, including disabled users, derive maximum benefit in terms of choice, price, and quality;
- (b) Ensuring that there is *no distortion or restriction of competition* in the electronic communications sector;
- (c) Encouraging *efficient investment in infrastructure, and promoting innovation*; and
- (d) Encouraging efficient use and ensuring the effective management of radio frequencies and numbering resources.

3. The national regulatory authorities shall contribute to the *development of the internal market* by inter alia:

- (a) *Removing remaining obstacles* to the provision of electronic communications networks, associated facilities and services and electronic communications services at European level;
- (b) *Encouraging the establishment and development of trans-European networks and the interoperability of pan-European services, and end-to-end connectivity*;
- (c) Ensuring that, in similar circumstances, there is *no discrimination* in the treatment of undertakings providing electronic communications networks and services;
- (d) Cooperating with each other and with the Commission in a transparent manner to ensure the development of *consistent regulatory practice* and the consistent application of this Directive and the Specific Directives.

4. The national regulatory authorities shall promote the *interests of the citizens* of the European Union by inter alia:

- (a) Ensuring all citizens have access to a *universal service* specified in the [...] Universal Service Directive;

³⁸⁶ Instead of objectives and regulatory principles, Nihoul and Rodford (2004:85) refer to legal constraints on objectives and legal constraints on means of actions of the NRAs respectively.

- (b) Ensuring a high level of *protection for consumers* in their dealings with suppliers, in particular by ensuring the availability of simple and inexpensive dispute resolution procedures carried out by a body that is independent of the parties involved;
 - (c) Contributing to ensuring a high level of protection of *personal data and privacy*;
 - (d) Promoting the provision of clear information, in particular requiring transparency of tariffs and conditions for using publicly available electronic communications services;
 - (e) Addressing the *needs of specific social groups*, in particular disabled users; and
 - (f) Ensuring that the *integrity and security* of public communications networks are maintained.
- (my underlining)

Thus, the NRAs should promote competition on the short and the long run, the internal market (with negative prohibition of barriers to Community trade and positive encouragement of trans-European networks) and the interests of European citizens. All these three objectives are part of standard European law and should not be controversial at this level of generality. However, they are so general that they can not have direct effects in the national legal order³⁸⁷ and their implementation in practice may cause problems because Article 8 of the Framework Directive looks more like a political platform than an operational tool for the NRA to conduct their day-to-day business.³⁸⁸ First, the three aims are not at the same level. The ultimate objective of the regulation and the NRAs is the maximisation of the users' welfare, hence the effective competition and the internal market are only means to achieve this ultimate objective.³⁸⁹ Second, the three aims may conflict between each other and there is no priority rule in the Directives. For instance, there may be a conflict between short term competition (under which the NRA should adopt a generous access policy) and long term competition (under which the NRA should adopt a more restrictive access policy),³⁹⁰ or there may be a conflict between effective competition (under which NRA may allow discrimination between countries) and the internal market (under which the NRA would prohibit such discrimination).³⁹¹

But the most fundamental problem is that the Framework Directive does not decide between different conceptions of the role of the regulators in the sector (and more generally the role of

³⁸⁷ Hogan & Hartson and Analysys (2006:169).

³⁸⁸ Similarly, Hocped and de Sireel (2005), Larouche (2005a:119), Maxwell (2004:para I.1-14), Valcke et al. (2005:50).

³⁸⁹ Also in this sense, Nihoul and Rodford (2004:105).

³⁹⁰ See the discussion of the essential facility doctrine in Chapter 3, section 3.1.1.C..

³⁹¹ There is a similar conflict in antitrust law: Korah (2004).

State in the economy) and their underlying economic theories.³⁹² As Garnham (2005:8) puts: “The difficulty is that there is agreement neither about the problems or their relative importance, nor about the appropriate theoretical way to approach them. This in particular has led policy makers, who of course want to please everyone, to formulate sets of mutually contradictory policies and/or to give regulatory agencies the invidious task of balancing conflicting goals”.

I see at least four different paradigms according to the intensity of intervention of the NRA from the most hands-off approach to the most hands-on approach. First, the NRA may promote a competition that is not based on price but on entrepreneurial innovation which in turn depend upon monopoly rents derivable from successful innovation (Schumpeterian model). Second, the NRA may promote a competition that is mainly based on price and not allow an operator to gain excessive profit (neo-classical competitive equilibrium).³⁹³ Third, the NRA may do ‘soft industrial policy’ by promoting the entry of some types of business model in the market.³⁹⁴ Fourth, the NRA or the State may do ‘hard industrial policy’ and possibly be involved themselves in the provision of electronic communications networks or services.³⁹⁵

	Hands-off	←-----→	-----→	Hands on
Role of NRA	Protect innovation, possibly by allowing creative monopoly	Protect price competition	Promote specific business model entry	Promote specific operator and directly offer services
Paradigm	<i>Schumpeterian</i>	<i>Neo-classic</i>	<i>Soft industrial policy</i>	<i>Hard industrial policy</i>

The problem is that the 2003 regulatory framework does not decide between those paradigms and the NRAs (and the other actors involved in regulation) are left to decide at any moment of

³⁹² It is thus only when looking at the accompanying soft-law instruments (like Guidelines or Recommendations of the Commission, or Common Positions or Principles of Implementation and Best Practices of the NRAs) that we find a more precise (although often vague) vision.

³⁹³ On those two paradigms, see Garnham (2005:9-13).

³⁹⁴ An example of this soft industrial is the use of the ladder of investment as suggested by Cave (2006:233) where NRAs decide to support certain sorts of business models and make them climb the value chain and refuse to support other types of business models.

³⁹⁵ On the industrial policy in the EU, see Commission Communication from the Commission of 5 October 2005, Implementing the Community Lisbon Programme: A Policy Framework to Strengthen EU Manufacturing - towards a more integrated approach for Industrial Policy, COM(2005) 474 and Communication from the Commission of 11 December 2002, Industrial Policy in an Enlarged Europe, COM(2002) 714. On the relationship between industrial policy and antitrust, especially in the telecommunications sector: Sauter (1997).

time which paradigm to follow. This missing choice has several unfortunate consequences to which I come back at the end of this Chapter. First, a specific NRA may adopt two paradigms at once or change paradigms over time, and more critically, has no tool to credibly commit to one paradigm (which may in turn undermine investment incentives and competition in the long run). Second, the NRAs across Europe may choose different paradigms, thereby undermining a common regulatory culture and possibly a single market for electronic communications.

B. Principles of the 2003 regulatory framework

The European legislature could not choose between the four paradigms on the role of the NRA in the sector and could not agree on a set of objectives that can be made operational, but it endorses a set of good governance principles proposed by the Commission.³⁹⁶ Contrary to the objectives, there is no specific provision on such principles (although some are provided for by Article 8(1) of the Framework Directive). They are like general principles of law which apply to all circumstances without the need to a specific reference on the application of the principle in the situation at stake.³⁹⁷

Proportionality

First, regulation should be proportionate.³⁹⁸ It implies that sectoral regulation should be justified with regard to its objectives and limited to what is necessary to meet those objectives. On such principle, the Court of Justice held in *Fedesa*³⁹⁹ that

13. (...) By virtue of that principle, the lawfulness of the prohibition of an economic activity is subject to the condition that the prohibitory measures are appropriate and necessary in order to achieve the objectives legitimately pursued by the legislation in question; when there is a choice between several appropriate measures recourse must be had to the least onerous, and the disadvantages caused must not be disproportionate to the aims pursued.

³⁹⁶ Such principles are stated in the Commission Communication on the 1999 Review, p. 14-17 and most of them are derived from the general principles of EU law. On those principles, see Trimidas (1999). On good regulatory principles in general, see Baldwin and Cave (1999), Prosser (1997), Ogus (1994), Hancher, Larouche and Lavrijsen (2003), Gilardi (2005). Note that these governance principles are better protected in the electronic communications sector than in other network industries: Geradin and Petit (2004:22-30).

³⁹⁷ Nihoul and Rodford (2004:96).

³⁹⁸ In general, Article 8(1) of the Framework Directive. In particular, Article 7(1) of the Framework Directive, Articles 5(1), 8(4) and 12(2) of the Access Directive and Article 17(2) of the Universal Service Directive. The principle of proportionality is also enshrined at Article 5 EC and Protocol 30 on the application of the principles of subsidiarity and proportionality.

³⁹⁹ Case C-331/88 *The Queen v Minister of Agriculture, Fisheries and Food and Secretary of State for Health, ex parte: Fedesa and others* [1990] ECR I-4023.

Thus, three criteria should be fulfilled.⁴⁰⁰ The regulation should be: (1) objectively suitable (or appropriate) to achieve the desired end, (2) necessary to achieve this end (i.e. there is no less restrictive measure), and (3) proportionate *stricto sensu* that is not to impose a burden which is excessive in the relation to the objective sought to be achieved (which implies a judgment value on a trade-off).

This principle is justified because the market mechanism is deemed to be the best 'regulator'.⁴⁰¹ The State should only intervene when market fails, preferably with horizontal legal instruments (like competition law or consumer law) and not sectoral rules which may be more easily distorted.

Flexi-security

Second, this regulation should be flexi-secure. On the one hand, the regulation should be flexible. This implies that the European law allows for differentiation across Member States and a certain level of re-nationalisation of the common regulation of the dominant operators. This also implies to give sufficient margin of discretion to the NRAs to adapt to market evolutions. In effect, that means that the EU regulation should mainly be process-based. This principle is important to accommodate the rapid and unpredictable evolutions of the markets.

On the other hand, the regulation should ensure legal certainty and be consistent over time. This implies that regulation should be based on clearly defined political objectives. This principle is justified because operators need to plan their investment decisions with sufficient confidence.⁴⁰²

Transparency and participation

Third, regulation should be transparent and ensure participation. This has two different meanings.⁴⁰³ First, all regulatory bodies should follow clear, simple and objective processes and should be open with stakeholders about their objectives, methodologies and data, subject

⁴⁰⁰ On the principle of proportionality in EU law, see de Burca (1993), Craig and de Burca (2002:371-379), Trimidas (1999). For the application in the electronic communications sector, see Lewisch (2005).

⁴⁰¹ Commission Communication on the 1999 Review, p. 13 and ERG Revised Common Position on remedies, p. 57.

⁴⁰² According to calculation of Guash and Spiller (1999) a lack of credibility may increase utilities cost of capital up to 6 percentage basis points.

⁴⁰³ Geradin and Petit (2004:28).

to a confidentiality requirement.⁴⁰⁴ Second, information about the outcome of such processes (e.g. regulations or decisions) should be easily accessible by all stakeholders, for instance through an obligation of publication and motivation of regulatory decisions.⁴⁰⁵

Subsidiarity and harmonisation

Fourth, regulation should respect the principle of subsidiarity.⁴⁰⁶ The interpretation of the subsidiarity principle is controversial in the legal as well as in the economic literature⁴⁰⁷ and its application to the electronic communications sector is complex.

The economic theory of federalism points to three elements to decide the optimal level of governance.⁴⁰⁸ (1) The first element is the presence of high fixed costs and/or transaction costs in regulation. This favours centralised regulation in order to spread these fixed costs among more countries (e.g. a pan-European regulator may spread the cost of doing a cost-model across all Member States) and/or to save transactions costs (e.g. a pan-European operator would save regulatory costs from having the same regulation across 25 Members States). (2) The second element is the presence of externalities across countries created by regulation. This also favours a centralised regulation in order to internalise such externalities (e.g. a pan-European regulator would take into account the positive and negative effects of its regulation on all operators and consumers across Europe and not only on the operators and the consumers of a specific Member State).⁴⁰⁹ (3) The third element is the heterogeneity of citizens' preferences. This favours a decentralised regulation in order to better reflect the preferences of each citizen (e.g. a national regulation of universal service may better reflect the preferences of some countries wishing a low level of universal service and other countries wishing a high level of universal service). Thus Alesina et al. (2005:276) summarise that there is a "trade-off between the benefits of centralisation arising from economies of scale and externalities, and the costs of harmonising policies in the light of the increased heterogeneity of individual preferences in a union which is growing in size."

⁴⁰⁴ Article 6 of the Framework Directive.

⁴⁰⁵ Article 5 of the Framework Directive.

⁴⁰⁶ Article 5 EC and Protocol 30 on the application of the principles of subsidiarity and proportionality.

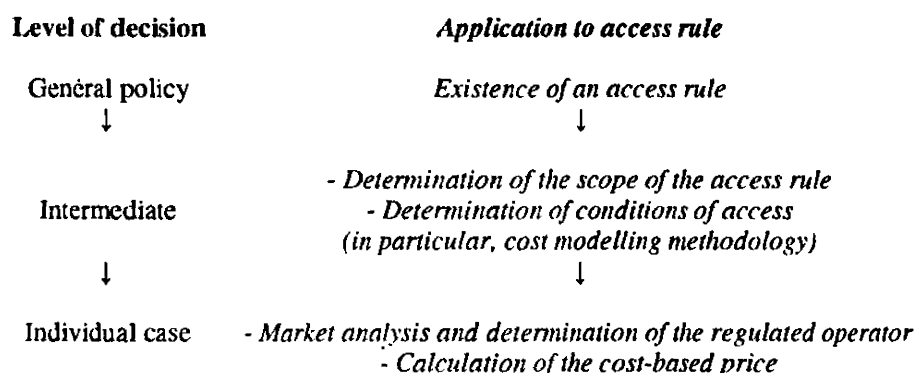
⁴⁰⁷ Van den Bergh (1998).

⁴⁰⁸ For an overview of the theory of fiscal federalism, see Oates (1999). For recent application of this theory to the allocation of powers in the European Union, see Alesina et al. (2005), Esty and Geradin (2001), Tabellini (2003).

⁴⁰⁹ See Barros (2004).

Thus according to this theory, the optimal level of governance varies according to the type of regulatory decision. As Larouche underlines (2005b:168) and (2006a:101), there are several types of decision going from the general to the individual level, as illustrated in Figure 3.5. In principle, there is more case to centralize at the general policy level than at the individual case level because the asymmetry of information is larger for a pan-European regulator than for a national regulator.⁴¹⁰

Figure 3.5: Different levels of regulatory decisions



Additional contradicting elements should also be taken into account. First, the theory of federalism is static and fails to take into account the fact that economies of scale and externalities are not exogenous but are dependent of the level of regulation. If there is a centralised regulation, intra-community trade is expected to increase, hence the economies of scale and externalities will also increase. There is thus a virtuous circle between the development of Community trade and the European level of regulation. This additional consideration favours a centralised regulation. Second, decentralisation may, under some circumstances, lead to regulatory competition and the adoption of the most efficient regulatory model. This is all the more important in electronic communications sector which evolves rapidly and where the effects of regulation are still largely unknown.⁴¹¹ This additional argument favours a decentralised regulation.

The principle of subsidiarity is important because it is deemed to be the most efficient way to allocate competences between the Member States and the Union. In practice, many authors⁴¹² support strong centralisation in the regulation of electronic communications because, on the

⁴¹⁰ Commission Communication on the 1999 Review.

⁴¹¹ Larouche (2005b:167).

⁴¹² Geradin and Petit (2004:13), Tabellini (2003:79). However Cave and Crowther (1996), Haucap (2006), and Larouche (2005a:168) are more nuanced in their approach. In the US, some authors show that it is preferable, on the one hand, to have a unified policy for mobile access regulation (Hazlett, 2003), and on the other hand, to allow different policies for broadband Internet access regulation (Brennan, 2003).

one hand, the European economy would strongly benefit from an integrated electronic communications market,⁴¹³ and on the other hand, the relationship between a European regulation and the development of intra-Community trade is tight. However, this centralisation should mainly be done at the general policy level and not necessarily at the individual case level. Thus, the 2003 regulatory framework calls for a harmonisation of regulatory methodologies, but not necessarily of regulatory outcomes because the market conditions vary across Member States (hence, the application of the same methodologies may lead to different results).⁴¹⁴

Technological neutrality

Fifth, regulation should be technologically neutral. This means that each similar service in the consumers' eyes should be dealt in the same way irrespective of the technology platform on which it is provided.⁴¹⁵ This does not necessarily imply more regulation and that new services will be regulated like the old ones.⁴¹⁶ On the contrary, the principle should lead to less regulation because convergence generally implies more competition.

This principle is important because a same retail service may now be provided on different infrastructure with technological convergence. It would create inefficient distortion in investment decisions to treat such retail service differently according to which infrastructure it is provided. However, this principle is not absolute and NRA may take proportionate steps to promote certain specific services where this is justified, for example digital television as a means for increasing spectrum efficiency.⁴¹⁷

⁴¹³ This is partly because the ICT sector (whose electronic communications represent 44%) accounts for around 40% of productivity growth and 25% of overall growth in Europe (see the Commission 11th Implementation Report, p. 2). Indeed, the argument of developing an internal market for telecommunications was one of the main rationale justifying the European liberalisation program: see Communication of the Commission of 30 June 1987, Towards a Dynamic European Economy: Green Paper on the Development of the Common Market for Telecommunications Services and Equipment, COM(87) 290.

⁴¹⁴ Valcke et al. (2005:57).

⁴¹⁵ Article 8(1) of the Framework Directive.

⁴¹⁶ Commission Communication on the 1999 Review, p. 15.

⁴¹⁷ Recital 18 of the Framework Directive. In that regard, see the Communication from the Commission of 24 May 2005 on accelerating the transition from analogue to digital broadcasting, COM(2005) 204. On the fact that the principle of technology neutrality is not absolute, see Nihoul and Rodford (2004:109), and Valcke et al. (2005:51).

3.2. SUBSTANTIVE LAW

After having set the stage of the 2003 regulatory framework, I focus now on the Significant Market Power regime and detail its substantive law aspect. First, I deal with the four steps of the regime (selection of the markets, delineation of the markets, assessment of market power, and choice of remedies), the relationship between those steps and the special case of emerging markets. Then, I see the application of the regime in practice in the different Member States. Finally, I briefly review the application of the other parts of economic regulation in the Member States.

3.2.1. The four steps of the Significant Market Power regime

As explained, the SMP regime involves for steps that are summarised in Figure 3.6 below and then detailed.

Figure 3.6: The Significant Market Power Regime

	Steps	Tests	NRAs	Commission
Market definition	1a. Market selection	- 3 criteria	----	Recommendation
	2a. Market (product) delineation	- SSNIP test		
	1b. Market selection	- 3 criteria*	(Draft)	Possibility of veto
	2b. Market (product and geographic) delineation	- SSNIP test	decision	
Market analysis	3. No effective competition = SMP	Adapted dominance test	(Draft) decision	Possibility of veto
Choice of remedies	4. At least one	Proportionality test	(Draft) decision	Possibility of comments

* Not if the market is selected in the Recommendation of the Commission

A. First step: The selection of the market

The Directives

Article 15(1) of the Framework Directive provides that:

The Recommendation shall identify [...] those product and service markets within the electronic communications sector, the characteristics of which may be such as to justify the imposition of regulatory obligations set out in the Specific Directives.

This provision instructs the Commission to select for sector-specific regulation the markets that need regulation, hence is circular. Recital 27 of the Framework Directive is more helpful by stating in a generic way that:

It is essential that ex ante regulatory obligations should only be imposed where [...] national and Community competition law remedies are not sufficient to address the [competitive] problem.

In addition, Recital 13 of the Access Directive provides that:

The aim is to reduce ex ante sector specific rules progressively as competition in the market develops. However the procedures also takes account of transitional problems in the market such as those related to international roaming and the possibility of new bottlenecks arising as a result of technological development, which may require ex ante regulation, for example in the area of broadband access networks [...].

In other words, the Commission should select the markets that have characteristics such that competition law will not be sufficient to address problems created by the existence of hard-core market power causing harm to consumers, for instance in case of bottleneck. If this *sufficiency criterion* is of common sense, it is difficult to apply in practice. As we have seen in Chapter 3, competition law has the tools to deal with every problem created by all kind of market power⁴¹⁸ because it controls exclusionary as well as exploitative abuses (although in this case, antitrust law has some inherent limitations). Therefore, it is reasonable to interpret Recital 27 as a *relative efficiency criterion* comparing the respective strengths of antitrust and sector-specific regulation. Following this logic, authorities should impose regulation when competition law would be less efficient to maximise consumer welfare.

This represents a radical shift of the regulatory paradigm. Under the 1998 framework, the Significant Market Power regime was mainly related to the competitive conditions under which infrastructures were deployed: it mainly applied to markets previously under legal monopoly (fixed voice networks and services)⁴¹⁹ and was linked to the so-called original sin of the previous monopolist. Under the 2003 directives, the SMP regulation is disconnected from the original sin and linked to the inefficiency of antitrust to control market power. Ironically although the directives were deemed to be de-regulatory, the change has led to an extension of sector-specific regulation and may even lead to its perpetuation in the future.⁴²⁰

⁴¹⁸ In this sense also Opinion of the French Competition Council of 14 October 2004, 04/A-17.

⁴¹⁹ There was nevertheless a slight possibility to regulate the mobile sector, that has been used more and more over time by the NRAs across Europe: Article 7(2) of the Interconnection Directive 97/33.

⁴²⁰ Note that in its preliminary proposals for the 1999 Review, the Commission suggested to partly maintain the origin sin rationale. Indeed, the Article 13(2) of DG Information Society Working Document of 27 April 2000 on a Common regulatory framework for electronic communications networks and services added to the present

More critically the rationale is difficult to apply in practice as it requires a double comparison. First, a comparison between the efficiency of two legal instruments (antitrust law and sector-specific regulation), which is complex in electronic communications as both instruments have converged over time.⁴²¹ Second, a comparison between the efficiency of two institutions (national competition authority and national regulatory authority), which is difficult when a single institution is in charge of both legal instruments.⁴²² This double comparison is rendered even more complicated and is very speculative because it is done when the Commission selects market at the European level for a 'representative' Member State⁴²³, although the relative efficiency of legal instruments and especially institutions vary strongly across Member States.

A similar difficulty has already been identified by the Court of Justice in *TetraLaval*. In this case, the issue was whether the Commission should assess the efficiency of (European and national) ex-post competition law before imposing ex-ante merger remedies. The Court of First Instance considered that the Commission had to do such an assessment.⁴²⁴ This is similar to the Framework Directive requiring the Commission and the NRAs to assess the efficiency of (European and national) competition law before imposing ex-ante sector remedies. But the Court of Justice judged that lower Court had erred in law and held that

75. However, it would run counter to the [Merger] Regulation's purpose of prevention to require the Commission, as was held in [...] the judgment under appeal, to examine, for each proposed merger, the extent to which the incentives to adopt anti-competitive conduct would be reduced, or even eliminated, as a result of the unlawfulness of the conduct in question, the likelihood of its detection, the action taken by the competent authorities, both at Community and national level, and the financial penalties which could ensue.

76. An assessment such as that required by the Court of First Instance would make it necessary to *carry out an exhaustive and detailed examination of the rules of the various legal*

SMP definition the following text: "and, where (a) undertaking has financed infrastructure partly or wholly on the basis of special or exclusive rights which have been abolished, and there are legal, technical or economic barriers to market entry, in particular for construction of network infrastructure; or (b) the undertaking concerned is a vertically entity owning or operating network infrastructure for delivery of services to customers and also providing services over that infrastructure, and its competitors necessarily require access to some of its facilities to compete with it in downstream market."

⁴²¹ See Chapter 5, Section 5.1.1.

⁴²² For instance, the British or the Greek NRAs may apply sector-specific regulation and competition law: see Section 4.1.2.A.

⁴²³ This concept of 'representative' Member State is borrowed from Cave et al. (2006:3).

⁴²⁴ Case T-5/02 *TetraLaval v Commission*, para 159. See also Case T-210/01 *General Electric v Commission*, para 75.

orders which might be applicable and of the enforcement policy practised in them. Moreover, if it is to be relevant, such an assessment calls for a high probability of the occurrence of the acts envisaged as capable of giving rise to objections on the ground that they are part of anti-competitive conduct.

77. It follows that, at the stage of assessing a proposed merger, an assessment intended to establish whether an infringement of Article 82 EC is likely and to ascertain that it will be penalised in several legal orders *would be too speculative* and would not allow the Commission to base its assessment on all of the relevant facts with a view to establishing whether they support an economic scenario in which a development such as leveraging will occur. [my underlining]

The interpretation of the Commission

Despite all these difficulties, the generic relative efficiency criterion has been interpreted by the Commission as covering three cumulative specific criteria in its first Recommendation on relevant markets of February 2003.⁴²⁵

The first criterion is static and relies on the presence of high and non-transitory barriers to entry. The barriers may be economic⁴²⁶ or regulatory. Recitals 11 and 12 of the Recommendation on relevant markets hold that:

11. Structural barriers to entry result from original cost or demand conditions that create asymmetric conditions between incumbents and new entrants impeding or preventing market entry of the latter. For instance, high structural barriers may be found to exist when the market is characterised by substantial economies of scale and/or economies of scope and high sunk cost. To date, such barriers can still be identified with respect to the widespread deployment and/or provision of local access networks to fixed locations. A related structural barrier can also exist where the provision of service requires a network component that cannot be technically duplicated or only duplicated at a cost that makes it uneconomic for competitors.

12. Legal or regulatory barriers are not based on economic conditions, but result from legislative, administrative or other state measures that have a direct effect on the conditions of entry and/or the positioning of operators on the relevant market. Examples are legal or regulatory barriers preventing entry into a market where there is a limit on the number of

⁴²⁵ Recommendation on relevant markets; and the Explanatory Memorandum available at: http://www.europa.eu.int/information_society/topics/ecommm/useful_information/library/recomm_guidelines/index_en.htm. The Commission developed the three specific criteria with the help of some external consultants whose report is public: Squire-Sanders and Dempsey and WIK (2003).

⁴²⁶ 'Structural' in the terms of the Recommendation I prefer the term 'economic' to the term 'structural' because an economic barrier may be structural or strategic : see Chapter 2.

undertakings that have access to spectrum for the provision of underlying services. Other examples of legal or regulatory barriers are price controls or other price related measures imposed on undertakings, which affect not only entry but also the positioning of undertakings on the market.

Thus, the Commission adopts the broad Bainian conception of the entry barrier as it includes the economies of scale and scope.⁴²⁷ This is appropriate given that the objective of economic sector-specific regulation is to maximise consumer welfare.⁴²⁸

However, this criterion leaves many uncertainties. It is not clear whether the criterion covers solely non-strategic barriers (i.e. not artificially manufactured by the firms) or includes strategic barrier as well. Cave (2004a:35) submitted the former because strategic barriers (like excessive investment or reinforcement of network effects) would require idiosyncratic and episodic intervention better done under competition law. Moreover, it is not clear how 'high barrier' is high and whether it is limited to market structure with one player, two, or more.

The second criterion is more dynamic and amounts to make two determinations: on the one hand, whether the market characteristics are such that there is effective competition behind entry barriers, and on the other hand, whether there is a tendency towards effective competition over the relevant time horizon considered. Recitals 13 and 14 of the Recommendation on relevant markets hold that:

13. Entry barriers may also become less relevant with regard to innovation-driven markets characterised by ongoing technological progress. In such markets, competitive constraints often come from innovative threats from potential competitors that are not currently in the market. In such innovation-driven markets, dynamic or longer term competition can take place among firms that are not necessarily competitors in an existing 'static' market. This Recommendation does not identify markets where entry barriers are not expected to persist over a foreseeable period.

14. Even when a market is characterised by high barriers to entry, other structural factors in that market may mean that the market tends towards an effectively competitive outcome within the relevant time horizon. This may for instance be the case in markets with a limited, but sufficient, number of undertakings having diverging cost structures and facing price-elastic

⁴²⁷ Similarly, the European Regulators Group adopts the Bainian conception of the entry barrier and defines it as '*an additional cost which must be borne by entrants but not by undertakings already in the industry; or other factors which enable an undertaking with significant market power to maintain prices above the competitive level without inducing entry*': ERG Revised Common Position on remedies, p. 124.

⁴²⁸ Schmalensee (2004:472).

market demand. There may also be excess capacity in a market that would allow rival firms to expand output very rapidly in response to any price increase. In such markets, market shares may change over time and/or falling prices may be observed.

Again, this criterion leaves many uncertainties. It is not clear whether the first limb of Recital 13 refers to the fact that a market should not be susceptible of regulation when there is competition *for* the market although there is no regulation *in* the market. In addition, it is not clear whether the foreseeable period to decide if the barrier is non-transitory should be the timeframe of the market review (two to three years) or longer.⁴²⁹

The third criterion relies on the relative efficiency of competition law remedies alone to address the market failure (identified according to the two first criteria) compared to the use of complementary *ex ante* regulation. Recital 15 of the Recommendation on relevant markets holds that:

15. The decision to identify a market as justifying possible *ex ante* regulation should also depend on an assessment of the sufficiency of competition law in reducing or removing such barriers or in restoring effective competition (...).

And the Explanatory Memorandum of the Recommendation on relevant markets adds (at p. 11-12):

Such circumstances would for example include situations where the compliance requirements of intervention are extensive, where frequent and/or timely intervention is indispensable, or where creating legal certainty is of paramount concern. It is not possible to give an exhaustive list of all the circumstances where antitrust would be less efficient than sector-specific regulation.

In practical application, NRAs should consult with their competition authorities and take account of that body's opinion when deciding whether use of both complementary instruments is appropriate to deal with a specific issue, or whether competition law instruments are sufficient.

This criterion is the most problematic one because it is a repetition of the generic criterion provided by Recital 27 of the Framework Directive (i.e. relative efficiency of sector-specific regulation) that the three specific criteria are supposed to develop, hence poses a logical

⁴²⁹ Commission Guidelines on market analysis, para 20 refers to the expected timing for the next market review.

problem.⁴³⁰ More critically, this third criterion is open to multiple and different interpretations. One interpretation is to rely on this criterion to limit regulation to remedies that can not be efficiently imposed by competition law (e.g. compulsory access) or situations where collective dominance prevails. However, this interpretation mixes the market selection with the choice of remedies. Another interpretation is to rely on the third criterion to inject institutional elements in the market selection process and limit regulation where competition law as applied by the competition authority could not intervene efficiently. Hence, in countries where competition authorities is strong (like in France), few market would be susceptible to regulation whereas in countries where the antitrust authorities is weak (like in Belgium), more markets would be susceptible to regulation. However, this interpretation would be very difficult to conduct in practice and undermine the harmonisation of regulation across Member States.⁴³¹ Yet another interpretation, that I favour, is that when the two first criteria are met, the third criterion is automatically fulfilled and thus serves merely as a cross-check.

All the three specific criteria should be applied cumulatively, which means that the absence of any of them implies that the relevant market would not be selected. Thus, “the combined analysis of the three criteria suggests that markets characterised by the presence of high barriers to entry (first criterion), which is not compensated by a dynamic market structure (second condition) should generally be selected unless the situation can be dealt with adequately by competition law remedies (third criterion)”.⁴³² This cumulative application has been criticised by Garzaniti (2003:14). He argues that there might be a need in certain cases to select a relevant market for ex ante regulation, even where there are low entry barriers and strong dynamic market factors are present because the application of competition law had proved not to be sufficient to address those concerns. However, this author fails to provide any example where there are competitive problems not addressable by antitrust although the two first specific criteria are not be met. I submit that there is none, hence Garzaniti’s critique is unfounded.

The application of the three criteria in practice

⁴³⁰ DG Competition was supporting the third specific criterion to alleviate calls that any sector fulfilling the two first specific criteria (like pharmaceuticals) should be subject to sector-specific regulation.

⁴³¹ Also in this sense, Cave et al. (2006:7).

⁴³² Gérardin and Sidak (2005:543).

So far, those three criteria have not been frequently implemented by the Commission or the NRAs. In adopting the first Recommendation on relevant market in February 2003, the Commission did not apply the three criteria test because it was instructed by the European legislature to select all markets regulated under the previous 1998 regulation irrespective of the test.⁴³³ Similarly the NRAs rarely conducted the test because most of them⁴³⁴ considered that it should not be applied to the markets selected in the Recommendation on relevant markets (wrongly assuming that the Commission had already applied the test).⁴³⁵ They only apply the test to the very few markets selected outside the Recommendation.⁴³⁶ The failure to apply systematically the test goes against European law as Article 15 and the related Recital 27 (from which the test is derived) applies equally to the Commission and the NRAs. Moreover, such failure has serious consequences on the whole logic of the SMP process (as I show in section 4.2.1.E) and may be one of the reasons why the 2003 framework misses some of its regulatory principles (as I show in section 4.4.2).⁴³⁷

B. Second step: The delineation of the market

Once a market area has been selected for possible regulation, the Commission and the NRAs should delineate its precise boundaries according to antitrust methodologies. If the market is national or infra-national, the Commission defines the product dimension of the market in a Recommendation addressed to NRAs.⁴³⁸ Each NRA then checks whether this definition fits with their national circumstances, adapts the definition accordingly and determines the

⁴³³ Annex I of the Framework Directive. The Commission itself implicitly recognised that the wholesale fixed transit market or the wholesale mobile access and call origination market did not fulfil the three criteria test: see Explanatory Memorandum of the Recommendation on relevant markets, p. 19 and 30. However, the Commission gave contradictory indications in the Communication from the Commission of 6 February 2006 on Market Reviews under the EU Regulatory Framework: Consolidating the internal market for electronic communications, COM(2006) 28, herein *Communication on Market Reviews*, p. 4.

⁴³⁴ This is not the case of the German NRAs which instruct by law to perform the TCT on all markets, including those pre-selected by the Commission, and Portugal: Case PT/2004/60 and PT/2004/61.

⁴³⁵ ERG Revised Common Position on remedies, p. 18.

⁴³⁶ The Commission has reminded this position to the Dutch NRA wanting to define additional retail leased lines market next to market 7 (Case NL/2005/279) and retail cable transmission for free radio/TV next to market 18 (Case NL/2005/247). Thus, many NRAs applied the test to disaggregate the market for broadcasting transmission services (market 18 of the Recommendation): Case AT/2003/18, Case ES/2005/252, Case FI/2004/76, Case IE/2004/42, Case NL/2005/246, Case SE/2005/188, Case UK/2004/111. In addition, the French NRA applied the test to exclude the international transit service from the market 10: Case FR/2005/229 and to add the national wholesale broadband access to market 12: Case FR/2005/206. The Portuguese NRA applied the test to decide not to regulate the transit market: Case PT/2005/154.

⁴³⁷ Also in this sense, Renda (2006:9).

⁴³⁸ Article 15(1) of the Framework Directive.

geographical dimension of the market.⁴³⁹ In doing so, the NRA takes the utmost account⁴⁴⁰ of the Commission Recommendation on relevant market and of the Commission Guidelines on market analysis.

Conversely, if the market is trans-national,⁴⁴¹ the Commission defines (after the binding opinion of the Communications Committee) the product and the geographical dimensions in a Decision addressed to NRAs.⁴⁴² In such hypothesis, the NRAs have no flexibility to define market differently and go directly to third step of analysing the market. To date, no such trans-national market has been defined, although some have suggested a trans-national market for broadcasting satellite transmission or even international roaming.

To delineate the boundaries of the markets, the authorities follow the methodologies explained in Section 2.3.1.A. They start by defining the retail market taking into account demand-side and supply-side substitutability. Then, they move to the definition of the relevant linked wholesale or intermediate markets because the wholesale customers are -by identity- the retail suppliers. In its first Recommendation of February 2003, the Commission distinguished six broad areas that I explain in more detail in section 3.2.2: (a) fixed voice, (b) fixed narrowband data, (c) fixed broadband data, (d) fixed dedicated access (leased lines), (e) non-fixed (mobile) voice, and (f) broadcasting services. In addition, some markets to be analysed by the NRAs are already pre-defined in the Directives and should not be identified again in the Commission Recommendation: conditional access systems,⁴⁴³ minimum set of leased lines,⁴⁴⁴ access to and use of the public telephone network at a fixed location.⁴⁴⁵

⁴³⁹ Article 15(3) of the Framework Directive.

⁴⁴⁰ Any Recommendation or soft law instruments should be taken into account by national authorities and national Courts, see Case C-322/88 *Grimaldi* [1989] ECR I-4407, para 18. The legal force of the Recommendation on relevant markets is further reinforced as the Commission may veto any different product and service market that an NRA may wish to define.

⁴⁴¹ A trans-national market has been defined as a market covering the Community or a substantial part thereof: Article 2b of the Framework Directive.

⁴⁴² Article 15(4) of the Framework Directive.

⁴⁴³ Article 6 of the Access Directive

⁴⁴⁴ Article 18 of the Universal Service Directive

⁴⁴⁵ Article 19 of the Universal Service Directive

Figure 3.7: List of markets susceptible to sector-specific regulation

	FIXED				MOBILE	BROADCAST
	voice	Narrowband data	Broadband data	Dedicated access	voice	
R E T A I L	1. Access residential 2. Access non-residential 3. Local/national residential 4. International residential 5. Local/national residential 6. International non-residential			7. Minimum set of leased lines		
W H O L E S A L E	8. Call origination 9. Call termination 10. Transit	8. Call origination	11. Unbundling local loop 12. Wholesale broadband access	13. Terminating segments 14. Trunk segments	15. Access and call origination 16. Call termination 17. International roaming	18. Broadcasting transmission services

C. Third step: The assessment of Significant Market Power

Prospective dominant position or leverage

Once markets have been defined, the NRAs analyse them to determine whether they are effectively competitive.⁴⁴⁶ The concept of 'effective competition' is not clear and rarely used as such in economic theory⁴⁴⁷ and the European legislature decided to equate the concept to the absence of operator having Significant Market Power.⁴⁴⁸ In turn, the concept of Significant Market Power is linked to a prospective dominance and/or leverage test:⁴⁴⁹ there is no effective competition when there is prospective dominance or possibility to leverage such dominance. Thus, regulators determine two elements:

⁴⁴⁶ Article 16 of the Framework Directive.

⁴⁴⁷ Thus Stigler (1956) notes that: "To determine whether an industry is workably competitive, therefore, simply have a good graduate student write his dissertation on the industry and render a verdict. It is crucial to this test, of course, that no second graduate student be allowed to study the industry".

⁴⁴⁸ Although the Articles of the Framework Directive do not link together the concept of 'absence of effective competition' and 'SMP', Recital 27 of that Directive makes clear the identity between both concepts. See also Guidelines on market analysis, para 19.

⁴⁴⁹ Article 14 of the Framework Directive as elaborated by ERG Revised Working Paper of September 2005 on the SMP concept for the new regulatory framework, ERG (03) 09rev3.

(1) They determine whether one or several operators enjoy a prospective single or collective dominant position. To do so, they appraise market power following the same antitrust methodologies explained in Section 2.3.1.B,⁴⁵⁰ but with two important adaptations⁴⁵¹.

The first adaptation relates to the time horizon of the assessment. As already seen, an antitrust assessment under Articles 81 and 82 EC is backward-looking (i.e. look at the existence of a dominant position at the time of the anti-competitive practice) and an antitrust assessment under Merger Regulation is forward-looking (i.e. look at the existence of substantial impediment to competition in the hypothetical market structure where the merger would take place). Sector-specific regulation assessment is in-between because it is forward looking (as the NRA should do a prospective assessment) but it is also based on existing market structure. As the Commission explains, NRAs assess market power on a forward-looking basis by considering the expected or foreseeable development over a reasonable period linked to the characteristics and the timing of the next market review, past data being taken into account when relevant.⁴⁵²

The second adaptation relates to the relevance of existing regulation in the assessment. Antitrust analysis should take into account the regulation in place and not designate an operator as having a dominant position where there is regulation that would constrain the exercise of market power. In *European Night Services*,⁴⁵³ the Court of First Instance held that

221. As regards, first, access to infrastructure [train paths], it is true that access for third parties may in principle be hindered when it is controlled by competitors; nevertheless, the obligation of railway undertakings which are also infrastructure managers to grant such access on fair and non-discriminatory terms to international groupings competing with ENS is explicitly provided for and guaranteed by Directive 91/440. The ENS agreements therefore cannot, by definition, impede access to infrastructure by third parties [...]

⁴⁵⁰ The fact that the criteria for collective dominance have been codified in the Annex II of the Framework Directive is criticised by Bavasso (2004:104-105).

⁴⁵¹ Temple Lang (2006:25) also underlines that SMP and dominance are not precisely the same thing.

⁴⁵² Commission Guidelines on market analysis, para 20 and 75. See also NL/2005/247 (retail broadcasting market).

⁴⁵³ Joined Cases T-374/94, T-375/94, T-384/94, T-388/94 *European Night Services and Others v Commission* [1998] ECR II-3141. It remains unclear if such principle has been undermined by the ruling of the Court of Justice in *Tetra Laval*: Case C-12/03P *Commission v Tetra Laval*, para 75. This case may be read as holding that competition authorities should not take into account the existence of Article 82 EC (and equivalent national provisions) 'regulation' when deciding merger remedies. However, the Court was not suggesting to ignore completely the effect of Article 82 but only to take it into account in a reasonable way. Moreover, the deterrence effects of Article 82 are weaker than the effects of existing regulation. For both reasons, I do not think that *Tetra Laval* undermines the principles of *European Nights Services*.

Conversely, sector-specific regulation assessment should not take into account the regulation in place on the analysed operator. According the Commission, the regulators should analyse the market in the context of the modified greenfield approach, i.e. in the absence of regulation in the market concerned under the SMP regulatory framework, but including regulation which exists outside such framework.⁴⁵⁴

For instance, when regulators try to determine whether an incumbent has market power on a specific market, they should look at the existing market dynamics (and in particular market shares), but also whether this dynamics is due to regulation. In practice, regulators should reconstruct market dynamics absent of regulation. This is because the Commission says,⁴⁵⁵

23. The purpose of a Greenfield approach is indeed to avoid circularity in the market analysis by avoiding that, when as a result of existing regulation a market is found to be effectively competitive, which could result in withdrawing that regulation, the market may return to a situation where there is no longer effective competition. In other words, any Greenfield approach must ensure that absence of SMP is only found and regulation only rolled back where markets have become sustainably competitive, and not where the absence of SMP is precisely the result of the regulation in place [...].

A final precision is that it is not required to find a SMP/dominance at the retail level in order to designate an operator as having SMP on a wholesale market (i.e. there is no double dominance requirement).⁴⁵⁶ In the context of joint dominance on the wholesale access and call origination market, the Commission held that⁴⁵⁷

(...) although retail market conditions may inform an NRA of the structure of the wholesale market, they may and need not in themselves be conclusive as regards the finding of SMP at the wholesale level. In order to find joint SMP in the wholesale market of mobile access and call origination, it is not indispensable to find joint SMP at the retail level, but – among others – it must be shown that fringe competitors, such as emerging mobile network operators, do not have the ability to challenge any anticompetitive coordinated outcome.

⁴⁵⁴ Draft Explanatory Memorandum of the second Recommendation on relevant markets, p. 9. See also Case AT/2004/90 (Decision of 20 October 2004: Veto) and Case FI/2004/24 and 27 (Decision of 20 February 2004: Veto), para 27, as well as Cave et al. (2006:4), Di Mauro and Inotai (2004).

⁴⁵⁵ Case DE/2005/144 (Decision of 17 May 2005: Veto).

⁴⁵⁶ Case ES/2005/330 (market 15), p. 7; Case IE/2004/121 (market 15), p. 6.

⁴⁵⁷ Annex II to the Commission Communication on Market Reviews, p. 7

The Commission argues that it is possible that operators compete against each other imperfectly on the retail market (i.e. they do not collude, hence there is not single or joint dominance), and yet extra rents are made because of the lack of retail entry resulting from spectrum scarcity. In order to protect such rents, operators have incentive to collude in refusing entry on the wholesale market, hence collective dominance may be found at that level. However Cave et al. (2006:92) reject the Commission justification because when the operators are able and willing to collude at the wholesale level, they should normally try to collude at the retail level as well.⁴⁵⁸ It is only in the exceptional case when collusion is not possible at the retail level, but well at the wholesale level (e.g. because the focal point, i.e. refusal to give access to MVNO, is easier to find) that the double dominance requirement would not be justified. More generally, the wholesale analysis cannot be done in total independence of the retail market. Indeed when there is no competitive problem at the retail level, there is no need to intervene at the wholesale level because the objective of the sector-specific regulation is to protect welfare of the retail end-users and not the interests of the wholesale competitors.

(2) The other element that NRA should look at is whether an operator that is prospectively dominant on a specific market may leverage its power on a (vertically or horizontally) related market. Again, this is an important difference with competition law.⁴⁵⁹ Under the latter, a dominant position is assessed market by market and it is not possible to be declared dominant if there is no sufficient power on that specific market.⁴⁶⁰ Thus, the possibility to extend a prospective dominance designation on a related market (and consequently to intervene on that related market where there is no dominance) is particular to sector-specific regulation and present a high risk of over-regulation. To prevent this, the Commission cautions the regulators to use this possibility very parsimoniously and notes that, in principle, an intervention on the market where the operator is dominant should suffice.⁴⁶¹

Thus, when regulators determine that one operator enjoys a single or collective prospective dominance or may leverage such position on a related market, they designate it as having

⁴⁵⁸ Note however that if there is a collusion at the retail level, the best remedy may be to impose access at the wholesale level. That does not question the relevance of the double dominance requirement to justify intervention, but only the best place of the remedy in the value chain.

⁴⁵⁹ See also Valcke et al. (2005:128).

⁴⁶⁰ Although it is possible to be condemned for an abuse on a related market for which there is no dominant position: Case C-333/94P *TetraPak II*, and *Wish* (2003:202).

⁴⁶¹ Commission Guideline on market analysis, para 84.

Significant Market Power. Some criticise the use of specific term to designate what is in fact a dominant position and argue that is bad legislative policy to have two legal terms referring to the same economic concept. If the use of a specific term under sector-specific regulation can be explained by historical reason,⁴⁶² it remains justified given the differences between SMP and dominant position. First and foremost, dominance applies to all markets in the economy (and designates a level of market power that justifies antitrust intervention) whereas SMP applies to a subset of carefully selected markets (and designates a hard-core market power that justifies sector-specific regulation). Second, dominance is usually assessed on a backward-looking basis (except under ex-ante merger control) and taking into account of the existing regulation whereas SMP is assessed on a forward-looking approach and without taking into account the regulation in place on the analysed operators. Third, dominance is market specific whereas SMP may stem from market power on a related market. Thus, the Commission is right in noting that the SMP operator does not necessarily enjoy a dominant position under Article 82 EC,⁴⁶³ hence two different terms are justified.

Standard of proof of the Significant Market Power

The standard of proof that an NRA should meet in order to designate an operator as having SMP depends on each national legal system and varies from a low 'balance of probabilities' or a 51% test (used in civil proceedings) to a high 'beyond of reasonable doubt' (used in criminal proceedings) with all the flavours in between like a 70% test. The Directives do not provide any direct indication in that regard. Yet, there is a case to follow the standard of proof used in European antitrust because the SMP regime has been aligned on competition law methodologies. As seen in Section 2.3.3.B, such standard is not clear and vary from the balance of probabilities to something little higher level depending of the circumstances of the case.

In practice, the UK and the Irish appeal bodies went for slightly different standards. The UK Competition Appeal Tribunal went for a balance of probabilities stating that:⁴⁶⁴

32. (...) One must look to see how things operate in practice, and prove whatever has to be proved to an appropriate level of proof. It points out the need to be particularly careful in relation to that when one is considering future conduct. We do not think that at the end of the

⁴⁶² In the previous regulatory frameworks, the threshold for regulation was a SMP concept which was not aligned on a dominant position.

⁴⁶³ Commission Guidelines on market analysis, para 24-32, and also para 70.

⁴⁶⁴ Competition Appeal Tribunal Decision of 29 November 2005, *Hutchison 3G v Ofcom*, Case 1047/3/3/04

day that is particularly controversial. However, since (as will appear) OFCOM does not seek to rely on a positive prediction of future behaviour as a step towards creating dominance (which was the position in *Tetra Laval*) we do not need to consider just what probative levels of evidence should be required by a regulator in relation to future conduct. *OFCOM's case is put differently – it relies on SMP now, not in the future. We do not think that Tetra Laval provides the assistance* that [the regulated operator] seeks to derive from it because it is directed at a different point (emphasis supplied).

Thus, the British tribunal rejects the (relatively high) standard of proof of *Tetra Laval* because the SMP designation is not a pure prospective merger assessment and is based on current market data. There is smaller risk of error, hence the burden of proof may be lower than in a merger case. For its part, the Irish Electronic Communications Appeal Panel imposed a slightly higher standard of proof because it insists more on the prospective analysis of the regulatory assessment. Thus, it held that:⁴⁶⁵

4.23. This does not mean that because there is ex ante analysis that the Respondent [i.e. the regulator] has to meet a higher standard of proof. The standard is whether, on the balance of probabilities an undertaking has significant market power. Rather the Panel is merely asserting the common sense proposition that *when one is making a finding of significant market power on the basis of a prospective analysis (as opposed to an ex post analysis) then it is necessary that this analysis be sufficiently rigorous and thorough* so that a clear link can be drawn between existing circumstances and likely future behaviour. To put it another way, because the likelihood of error is greater in a prospective analysis, the prospective analysis must be proportionately more rigorous to account for this possibility (emphasis supplied).

Alternative solutions to define Significant Market Power

The European legislature decided to equate the concept of effective competition with an adapted dominance test in order to make regulation more flexible, more legally certain and more harmonised. Larouche and de Visser (2005:4) criticise such approach. On the one hand, they argue that dominance and effective competition may coincide. They take the example of a contestable market with one player where a dominant position may be found and yet, the market is effectively competitive. On the other hand, they argue that absence of dominance and non effective competition may coincide. They give the example a tight oligopolistic market where there is no single or joint dominance and yet public intervention would be

⁴⁶⁵ Electronic Communications Appeal Panel of 26 September 2005, *Hutchison 3G v ComReg*, Decision ECAP 02/05.

justified. The first limb of the critique is unconvincing as the authors themselves⁴⁶⁶ recognise because it is more a question of correct definition of dominant position (that should not only be based on market share but also on entry barriers, hence a single player in a contestable market should not be designated as having SMP). The second limb of the critique is more interesting and point to the existence of possible gap in the SMP assessment, similarly to what happened before the review of the merger regulation.⁴⁶⁷ However, I do not believe that an extension of the SMP test is appropriate when balancing type I and type II errors.⁴⁶⁸

At a more general level, Vogelsang et al. (2003) very appropriately point to the relationship between on the one hand the objectives of the SMP regime, and on the other hand, the equation effective competition/no dominance and the way dominance is assessed. They show that if the objectives of the regime is the maximisation of long term consumers' welfare or even something broader and that if the dominance is assessed in a static way, the equation is not justified because effective competition may exist with presence of dominance (provided that anti-competitive effects are compensated by innovation). Again, the criticism is not against the equation effective competition/no dominance but against a static assessment of dominance.

In sum, both criticisms point to the need to link the dominance assessment with the objectives of the framework⁴⁶⁹ and the characteristics of the industry under review. They do not fundamentally question the equation between effective competition and no dominant position. That said, the European legislature could have adopted a different –and more holistic approach- of the concept of effective competition. For instance in 1996, the Court of Justice went for such approach when interpreting the previous directive on public procurement in the excluded sectors.⁴⁷⁰ Article 8(1) of the Directive provided that:

⁴⁶⁶ At footnote 6 of their paper. In any case, the contestable markets are rare in practice and probably inexistent in the electronic communications sector given the high fixed and sunk costs of deploying an electronic communications network.

⁴⁶⁷ Hogan & Hartson and Analysys (2006:163).

⁴⁶⁸ The authors go also in that direction at p. 6 of their paper.

⁴⁶⁹ Recall that the market definition is closely related to the objectives of the legal instrument for which it is used: Commission Notice on the definition on relevant market, OJ [1997 C 372/5].

⁴⁷⁰ Council Directive 90/531/EEC of 17 September 1990 on the procurement procedures of entities operating in the water, energy, transport and telecommunications sectors, OJ [1990] L 297/1. This Directive has now been replaced by Directive 2004/17/EC of the European Parliament and of the Council of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors. OJ [2004] L 134/1 which does not cover any more the telecommunications sector deemed to be competitive enough to justify a lifting of specific rule of public procurement: See Recitals 5-8 of Directive 2004/17 and Communication from the Commission pursuant to Article 8 of Directive 93/38, OJ [1999] C 156/3.

This Directive shall not apply to contracts which contracting [...] award for purchases intended exclusively to enable them to provide one or more telecommunications services where other entities are free to offer the same services in the same geographical area and under substantially the same conditions.

The Court of Justice interpreted this provision as meaning that⁴⁷¹

35. [...] criterion laid down by Article 8(1) of the directive, namely that "other entities are free to offer the same services in the same geographical area and under substantially the same conditions", is to be verified as a matter of law and of fact, having regard in particular to all the characteristics of the services concerned, the existence of alternative services, price factors, the dominance or otherwise of the contracting entity's position on the market and any legal constraints.

Alternatively in 1996, the US Congress went for a comprehensive conception of effective competition with a check list of 14 items like availability of several access and interconnection services.⁴⁷²

D. Fourth step: The choice of remedies

DI. Remedies on the wholesale markets

If one or more operators enjoy a dominant position, and consequently have been designated as having Significant Market Power, the NRA must impose at least one obligation and may impose more than one, to be chosen among those provided in the Directives.⁴⁷³ This choice might be constrained by the international commitments taken by the Member States, in particular at the WTO.⁴⁷⁴ When an operator enjoys SMP on a wholesale or intermediate market, the choice should in principle be done among the menu of ascending remedies provided in Articles 9 to 13 of the Access Directive.⁴⁷⁵

⁴⁷¹ Case C-392/93 *The Queen v H. M. Treasury, ex parte British Telecommunications*, ECR [1996] I-1631.

⁴⁷² Section 271 of the Telecommunications Act, which is the condition for RBOCs to provide long distance services.

⁴⁷³ Commission Guidelines on market analysis, para 114. *Contra* Hocepiéd (2002).

⁴⁷⁴ Council Decision 97/838/EC on the results of the WTO negotiations on basic telecommunications services, and its annex containing the additional commitments take by the European Communities and their Members States, O.J. [1997] L 347/45. For the markets covered by the commitments, the NRAs should impose at least three obligations (transparency, non-discrimination, cost-orientation). See also: Bronkers and Larouche (2005). Geradin and Kerf (2004).

⁴⁷⁵ Described in more detail in Chapter 3 of the ERG Revised Common Position on remedies.

Transparency (Article 9 of the Access Directive)

First, NRAs may impose a transparency obligation, requiring operator to make public specified information, such as technical specifications, network characteristics, accounting information, or terms and conditions for supply and use. In particular, the authority may require the publication of a reference offer,⁴⁷⁶ which shall be sufficiently unbundled, and it may even impose changes to these offers.

As Cave (2004a) notes, the disclosure of technical information for a firm's access to technical facilities may be useful to achieve interconnection or network access, although the standardisation process may have already placed much of the information in the public domain. On the other hand, disclosure of price data may be an instrument of collusion or price leadership and hence is particularly unsuitable in cases of collective dominance.

In its Revised Common position on remedies, the ERG sees transparency more as an accompanying obligation with others (like non-discrimination and/or compulsory access) to make the overall remedy more effective than a stand-alone remedy (that may enhance the effectiveness of antitrust remedies by facilitating the identification of anti-competitive behaviours).⁴⁷⁷ More critically, the ERG has a very extensive view of that remedy and uses it as means to impose Service Level Agreement or to ensure sufficiently unbundled offers.⁴⁷⁸ In practice, the NRAs have relied very much on the transparency remedy.

Non-discrimination (Article 10 of the Access Directive)

Second, the NRAs may impose a non-discrimination obligation, requiring the operator to apply equivalent pricing and non-pricing conditions in equivalent circumstances to other undertakings providing equivalent services. In particular, a vertically integrated firm should provide services and information to others under the same conditions and quality as it provides for its own services, subsidiaries, or partners. Thus, the non-discrimination

⁴⁷⁶ According to Article 9(4) of the Access Directive, when an operator should give access to the twisted metallic pair local loop (market 11 of the Recommendation on relevant market), the NRA should ensure the publication of a reference offer containing at least the elements set out in the Annex II of the Access Directive like prices or technical conditions.

⁴⁷⁷ ERG Revised Common Position on remedies, p. 48.

⁴⁷⁸ ERG Revised Common Position on remedies, p. 96, 97, 103, 107, 108, 111.

obligation under sector-specific regulation is more far reaching than non-discrimination under competition law, where it does not always cover firm's internal process or relationship with subsidiaries.⁴⁷⁹

This obligation is primarily relevant in case of an SMP operator that is vertically integrated into a competitive market to prevent exclusionary behaviours through foreclosure of competition in the upstream or the downstream market. But the NRA should apply this remedy in a cautious way, as it may be efficient to allow price discrimination according to the customers' willingness to pay or the product demand elasticity (like a Ramsey pricing).⁴⁸⁰ For instance, it may be efficient and not anti-competitive for a mobile operator to price the access to its network according to the different willingness to pay of the service providers seeking access. Indeed, the mobile operator may want to charge differently the providers of content over mobile phone, according to the value of their content for the end-users. Moreover, non-discrimination may be an instrument of collusion and hence is particularly unsuitable in cases of collective dominance.⁴⁸¹

Accounting separation (Article 11 of the Access Directive)

Third, the NRAs may impose an accounting separation obligation requiring the SMP operator to provide a profit and loss statement and statement of capital employed for each of the regulatory reporting entities.⁴⁸² The NRA may even extend the obligation of accounting separation to market where the regulated operator does not have SMP when justified (for instance to ensure the coherence of data) and with regard to the principle of proportionality.⁴⁸³ In particular, the NRA may require a vertically integrated company to make transparent its wholesale and internal transfer prices. In addition, the authority may also require that accounting records are provided on request, and it may even specify the format and accounting methodology to be used.

⁴⁷⁹ Larouche (2000a:225-230).

⁴⁸⁰ Varian (1989). This issue has come back in the policy debate with the debate on net neutrality.

⁴⁸¹ ERG Revised Common Position on remedies, p. 49.

⁴⁸² Commission Recommendation of 19 September 2005 on accounting separation and cost accounting systems under the regulatory framework for electronic communications, O.J. [2005] L 266/64 and ERG Guidelines for Implementing the Commission Recommendation, ERG(05) 29. See also Andersen (2002).

⁴⁸³ Recommendation on accounting separation and costs accounting system, Point 4 and Recital 5, and ERG Implementing Guidelines, Section 7.4.

The purpose of imposing such obligation is to provide a higher level of detail of information than that derived from the statutory financial statements, to reflect as closely as possible the performance of parts of the regulated operator's business as if they had operated as separate businesses, and in the case of vertically integrated undertakings, to prevent discrimination in favour of their own activities and to prevent unfair cross-subsidy.⁴⁸⁴ However as Cave (2004a) notes, this obligation represents a considerable ratcheting up of the regulatory burden on the SMP operator, and is only justified when there is persistent network monopoly enjoying an entrenched competitive advantage. In addition, disclosure of cost data may be an instrument of collusion and hence is particularly unsuitable in cases of collective dominance.⁴⁸⁵

Compulsory access (Article 12 of the Access Directive)

Fourth, the NRAs may impose an access obligation, requiring the operator not to withdraw access, to negotiate in good faith or to give third party access to specific network facilities for fair compensation. This notion of access should be construed broadly,⁴⁸⁶ as it covers access to wire and wireless network elements (like access to the fixed local loop, or roaming on other mobile networks), access to associated facilities (like the conditional access system for digital television), access to physical infrastructure (like buildings, ducts and masts), or access to relevant software systems (like operational support system, or number translation system). The NRA could impose access when a refusal would hinder the emergence of a sustainable competitive market at the retail level or would not be in the end-users interests.

Cave (2004a) and Geradin and Sidak (2005:547) argue that the test to impose third-party access under sector-specific regulation is softer (read easier to meet by the NRA and the access seekers) than the one under competition law because under the former the authority has two alternative possibilities to impose access (hindrance of sustainable retail competition or end-users interests) whereas under the latter it has only one possibility (hindrance of sustainable retail competition).

⁴⁸⁴ On the importance for new entrants operators of a correct implementation of accounting separation, see Tarrant (2003).

⁴⁸⁵ ERG Revised Common Position on remedies, p. 50.

⁴⁸⁶ Article 2 of the Access Directive.

I disagree because when the market selection test (which embodies some sort of essential facility test) is also taken into account, then it is not easier to impose access under sector-specific regulation than under competition law.⁴⁸⁷ It is economically justified that access should not be more easily granted under sector-specific regulation than under antitrust,⁴⁸⁸ as the same conflict between short-run and long run competition holds. Indeed, short-run interests might best be furthered by the adoption of mandatory access on a wide scale, but such policy would reduce incentives to invest in competing facilities and would stifle innovation in the long term.

Price control and cost accounting (Article 13 of the Access Directive)

Fifth, the NRAs may impose price control obligations. The authority could prohibit anti-competitive pricing practices, like prices which are excessive, predatory, or creating margin squeeze.⁴⁸⁹ The NRA could also impose positive price control provided it promotes efficiency and allows the operator a reasonable rate of return on adequate capital employed taking into account the risks involved.⁴⁹⁰ When cost orientation is chosen, the burden of proving that prices are cost oriented lies with the regulated operator. Different methods of price control are possible.

(1) First, the NRAs can rely on benchmarking and set prices according to those applied in comparable competitive markets (in the same country, in another EU Member State, or even outside the European Union). This is a very efficient interim means to control price and force them down when cost models are not yet available. The Commission is recommending such approach based on the third lowest price observed in the Member States for the one-off connection and the monthly pricing of the wholesale leased lines part circuits.⁴⁹¹ It has recommended the same approach for the pricing of fixed interconnection charges between

⁴⁸⁷ Also in this sense: Bak (2003:321), Bavasso (2004:110), Valcke et al. (2005:135).

⁴⁸⁸ Haussman and Sidak (1999). The authors suggest that an NRA imposing compulsory access should use a consumer-welfare test (as captured by the essential facility doctrine) and not a competitor-welfare test. As noted by Breyer, "Increased sharing by itself does not automatically mean increased competition. It is in the unshared, not in the shared portions of the enterprise that meaningful competition would likely to emerge. Rules that force firms to share every resource or element of the business would create, not competition, but pervasive regulation, for the regulators, not the market place, would set the relevant terms", quoted in Kahn (2001:7).

⁴⁸⁹ See Section 2.3.1.C.

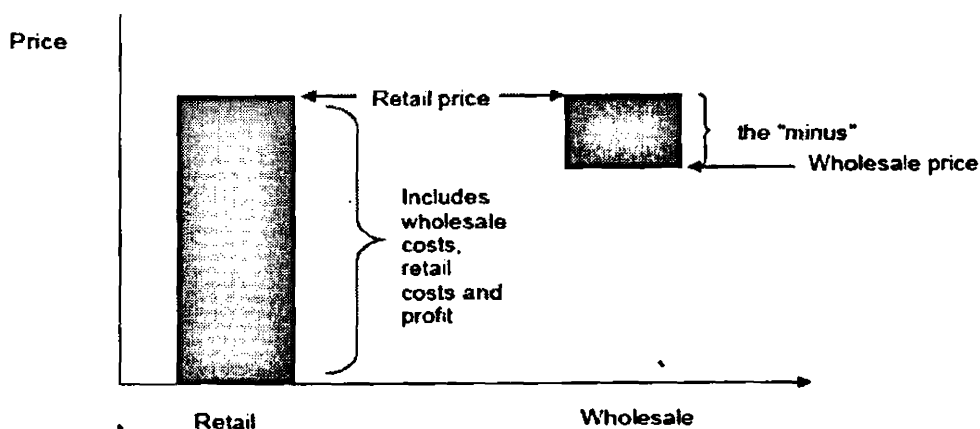
⁴⁹⁰ Mitchell and Vogelsang (1991), OECD (2004).

⁴⁹¹ Commission Recommendation of 29 March 2005 on the provision of leased lines in the European Union (Part 2- Pricing aspects of wholesale leased line part circuits), O.J. [2005] L 83/52, which aims at market 13 and, for sufficient line length, market 14 of the Recommendation on relevant market.

1998 and 2002 when most Member States did not have yet put in place cost models.⁴⁹² In practice, several NRAs base their price control on international benchmarking.⁴⁹³

(2) Then, the NRAs can also follow a 'retail minus' methodology and set the wholesale price on the basis of a freely determined retail price, minus a mark-up compensating for the retail services (marketing, customer care, finance and retail billing including bad debts, retail product development and management costs, retail computing costs, other overheads attributable to retail services). Conceptually, the minus corresponds to those retail costs saved by the SMP operator from serving new entrants on a wholesale basis instead of serving end-users on a retail basis.⁴⁹⁴ Thus, retail minus aims to reduce the ability of the SMP operators to pursue anti-competitive behaviours, in particular market foreclosure by vertically operator through the implementation of a margin squeeze, as well as to promote a sustainable competitive environment in the retail market as it facilitates entry. However, it does not aim, and as such will not result, in securing cost oriented prices.

Figure 3.8: Application retail minus methodology



Source: IRG PIB regarding implementation and use of Retail Minus pricing

If easy in theory, the implementation of retail minus requires the NRAs doing many difficult choices that may be split into three broad categories:⁴⁹⁵ issues related to determining the basic

⁴⁹² Commission Recommendation of 8 January 1998 on interconnection in a liberalised telecommunications market (Part 1 - Interconnection pricing), O.J. [1998] L 73/42, last amended by Commission Recommendation of 22 February 2002, O.J. [2002] L 58/56.

⁴⁹³ Market 8: Case SI/2005/257. Market 15: Case ES/2005/330; Case SI/2005/230. Market 16: Case DK/2005/204; Case LU/2005/321; Case PT/2004/129; Case EE/2006/342. Market 18: Case ES/2005/252.

⁴⁹⁴ It corresponds to the Efficient Component Pricing Rule (ECP) rule advocated by Sidak, but rejected in many hypothesis by Armstrong (2002) and Laffont and Tirole (2000).

⁴⁹⁵ See the Public consultation of February 2006 on the IRG Principles of Implementation and Best Practice regarding the implementation and use of Retail Minus pricing, IRG(05) 39rev2.

retail price (especially when there is temporary promotions, products are offered as a bundle, ...), to calculating the value of the minus (retail costs of the SMP operators or of another efficient new entrant which may vary in case of retail economies of scale,⁴⁹⁶ inclusion the additional costs incurred by providing a wholesale service rather a retail service, timeframe to be used, ...), and to other implementation problems (frequency of the revision of minus, ...).

In practice as illustrated in Table 3.1a below, regulators mainly rely on retail minus when imposing price control in the market for fixed wholesale broadband access (market 12 of the Recommendation on relevant markets).

(3) Finally, the NRAs can set prices equal to costs provided they have sufficient information about the actual costs. To get them, NRAs may impose accounting obligations that are based on different methods than those used by the SMP operators for financial reporting.

However, the concept of relevant cost is complex and entails many regulatory choices in an industry where there are important fixed common costs (hence the standard marginal cost would be insufficient to recoup costs) and where technological progress is rapid (hence costs change quickly over time). To deal with both difficulties, it is important to distinguish the cost base and the cost allocation method.

On the one hand, the cost base is an evaluation of the cost of the operators' different inputs. NRAs rely on three main methodologies to assess such costs: the Historical Cost Accounting (HCA) which values the inputs at the price that have been purchased; the Current Cost Accounting (CCA) which values the assets at their current replacement value and which may be higher or lower than the historical price depending of the market and technological evolution;⁴⁹⁷ and the Forward-Looking Price (FL) which values the inputs at their future efficient prices. As the last method is often too difficult to apply in practice, regulators tend to approximate Forward-Looking valuation with Current Cost Accounting valuation.

To complicate the matter even further, the NRAs should decide if they start the calculation from the financial account of the operator (the top-down approach), or from an engineering

⁴⁹⁶ On this issue, see the discussion on price squeeze at Chapter 3, Section 3.1.1.C.

⁴⁹⁷ IRG Principle of Implementation and Best Practice of February 2006 regarding the use of current cost accounting methodologies.

model⁴⁹⁸ (the bottom-up approach) that reflects either the existing network topology of the regulated operator (the scorched node) or an ideal efficient typology (scorched earth). The NRA may also use both approaches in a complementary way: the top-down model to determine the efficiently incurred costs of the operator and the bottom-up model to check the efficiency of the operator.

Figure 3.9: Nine ways of calculating the cost base of an SMP operator

		HICA	CCA	FL
Top-down (financial account)				
Bottom-up (engineering model)	Scorched node (existing typology)			
	Scorched earth (efficient typology)			

On the other hand, the cost allocation method is the way to allocate the individual and common costs to a particular service and entails the choice of the relevant cost benchmark. Depending of the time horizon and the share of the common cost allocated to a specific service, there are six cost benchmarks in ascending order: the marginal cost (MC), the Average Variable Cost (AVC), the Long Run Average Incremental Cost (LAIC), the Average Total Cost (ATC) whose a particular application is the Fully Distributed or Allocated Cost (FDC or FAC), and the Stand Alone Cost (SAC).⁴⁹⁹ When choosing the LAIC, the NRA may also decide to add a mark-up to reflect the value of the option (between buying and building) that access buyers maintain.⁵⁰⁰ The value of such option varies according to the risk of the investment (higher the risk is, higher is the value to keep the choice between building and buying). Dixit and Pindyck (1994) estimated the 'mark-up' on LRIC associated with pricing the option as 100%. However Dobbs (2004) suggested that a mark-up of 5–50% is more likely when taking account of other factors influencing output prices. Moreover, this mark-up only applies to the sunk cost component of an access product.

In addition, the NRA could also rely on sophisticated pricing design. For example, given the very significant fixed costs in telecom and the consequent divergence between average and

⁴⁹⁸ On those models, see Gasmi et al. (2002).

⁴⁹⁹ See Section 2.2.1.B.

⁵⁰⁰ In general, see Alleman (1999). Pindyck (2005).

marginal cost, a non linear pricing structure consisting of a fixed fee combined with a unit charge equal to marginal cost may be appropriate.⁵⁰¹

In practice, the NRA should assess the most appropriate cost base, and cost allocation method for the price control obligation to meet the objectives of the regulation, in particular effective competition and efficient investment.⁵⁰² As shown in Table 4.1 below, most of the European regulators relied on the CCA as a cost base and the LRIC as the cost benchmark. The allowed (nominal pre-tax) cost of capital is on average 11.43% for the fixed network and 14.89% for the mobile network, but old and big Member States tend to have a lower cost of capital than average and small and/or new Member States have a higher cost of capital than average.

⁵⁰¹ Cave (2006:234-235).

⁵⁰² Commission Recommendation on accounting separation and costs accounting system, Point 3 and ERG Implementing Guidelines, Section 3. The Commission recommended the use of the LRIC benchmark for the pricing of fixed interconnection as well as for the pricing of unbundled access to the local loop; Commission Recommendation on interconnection in a liberalised telecommunications market - Part 1 at para 3; Commission Recommendation of 25 May 2000 on unbundled access to the local loop, O.J. [2000] L 156/44 at Article 1(6); Annex II to Communication on Market Reviews, p. 6 See also: Europe Economics (2000).

Table 3.1a: Cost base and cost benchmark used by the NRAs (as of February 2006)

	M. 8 and 9 Fixed origination and termination	M. 11 Unbundling Local Loop	M. 12 Wholesale Broadband Access
AT	FL-LRAIC	FL-LRAIC	RM
BE	FL-FDC*	FL-FDC*	CP and RM
CY	CCA-LRIC	HCA-FDC**	RM
CZ	CCA-LRAIC	CCA-LRAIC	
DK	FL-LRAIC*	CCA-LRAIC*	CP
EE	HCA-FDC	FL-LRAIC	
ES	HCA and CCA/FDC**	H and C/FDC**	RM
FI	CCA-FDC	CCA-FDC	---
FR	CCA-LRAIC	CCA-LRAIC	MS ⁵⁰³
DE	FL-LRAIC*	FL-LRAIC*	LRAIC
EL	CCA-LRAIC	CCA-LRAIC	RM
HU	FL-LRAIC	HCA-FDC	HCA-FDC (DSLAM access) RM (national IP access)
IE	CCA-LRIC	CCA-LRIC	RM
IT	HCA or CCA /FDC ⁵⁰⁴	HCA or CCA-FDC	HCA or CCA/FDC
LT	FL-FDC**	HCA-FDC	HCA-FDC
LU	CCA-LRIC	CCA-LRIC	---
LV	CCA-FDC	CCA-FDC	
MT	HCA-FDC	HCA-FDC	
NL	FL-LRIC*	FL-FDC*	---
PL	FL-LRIC	FL-LRIC	
PT	HCA-FDC**	CCA-FDC	RM
SE	FL-LRIC*	FL-LRIC*	RM ⁵⁰⁵
SI	CCA-FDC	CCA-FDC ⁵⁰⁶	
SK	CCA-LRAIC	n.a.	
UK	FL-LRIC*	FL-LRIC*	RM

HCA: Historic Costs Accounting; CCA: Current Cost Accounting; FL: Forward-looking Cost Accounting
LR(A)IC: Long Run (Average) Incremental Cost; FDC: Fully Distributed Cost
CP: Cost plus; RM: Retail minus; MS: Margin Squeeze

* FL based on CCA

** Move towards FL-LRIC or CCA-LRIC

Source: Cullen International (as of June 2006)

⁵⁰³ Margin Squeeze on the basis of an efficient new entrant.

⁵⁰⁴ HCA for access network and CCA for transport network.

⁵⁰⁵ The NRA notes that applying a 'cost plus' model may potentially result in too low bitstream access prices as compared to unbundled access and would reduce incentives of alternative operators to invest in building their own networks. Furthermore, with 'cost plus' bitstream access prices, there is a higher risk of potential price squeeze between the incumbent's retail and wholesale products.

⁵⁰⁶ The NRA recognises that LRIC is best, but considers that it would not be proportionate at this stage.

Table 3.1b: Cost of capital in the different Member States

	Fixed	Mobile
AT	10,37	
BE	11,52	19,5
DK	8,5	
FI		
FR	9,8	15
DE	8,35	
EL	10,4	16,26
IE	11,5	
IT	10,2	
LU		
NL	9,5	
PT	13,32	
ES	10	12,49
SE	10,5	12,6
UK	10	11
EU15	10,30	14,48
CY	12,44	13,47
CZ	11,18	13,26
EE	11	
HU	16,5	17,5
LV		
LT	12,27	
MT	14,5	17
PL	11,47	
SK	11	
SI		
EU10	12,55	15,31
EU25	11,43	14,89

Source: Cullen International (as of June 2006)

As this last variation of price control is very intrusive, it should only be used with extreme parsimony and be confined to cases close to the existence of an essential facility. That may be the case for the different types of access to the fixed local network (call termination, unbundling of the local loop, bitstream) provided that one operator enjoys a monopoly or position of super-dominance in the relevant geographical area. On the other hand, when there is network duplication like in the mobile industry, non-discrimination or other forms of price control may be preferable.⁵⁰⁷

⁵⁰⁷ Cave (2004a).

Other obligations (Article 8.3 of the Access Directive)

In exceptional circumstances, the NRA may also impose other obligations than those listed in the Access Directive, provided it gets the prior agreement of the Commission.⁵⁰⁸ For instance, if justified, the NRA could impose technical solutions (like the use of multiple SIM cards in mobile handsets) or changes in the tariff principles (like imposing receiving-party-pays at the retail level or the Bill-and-Keep at the wholesale level) to address the mobile termination problem.

More importantly, the fact that the obligations listed in the Access Directive are all behavioural does not exclude a structural solution.⁵⁰⁹ Thus, contrary to the Commission,⁵¹⁰ I submit that the NRA could impose a divestiture and a structural separation of the local loop.⁵¹¹ I reckon however that this remedy would be very difficult to apply in practice as the Commission, and the Courts in case of legal challenges, should be convinced that the available remedies are insufficient and that a structural separation is the only way forward.⁵¹²

D2. Remedies on the retail markets

In contrast to the wholesale markets, two conditions must be fulfilled in regulating a retail market: (1) one or more operators should enjoy an SMP position on a relevant market, and (2) the obligations that may be imposed on wholesale markets should not be able to achieve the three objectives of the Framework Directive, in particular the effective competition.

If it is the case, the NRA imposes one or more obligations, to be chosen from the non exhaustive list provided in Article 17 of the Universal Service Directive. The NRA may impose the same type of price control listed above (prohibition of anti-competitive pricing

⁵⁰⁸ Article 8(3) of the Access Directive.

⁵⁰⁹ Although Ofcom imposed the quasi-structural separation of BT under the competition law provisions and not under the sector-specific regulation (Ofcom Final statements of 22 September 2005 on the Strategic Review of the Telecommunications and undertakings in lieu of a reference under the Enterprise Act 2002), its CEO at the time recognised that structural separation could have been imposed under the 2003 framework, but that would have been legally more difficult: speech of S. Carter at the NHH Conference in Budapest in September 2006.

⁵¹⁰ Impact assessment on the Review 2006, p. 11.

⁵¹¹ Also in this sense: Hogan and Hartson and Analysys (2006:193).

⁵¹² On structural separation: OECD (2001). Several arguments militate against the separation of the local loop at this stage of market development, in particular the difficulty to identify a stable dividing line between potentially competitive and non-competitive activities and the related problem of co-ordinating investment activities between the network company LoopCo and the service company ServCo.

practices or positive price control), possibly adapted to take account of the characteristics of the market to be regulated. However, as the SMP regime mainly aims at ensuring effective competition, the retail tariffs control should only ensure competition, hence the orientation of prices towards costs. They should not guarantee other objectives such as general accessibility and affordability of certain services, hence tariffs below costs (which is the remit of the universal service).⁵¹³ To ensure effective price control, the NRA could impose the implementation of appropriate cost accounting systems,⁵¹⁴ with specific format and methodology and whose compliance would be verified by a qualified independent body.

Going beyond price control, the NRA could also impose other types of obligations such as the prohibition of discrimination between end-users or unreasonable bundling of services, or any other remedies that may be appropriate.

*D3. General principles to choose remedies*⁵¹⁵

The choice of obligations⁵¹⁶ made by the National Regulatory Authority should follow three general principles, whose some have already been refereed above (section 3.1.2.B).

Proportionality

A first principle is that the remedies should be based on the nature of the problem identified and appropriate to address it. Thus, the NRA first identifies the market failure as well as the underlying economic incentives and possibilities to behave anti-competitively. Four main problems have been categorised by the European Regulators Group:⁵¹⁷ (i) single dominance leading to entry deterrence, allocative inefficiencies (like excessive price) and productive inefficiencies (like lack of investment); (ii) vertical leveraging leading to denial of access, price or non price leverage actions; (iii) horizontal leverage leading to anti-competitive bundling of cross-subsidisation; and (iv) all termination charges setting leading to tacit collusion and/or excessive prices. Then, the remedies should be justified in light of the three

⁵¹³ Contrary to what is argued by Bak (2003:322), retail SMP control and universal service obligations do not have the same aims and should not be confused.

⁵¹⁴ See further, Andersen (2002).

⁵¹⁵ Cawley (2004), Valcke et al. (2005:42-69).

⁵¹⁶ Article 8(4) of the Access Directive.

⁵¹⁷ ERG Revised Common Position on remedies, pp. 23-45.

objectives of the Framework Directive (effective competition, internal market, and interests of the European citizens). Finally, the remedies should be the least burdensome option possible to achieve the regulatory aim.⁵¹⁸

This 'proportionalisation' of the remedies is one of the key innovations of the 2003 regulatory framework as previously the NRAs had to apply automatically the whole set of remedies provided in the directives (and corresponding to all the five obligations described above). Thus NRA should undertake a regulatory options assessment of alternative remedies (if available) so that the least burdensome remedies effective remedy will be selected. However, that does not necessarily lead to the high evidentiary standard of full cost-benefit analysis.⁵¹⁹

A specific application of the principle of proportionality is the imposition of asymmetric remedies which consists to choose different remedies for operators active on the same relevant market according to the relative size of these operators and the relative compliance costs. For instance when regulating the termination charges between the fixed operators, it may be proportionate to impose price control based on heavy cost accounting for the bigger players (i.e. the incumbent) and a price control based on a lighter benchmarking for the smaller players.⁵²⁰

Figure 3.8: An economic evaluation of the obligations

Obligation	Indication	Contra-indication or adverse effects
Transparency	Technical information indispensable to successful interconnection	Price disclosure may ensure excessive/rigid prices
Non-discrimination	Partial remedy against margin squeeze	Too broad a prohibition may reduce consumer welfare; conditions for discrimination may not exist
Separate accounting	Potentially useful for persistent monopoly; essential for many price squeeze investigations	Costly
Mandatory access	Useful for dealing with persistent network monopoly	Reduces incentives to invest and innovate
Cost-oriented pricing	Useful for dealing with persistent network monopoly	Reduces incentives to invest and innovate
Retail price control	Can maintain distorted retail price structure; possible approach to consumer protection issues (e.g. ignorance)	Widespread mandatory access by resellers an alternative

Source: Cave and Larouche (2001:14)

⁵¹⁸ Commission Guidelines on market analysis, para 118.

⁵¹⁹ ERG Revised Common Position on remedies. A full cost-benefit analysis as been proposed by Veljanovski (2003). See also Recital L of Resolution of the European Parliament of 18 November 2003 on the Eight Report from the Commission on the implementation of the Telecommunications Regulatory package, A5-0376/2003.

⁵²⁰ See *infra* Table 4.4b and Vlacke at al. (2005:97-105) analysing the reciprocity of wholesale charges between big and small players on the same relevant market.

Service-based competition, infrastructure-based competition and the ladder of investment or stepping-stone theory

A second principle is that the NRA should start by assessing whether the infrastructure is likely to be replicated or not. As suggested by Cave (2006:231), the NRA can do such assessment in a two-stage process. First, the NRA conducts an empirical enquiry of replication in similar circumstances (benchmarking). However, such benchmarking may be difficult (especially when there are limited examples of replication that may be the result of special and/or unsustainable experience and may lead to ambiguous results). Thus the empirical approach should be complemented by a theoretical approach where the NRA looks at evidence from cost modelling. It is possible to specify a cost function and try to estimate it with econometric method⁵²¹. Alternatively, it is possible to specify an engineering model of the physical network, make a detailed set of assumptions about inputs prices and other factors and estimate the forward looking cost of network facilities⁵²². However, cost modelling have their own drawbacks because they have a bias towards a finding of non-replicability (as they tend to assume perfect productive efficiency and to ignore management and other problems associated with large enterprises) and the market outcome depends not only on cost data but also the likely competitive interactions in the market place. Depending of the result of this replicability assessment, the NRA may follow three paths.

If the duplication is neither feasible nor desirable due to the persistent presence of significant economies of scale and scope or other entry restrictions, the NRA must ensure sufficient access to wholesale inputs in order to secure maximum benefits to consumers and protect them against any potential behavioural abuses. This is the standard role that regulation has played in the past in the monopolised sectors.

If infrastructure duplication is feasible, remedies should assist the transition process to a sustainable competitive market and provide new entrants with incentives to climb the investment ladders with dynamic access point determination and price setting.⁵²³ Indeed, there is no conflict between infrastructure (facilities-based) competition and service (access-based)

⁵²¹ See Fuss and Waverman (2002).

⁵²² See Gasmi et al. (2002) and Sharkey (2002).

⁵²³ Cave and Vogelsang (2003) and Cave (2006:233-234).

competition, when time dimension is taken into account. NRAs should provide incentive for competitors to seek access from the incumbent in the shorter term and to rely increasingly on building their own infrastructure in the longer term.⁵²⁴

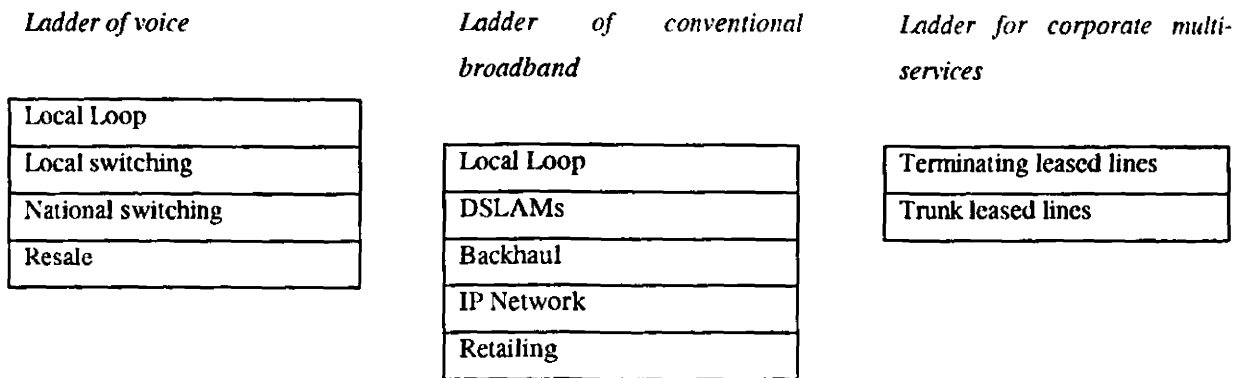
To do so, Cave (2006:233-234) propose that the regulators follow several steps: (1) Rank replicable components of the value chain according to their ease of replicability (see Figure 4.9); (2) Identify where on the ladder incumbents and entrants are located and choose the point of the ladder at which intervention is justified by deciding how entrants should be encourage to climb the ladder;⁵²⁵ (3) Determine the likely investment potential of actual and potential entrants at that point, in other words their scope for progression over the period of the intervention (say 2–3 years); (4) Choose the mode of intervention, which can be by price or quantity instruments, in other words, either based upon rising access prices, subject to a short transition period where necessary, or upon the projected withdrawal of mandatory access. Above all, it is important that regulators make a credible commitment to the policy. Otherwise 'moral hazard' problem will arise, with entrants knowing that, if they do not invest, the NRA will not remove their benefits.⁵²⁶

⁵²⁴ Monti (2004).

⁵²⁵ This decision will be based on an analysis of the scale and prospects of the operators at various points, with a bias in favour of what might be described as 'leading competitors', defined as those more advanced in their infrastructure building and satisfying a minimum market share criterion.

⁵²⁶ It is thus important that the regulator sticks to its policy, which is not always the case. For instance in Canada, the CRTC decided in 1997 to divide the country into two regions—large urban, and small urban and rural. In the latter, unbundled loops would be available for an indefinite period as an 'essential facility'. In the former, they would be available for 5 years only, giving entrants a window of opportunity to build their own loops. This plan to withdraw mandatory access to loops in more populated areas was, however, abandoned in 2001, as roll-out of competing loops was slower than expected.

Figure 3.9: The investment ladders



Finally if the NRAs can not determine with sufficient certainty whether infrastructure is duplicable, they should keep an open mind and continue monitoring to re-assess their views, while being aware of the possibility of inefficient investment.

Incentive compatibility

Finally, the NRAs should choose when possible remedies that are incentive compatible.⁵²⁷ To do that, they should formulate the obligations in such way that the advantages to the regulated party of compliance outweigh the benefits of evasion. Incentive compatible remedies are likely to be both effective and require a minimum of on-going regulatory intervention. However, this may be difficult to achieve in practice, especially as the legal power to develop incentives for compliance is likely to vary greatly across Member States.

⁵²⁷ The principle of incentive compatibility is not expressly mentioned in the 2003 regulatory framework, but is linked to the proportionality requirement (Article 8.1 of the Framework Directive) and the provisions on financial penalties (Article 10.3 of the Authorisation Directive): Valcke et al. (2005:53).

E. The relationship between the four steps of the Significant Market Power regime

After having detailing each of the four steps of the Significant Market Power regime, I concentrate now on their relationship. The most important one is the link between the three criteria test (step 1) and the SMP designation (step 3). The three criteria test aims to define the scope of economic regulation by focussing on a sub-set of dominance cases (the hard-core market power) that could not be efficiently dealt with by competition law.⁵²⁸ In fact, the TCT is stricter than SMP (i.e. when the former is passed, the latter should also be passed) and as it is performed beforehand, the SMP assessment becomes largely irrelevant.⁵²⁹ However, the Framework Directive prescribes (artificially) the Commission and the NRAs to perform the two tests. As we have seen, the practice reinforces this separation because it assigns both tests to different institutions: the Commission carries the TCT at the European level and then the NRAs asses SMP at the national level and with better knowledge of the specific market characteristics the NRAs should not do the three criteria test on the markets selected by the Commission as they may presume that it is fulfilled.)⁵³⁰

This presumption is largely artificial because it is not possible for the Commission to perform the TCT for each of the 25 Member States as it does its analysis at the European level (taking an average position) and with limited knowledge.⁵³¹ The best proof of this artificiality is that some NRAs have found no SMP on markets selected by the Commission, although the SMP assessment is weaker than the TCT. More critically, the presumption goes against the law and good policy practice. It goes against the law because Article 15 of the Framework Directive (which embodies the TCT) applies equally to the Commission and the NRAs, hence the NRAs should individually do the TCT and not rely on the (necessarily imperfect) work of the Commission. It is not good policy because the TCT is the most fundamental test to define the scope of regulation and NRAs could not escape that test, relying on the work of the Commission which is imperfect and can probably not be contested in Courts. In practice not doing the test lower the burden of proof to regulate and increase the risk of type I errors.

⁵²⁸ In practice, the two first selection criteria rely on the same indicators than the dominance assessment.

⁵²⁹ It is only useful to determine which are the specific operators that should be regulated.

⁵³⁰ ERG Revised Common Position on remedies, p. 18.

⁵³¹ Such difficulty is recognised in Cave et al. (2006:3).

The second relationship is the link between on the one hand the market delineation (step 2), and on the other hand, the TCT (step 1) and the related SMP assessment (step 3). All tests move together according to the technological and market developments. Indeed, more the markets are defined narrowly, higher the probability is that this narrow market would be selected for regulation and that NRA would find SMP on this narrow market.⁵³² At the limit, when the competitive conditions are such that each network constitutes a relevant market, these very narrow markets would automatically be selected⁵³³ and NRAs would normally find the operator as having SMP (save exceptional circumstance like strong countervailing buying power.)⁵³⁴

The third relationship is the link between the market selection (step 1) and the choice of remedies (step 4) because the third selection criterion is related to the efficiency of remedies. In fact, the insufficiency of competition law remedies would probably be better assessed when remedies are chosen.⁵³⁵ However, the Commission is bound to assess (maybe in a very abstract way) the relative efficiency of remedies during the first step and once a market is selected (and SMP is found), at least one sector remedy should be imposed without the possibility to argue at that stage that antitrust remedies would be sufficient.⁵³⁶ Again, if the TCT was applied thoroughly by the NRAs, this lack of flexibility would not be problematic and even justified because it is implausible that antitrust remedies would suffice to redress the competitive problems when there is hard-core market power.

Thus, in the four steps of SMP regime, the most important ones are step 1 (the three criteria test) and step 4 (the choice of remedies). If performed adequately, step 2 (market definition) and step 3 (dominance) could be largely ignored. Unfortunately, the three criteria test is not taken seriously today, hence steps 2 and 3 become important as a tool to alleviate over-regulation.

⁵³² This link is recognised by the Commission in the Explanatory Memorandum of the Second draft Recommendation on relevant markets, p. 37. This link is classic under competition law and lead the authority to tries to define market narrowly whereas the investigated undertaking tries to define the market broadly: Korah (2004). Under sector-specific regulation, the link between steps 1 and 3 is parallel to the link between steps 2 and 3 because of the close link between steps 1 and 2.

⁵³³ This is the case for the wholesale markets for fixed or mobile termination (markets 9 and 16 of the Recommendation on relevant market).

⁵³⁴ This is the case for the wholesale markets for fixed or mobile termination (markets 9 and 16 of the Recommendation).

⁵³⁵ Nihoul and Rodford (2004:273) go even further arguing that: "It is not possible to determine whether preference must be given to general competition law at the moment when authorities are considering *in abstracto* what markets are to be defined for an assessment of competition".

⁵³⁶ Commission Guidelines on market analysis, para 114.

*F. The special case of emerging markets*⁵³⁷

As the 2003 framework eases the selection of market for intervention and aligns sector-specific regulation on antitrust working methods, some feared that the regulators would follow their antitrust counterparts and intervene extensively in emerging markets.⁵³⁸ However if a strong approach may be justified for merger control that is one-shot, it is less justified in case of sector intervention that is continuous.⁵³⁹ Thus, Recital 27 of the Framework Directive provides that:

(...) newly emerging markets, where *de facto* the market leader is likely to have substantial market share but should not be subjected to inappropriate obligations.

The Recital implies that sector-specific regulation is not precluded on emerging market but should be apply more parsimoniously than in ordinary markets. However, it is of limited use as it does not define the notions of ‘emerging market’ or ‘appropriate obligations’, nor articulate a comprehensive rationale of the regulation of emerging markets. Several reasons have been put forward by different European regulatory actors. First, there may not be hard-core market power justifying regulation and the high market shares of the first mover are contestable because entry barriers are low.⁵⁴⁰ Second, there is hard-core market power but regulators should forbear because the first mover should recoup its investment risk and investment incentive should be preserved.⁵⁴¹ Third, premature intervention may constrain spontaneous market developments and unduly influence technological progress.⁵⁴²

To clarify the issue, the first step is to define an emerging market. The European Regulators Group defines the emerging market⁵⁴³

when it is distinct from a market that is already susceptible to ex ante regulation from both a demand and a supply perspective. This means that consumers of the new service should not move their custom to currently available services in response to a small but significant non-

⁵³⁷ Commission Guidelines on market analysis, para 81-85; ERG Revised Common Position on Remedies, p. 19-20 et p. 116-119; Renda (2006:21-27).

⁵³⁸ On antitrust practice in emerging market, see Chapter 3.

⁵³⁹ Commission Guidelines on market analysis, para 32.

⁵⁴⁰ That is implied by the Framework Directive of the European Parliament and the Council at Recital 27, and the Recommendation on relevant markets of the Commission, recital 15.

⁵⁴¹ That is implied by the ERG Revised Common Position on remedies at p. 89.

⁵⁴² That is implied by the Commission Guidelines on market analysis at para 32.

⁵⁴³ ERG Revised Common Position on remedies, p. 19.

transitory price increase in the price of the new service. In a similar manner, firms currently providing existing services should not be in a position to quickly enter the new service market in response to a price increase.

The ERG notes that such markets will normally not be selected for regulation because it will not be possible to assess the three criteria test as there is a high degree of demand uncertainty and entrants to the market bear higher risk.⁵⁴⁴

However, the notion has been invoked by the incumbents, but not used so far by the regulators and the European Commission in the context of VoIP or the VDSL (see below).

3.2.2. Application of the Significant Market Power regime to the different market segments⁵⁴⁵









In its first Recommendation of February 2003, the Commission distinguished between six broad areas: (a) fixed voice, (b) fixed narrowband data, (c) fixed broadband data, (d) fixed dedicated access (leased lines), (e) mobile voice, and (f) broadcasting services.

⁵⁴⁴ Similarly, Indepen and Ovum (2005b:3) define an emerging market as “any relatively new market in which there is insufficient information (for example in terms of demand, pricing, price elasticity and entry behaviour) to carry out the necessary market definition procedures and/or tests as to whether the market is susceptible to ex ante regulation”. Baake and al. (2005:22) take “as the necessary condition for a new market the existence of an innovation, i.e. an increase in general knowledge on the possibility of manufacturing or distributing goods and services”.

⁵⁴⁵ For an overview of the market analysis of September 2005, see Commission Communication on Market Reviews.

Table 3.2: Results of national market analysis (as of 31 August 2006)

	AT	BE	CY	CZ	DK	EE	ES	FI	FR	DE	EL	HU	IRL	IT	LT	LU	LV	MT	NL	PL	PT	SE	SI	SK	UK
1	a			a			a	a	a	/		a		a					a	/	a	a	a	a	a
2	a			a			a	a	a	/		a		a					a	/	a	a	a	a	a
3	a			a			a	a	v	/		a							a	/	a				a
4	a			a			a		a	/		a		a					a	/	a	a			a
5	a			a	a		a	a	v	/		a							a	/	a	a			a
6	a			a	a		a		a	/		a		a					a	/	a	a			a
7	a			a	a		a	a				a		a					a	/		a	a		a
8	a			a	a		a	a	a	/		a		a	a				a	/	a	/	a	a	a
9	a			a	a		a	a	a	v		a		a	a				a	/		/	a	a	a
10	v			a			a	a	a	/		a		a	a				a	/		a	a		a
11	a			a	a		a	a	/		a	a	a	a	a				a	/		a	a	a	a
12				a			a	a	a	/		a	a	a	a				a	/		a	a	a	a
13	a			a			a					a		a					a	/				a	a
14	a			a			a					a		a					a	/		a		w	a
15	a			a	a		a	a	v	w		a	a	a	a				a	w		a	a		a
16	a			a	a		a	a	a	/		a	/	a	a	a			a	/	a	a	a	a	a
17							a																		
18				a			a		a	/		a	/						a	/		/			a

-  Effective competition - no ex ante regulation
-  No effective competition - ex ante regulation
-  Partial competition - partial ex ante regulation
-  Withdrawal (totally or partially); not yet re-notified
-  Veto
-  Veto - measure corrected by a new notification
-  Separated notification for remedies
-  Final measure accepted

Source: European Commission

A. Fixed voice markets

At the retail level, the services provided at fixed location are in separate markets than the services provided at non-fixed locations.⁵⁴⁶ Indeed, a small increase of the fixed services' prices may be profitable as the possibilities of substitution are limited for the demand (the marginal customer will not switch to mobile services) in case of price increase, as well as for the supply. Of course, this distinction may change over time. When the marginal customer will switch between fixed and mobile in case of relative price increase or when offers

⁵⁴⁶ That has been the long antitrust practice of the Commission: Commission Decision of 4 October 1995, *GSM in Italy*, OJ [1995] L 280/49; Commission Decision of 18 December 1996, *GSM in Spain*, OJ [1997] L 76/19; *Telia/Telenor*, para 94; Case M. 2574, *Pirelli/Editizione/Telecom Italia*, para 33.

integrating fixed and mobile services will attract sufficient customers, both services will be part of the same relevant market.⁵⁴⁷

On the basis of these retail markets, wholesale markets may be defined by determining which networks and services are necessary for the providers of retail telephone services and what are the constraints on the behaviours of the networks' suppliers. An undertaking wishing to enter retail markets may decide to construct its own extensive network. This would entail considerable investments which could only be viable when end-users expenditure is sufficiently high (like in a business park). Alternatively, the new entrant may rely on the existing networks and purchase or lease all or part of it. In this case, these networks may be divided in three main elements that constitute separate markets: call origination, call transit and call termination.

Market 1 and 2: Retail fixed access

In its Recommendation, the Commission defined two markets for 'access to the public telephone network at a fixed location'. They correspond to the provision of a connection to the fixed public telephone network for the purpose of making and/or receiving telephone calls and related services (such as faxes and dial-up internet) and the access to incoming calls. The Commission distinguished between residential and non-residential (business) markets because the demand substitutability is small (i.e. the contractual terms of access and services may vary), and more importantly, the supply substitutability is limited (i.e. a supplier to the business market would normally not be able to respond to a price increase by a hypothetical monopolist in the residential market because the economics and network coverage's requirement of serving both types of customers are very different).

Most NRAs have followed the Recommendation and defined separate markets for residential and non-residential customers, while some⁵⁴⁸ have defined the retail access markets on the basis of different levels of access (low and high level narrowband access). All of them found the incumbent PSTN operators having SMP on these markets. The majority imposed the full

⁵⁴⁷ See also Section 4.2.2.C.

⁵⁴⁸ Case IE/200/158-159; Case NL/2005/287-288; Case UK/2003/9-10.

set of remedies including price control.⁵⁴⁹ In general, regulators imposed carrier selection and carrier pre selection obligations, as well as occasionally wholesale line rental remedies,⁵⁵⁰ to prevent leverage of dominance from the retail access markets on to the retail calls markets.

Market 3 to 6: Retail fixed voice services

Then the Commission defined four publicly available telephone services provided at a fixed location: residential local and/or national (M.3), residential international (M.4), non-residential local and/or national (M.5), non residential international (M.6). The Commission distinguished between connection lines and telephone services (outgoing calls) because of demand substitutability (i.e. end-users are able to buy separately both products since the introduction of carrier selection and carrier pre-selection⁵⁵¹ and would probably switch to a CS/CPS provider⁵⁵² if the line owner operator would increase the price of telephone service) and limited supply substitutability (i.e. CS/CPS operators are not able to enter the connection market in case of increase of connection price).

Among the telephone services, the Commission distinguished between residential and non-residential users as for the connection markets. It also considered that local and national calls are in the same market because of the strong supply substitutability (i.e. an increase in the price of calls in one category by a hypothetical monopolist could induce service providers in the other category to purchase the wholesale elements needed, provided that they are available, to supply the relevant services), although there is no demand substitutability (i.e. end-users can not substitute a local call with an national call or vice versa).⁵⁵³ However, the Commission considered that local/national calls are not in the same market than international

⁵⁴⁹ In Denmark, the NRA did not impose specific obligations because the obligations in place (wholesale obligation on market 8. CS/CPS and universal service obligations) were sufficient: Case DK/2005/183-184. In Portugal, the NRA did not impose price control on the non-residential access market: Case PT/2004/91.

⁵⁵⁰ Case FR/2005/221-222, Case IE/2005/158-159, Case IT/2005/260-261, Case PT/2004/91, Case SE/2004/112-113. Wholesale Line Rental where the incumbent operator rents its subscriber lines on a wholesale basis to alternative operators that would then 'resell' the subscriber line to the end user. In conjunction with carrier pre-selection ('all calls' option), WLR enables alternative operators to end the billing relationship between the incumbent and the end user.

⁵⁵¹ CS/CPS were introduced under the previous regulatory framework by Directive 98/61/EC of the European Parliament and of the Council amending Directive 97/33/EC with regard to operator number portability and carrier pre-selection.

⁵⁵² End users can relatively easily choose alternative undertakings by means of short access codes (via contractual or pre-paid means) or by means of carrier pre-selection.

⁵⁵³ The local/national market includes calls to mobile and to non-geographic locations because of the supply substitutability (i.e. similarly to geographic equivalents service providers providing one category of services can be expected to be in a position to purchase the wholesale elements that are needed including mobile termination if a hypothetical monopolist attempts to increase prices).

calls because the supply substitution is limited (as there are often particular restrictions which limit this ability to purchase all the wholesale elements in an international calls market) and the demand substitution is non-existent.⁵⁵⁴

The Commission selected those four retail markets because they are listed in the Annex I of the Framework Directive, although they may not fulfil the three selection criteria. Indeed when wholesale markets are efficiently regulated, retail markets show no important entry barriers, and following the logic of the Directives, retail regulation should be lifted, with one caveat however. NRAs may want to continue to collect data on retail markets to control the absence of margin squeeze between wholesale interconnection charges and retail tariffs.⁵⁵⁵

The majority of the NRAs have followed the market definitions of the Commission, while some did not adopt the distinction between residential/non-residential⁵⁵⁶ and others defined separate markets for fixed-to-mobile calls and/or calls to non-geographic numbers⁵⁵⁷ or introduced more fine tuned segmentation.⁵⁵⁸

However, the big test for the resiliency of the regulatory framework to technical progress is its treatment of the Voice over Internet (VoIP) and its possible inclusion in the service telephony markets.⁵⁵⁹ NRAs must assess the demand-side and supply side substitutions of such services looking at price elasticity of demand, the ability to price discriminate, the broadband penetration rate, the take-up of VoIP by broadband households, and the presence of the PSTN incumbent in the provision of VoIP services. As illustrated in Table 3.3 below, the treatment of VoIP varies across Member State, but some common tendencies are emerging. The regulators that have conducted their market analysis early (in 2003-2004) did not include VoIP in the retail services markets because it was at an early stage of development. The majority of the regulators that have conducted their analysis later (in 2005-2006) did include

⁵⁵⁴ Similarly, *Telia/Telenor*, para 85-87 built the relevant market analysis around the conventional split of services and concludes that local, long distance and international calls can be treated as separate markets.

⁵⁵⁵ The Explanatory Memorandum of the Recommendation on relevant markets notes at p. 4 that the NRA may collect data on any market covered by the new regulatory framework, regardless of whether it is identified in the Recommendation. Also NRAs may want to maintain price regulation, like tariffs averaging, to ensure the fulfilment of universal service objectives: Articles 3 to 15 of the Universal Service Directive.

⁵⁵⁶ Case DE/2005/308-311, Case IE/2005/160-163, Case NL/2005/289-292

⁵⁵⁷ Case DE/2005/308-311, Case NL/2005/, Case PT/2004/59

⁵⁵⁸ Case UK/2003/7-8.

⁵⁵⁹ In 2000, the Commission considered that VoIP was not substitutable to PSTN because of the difference in quality: Communication from the Commission on the Status of voice on the Internet under Community law, OJ [2000] C 369/3.

in markets 3 to 6 managed VoIP (also termed as Voice over Broadband) that are provided by the end-users broadband access provider (like Free in France) and whose quality may be guaranteed, but they did not include unmanaged VoIP (also termed as VoIP) that are provide by companies with no control over the local infrastructure (like Skype) and whose quality may not be guaranteed.⁵⁶⁰

⁵⁶⁰ On the distinction between managed and un-managed VoIP, see Cave et al. (2006:47).

Table 3.3: Different treatments of Voice over Internet⁵⁶¹

	Inclusion in M. 3-6	What type of VoB	Rationale	Remedies
AT	No	- VoB has gateways to PSTN - VoI: No gateways function to PSTN	Not an issue (Feb 2005)	--
BE	Yes	Only VoB including national numbering		
CY	No yet analysed			
CZ	No		Early stage of development and negligible take-up May change in the future	--
DK	No		VoIP is not substitutable to telephony	--
EE	No yet analysed			
ES	No			--
FI	No			--
FR	Yes	- Only VoB (like Free): quality controlled by provider - Not VoIP (like Skype)	Similar quality than PSTN	No
DE	Yes	VoIP allowing any-to-any connections to national and international fixed networks		Techno neutral
EL	No yet analysed			
HU	Yes	- VoIP as prepaid calling card services using IP-based networks - No peer-to-peer (like Skype) or cable service		
IE	No		Early stage of development and negligible take-up May change in the future	--
IT	Yes	VoIP calls originating from the '0' geographic number range		
LT	No			--
LU	No yet analysed			
LV	No yet analysed			
MT	Yes	Only managed VoIP		
NL	Yes	Only managed VoB	Similar quality than PSTN	Lighter remedies for managed VoB than PSTN: different price floor and no price cap
PL	Yes	Data on VoIP		Yes
PT	No		May change in the future	--
SE	Yes	IP-telephony with the same basic functions		No
SI	No		No substitutability with PSTN	--
SK	No		VoIP not yet available	--
UK	No		May change in the future	--

Source: Cullen International (as of June 2006)

⁵⁶¹ See also the table in Renda (2006:25).

In a majority of notifications, the regulators found the fixed line incumbent as having Significant Market Power. However some considered that retail calls markets (in particular the international calls) are competitive⁵⁶² because regulating wholesale call origination market effectively (through carrier selection and carrier pre-selection obligations and possibly wholesale line rental obligations), the downstream retail markets may over time become sustainably competitive so that retail regulation could be phased out. A difficult case and indeed the first one leading to a Commission veto was the Finnish NRA concluding that both markets were effectively competitive. In that case, the NRA did not find SMP despite the fact that TeliaSonera had market shares above 50%⁵⁶³ because there were several operators active on the market, the barriers to entry were low and the customers might easily get international service from another operator than the one providing the line. The Commission considered that the NRA did not sufficiently rebut the presumption of dominance implied by the high market shares and did not apply the modified greenfield approach (but instead found low entry barriers without taking into account that this situation was precisely due to the regulation).

In cases of SMP, NRAs have imposed various remedies, including price regulation with price caps.⁵⁶⁴ As regard VoIP,⁵⁶⁵ even if it belongs to the same market as PSTN telephony and SMP is found on that market, a differentiated regulatory approach may be appropriate for VoIP on the one hand and PSTN telephony on the other hand, because the competitive challenges related to both products may be different. In particular, the French NRA noted that in view of the fact that VoIP is in principle provided over broadband, effective regulation of wholesale broadband access products (local Loop Unbundling and bitstream) may remove barriers to entry as regards the provision of VoIP and may therefore make retail regulation redundant. The Dutch NRA went for lighter remedies for Voice over Broadband managed services by imposing a price floor.

⁵⁶² Case AT/2005/125 (M.4), Case DE/2005/308-311 (M.4 and 6), Case DK/2005/194 and 208 (M.5 and 6), Case FI/2003/23-26 (M.3 and 5 in part) and FI/2005/201-202 (M.4 and 6), Case NL/2005/290-292 (M.4 and 6), Case SE/2005/195-198 (M.3 to 6).

⁵⁶³ About 55% of the residential market and about 50% of the non-residential market. Note however that contrary to most EU countries, the majority of local loops in Finland are controlled by several local monopolist and not by TeliaSonera. Thus, the high market share of the latter on international calls market very much depends on the access regulation in place.

⁵⁶⁴ The Danish regulator did not impose obligation on markets 3 and 4 although it designated TDC as having SMP because it considered that the wholesale remedies on the CS/CPS are sufficient: Case DK/2005/268-269.

⁵⁶⁵ On the relationship between regulation and the deployment of VoIP, see de Bijl and Peitz (2006).

Market 8: Wholesale fixed call origination

At the wholesale level, the Commission defined a market for 'call origination on the public telephone network provided at a fixed location'. This market covers all telecom networks of the appropriate geographical area (national or regional in some countries). Indeed, a hypothetical monopolist would be able to raise its price profitably because of the limited substitutability of the demand (i.e. a new entrant needs access to the telephone network and can not rely on any other infrastructures), and of the supply (i.e. neither the new entrant nor any other firm can easily put in place a new local telephony network). The Commission selected such market because it was listed in the Annex I of the Framework Directive, and because it fulfils the three selection criteria given the important (literally) sunk costs of deploying a network and the relatively small number of calls passing through them.

The NRAs have generally followed the market definition proposed by the Commission, while some have segmented the market into several sub-markets.⁵⁶⁶ To be able to impose Wholesale Line Rental, the Danish NRA has broadened market 8 to include access and origination.⁵⁶⁷ The Dutch and the British regulators followed another route of taking the market 8 as proposed by the Commission (call origination only) but selecting an additional access market.⁵⁶⁸ All regulators have designated the incumbent operator as having Significant Market Power,⁵⁶⁹ indicating that wholesale fixed call origination remains one of the bottlenecks in electronic communications. NRAs have generally imposed the full suite of remedies, including price control at Forward Looking Long Run Incremental Cost (FL-LRIC) methodology, possibly differentiated according to the size of the operators.⁵⁷⁰

*Market 10: Wholesale fixed transit*⁵⁷¹

Then the Commission defined a market for 'transit services in the fixed public network'. It includes both conveyance between tandem switches on a given network, between tandem switches on different networks and including pure conveyance across a third network. It

⁵⁶⁶ Case DE/2005/143: segmentation between CS/CPS, valued-added and dial-up Internet services.

⁵⁶⁷ Case DK/2005/141.

⁵⁶⁸ Case NL/2005/297; Case UK/2003/11-12 and 15.

⁵⁶⁹ In Finland, the 46 local operators were deemed to have SMP: Case FI/2003/28; and in Hungary, the 5 local operators were deemed to have SMP: Case HU/2005/151.

⁵⁷⁰ As in Finland (Case FI/2003/28) and Hungary (Case HU/2005/151).

⁵⁷¹ On the economics of the long distance market, see Kaserman and Mayo (2002).

constitutes a separate market from call origination and termination because the economics and the conditions of competition between the core network and the local network are different (i.e. the demand and supply substitutability are more important in the core network, in particular on the thick routes like between two big cities). The Commission recognised that individual NRA should decide the precise delineation of each three market (origination, transit, and termination) according to the typology of their country's network, but these elements are additive and the sum of three should cover the whole connection. The Commission selected such market as it was identified in Annex I of the Framework Directive, but it recognised that transit services is one of the areas where competition can be expected to develop and that could be dropped from future revision of the Recommendation.⁵⁷²

Most of the NRAs have segmented further the market definition of the Commission, mainly according to the scope of transit (e.g. between local, national and international transit).⁵⁷³ As the Commission expected, the market has become effectively competitive in a number of Member States. As of May 2006, six regulators found Significant Market Power on all the transit markets, three found SMP on some transit markets⁵⁷⁴ and two found no SMP on all transit markets.⁵⁷⁵ However among the latter cases, one was vetoed by the Commission. The Austrian NRA found that the incumbent Telekom Austria had no market power because it did take into account the self-supply transit (including the transit that new entrants interconnected between them could supply to themselves), hence found a market share of 45%. However, the Commission vetoed this draft decision because it considered that self-supply should not have been taken into account as the self-provision through direct interconnection do not exercise a sufficient pressure on the price of wholesale transit,⁵⁷⁶ and accordingly the market share of Telekom Austria should be recalculated at 90%.⁵⁷⁷ The Austrian NRA disagreed, refused to

⁵⁷² Explanatory Memorandum of the Recommendation on relevant markets, p. 18-19.

⁵⁷³ Case DE/2005/145, Case FI/2004/75: segmentation between local and nationwide transit; Case FR/2005/259: regional, national, intra-territorial, inter-territorial transit, and no selection of international transit; Case IE/2005/192: national and international transit; Case NL/2005/285: local conveyance, regional conveyance, transit; Case UK/2003/16: inter-tandem conveyance and single transit; Case LT/2005/319: national and international transit.

⁵⁷⁴ National transit in Finland (Case FI/2005/75), Fixed transit for mobile calls in Germany (Case DE/2005/145), International transit in France (Case FR/2005/259).

⁵⁷⁵ Case AT/2004/90; Case PT/2005/154 because the three criteria test is not met; Case HU/2005/153.

⁵⁷⁶ As the Commission noted at para 19 of the veto Decision: "... self-provision through direct interconnection requires network roll-out associated with high investments as well as substantial planning and time. Given these findings, it is not readily apparent from the notification and the additional information provided how network operators could promptly shift to self provision through direct interconnection, and thus "demand" their self-provided transit services."

⁵⁷⁷ Case AT/2004/90 (Decision of 20 October 2004: Veto). On the issue of self-supply, see Chapter 3, Section 3.1.1.A.

withdraw its draft decision (without adopting the final decision however) and went on a preliminary ruling at the Court of Justice arguing that the Commission did not motivate sufficiently its veto decision. However, the Court of Justice dismissed the appeal because the Austrian NRA is not a Court in the meaning of Article 234 EC as there was no dispute that the NRA should decide upon.⁵⁷⁸ When intervening, most of the NRAs imposed the full suite of the remedies, including price control based on FL-LRIC methodology.

Market 9: Wholesale fixed call termination

Finally, the Commission defined a market for 'call termination on individual public telephone networks provided at a fixed location'. The market is defined by individual network because of the externalities created by the Calling-Party-Pays principle.⁵⁷⁹ The Commission selected such market because it was identified in Annex I of the Framework Directive and because the externality created by the tariff principle means that it fulfils the three criteria test.

All notifying NRAs followed the network specific market definition. They designated all the terminating operators as having Significant Market Power. Initially, the German NRA considered that the incumbent Deutsche Telekom had SMP on the market of its own network, but that the 53 small new fixed entrants had no SMP on the 53 markets of their own network. The NRA decided that the dominance presumption (by hypothesis 100% market share) was rebutted by the countervailing buying power of Deutsche Telekom. The NRA stated that DT could threaten a new entrant to refuse to interconnect if it wanted to increase its termination charge above a reasonable level. However, the Commission vetoed the draft decisions because it disagreed that DT had countervailing buying power (as DT has an obligation to interconnect under the SMP regime and under the interconnection safeguard clause).⁵⁸⁰ Therefore, the NRA re-did its analysis and found that all the 53 new entrants had SMP.⁵⁸¹

⁵⁷⁸ Case C-256/05 *Telekom Austria* [2005] ECR I-0000, para 10 and 11

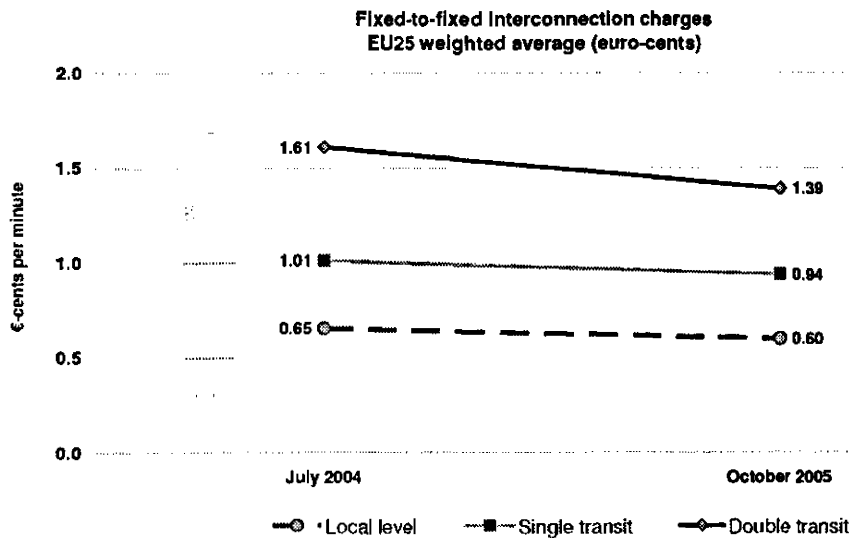
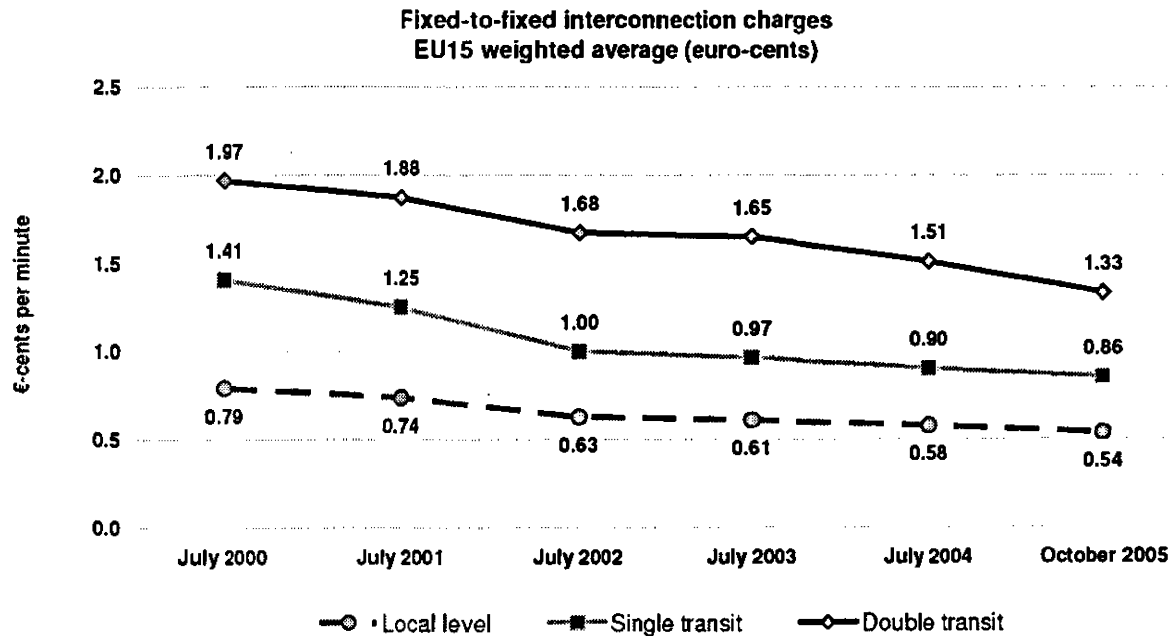
⁵⁷⁹ See *supra* Section 2.3.1.A.

⁵⁸⁰ Case DE/2005/144 (Decision of 17 May 2005: Veto). Interestingly, the Commission seems to have changed its mind since the adoption of the Recommendation where it noted at p. 20 of the Explanatory Memorandum that "The existence of a regulatory requirement to negotiate interconnection in order to ensure end-to end connectivity (as required by the regulatory framework) redresses this imbalance of market power. However, such a regulatory requirement would not endorse any attempt by a small network to set excessive termination charges. Consequently, there is still likely to be an imbalance of market power between large and small networks because it would be easier for a large network than a small network to initiate the step of raising call termination charges and would be more difficult for a small network to resist a move by a large network to lower termination charges".

⁵⁸¹ Case DE/2005/239.

When intervening, the NRAs imposed the full suite of remedies on large SMP operators, including price control at FL-LRIC (the current level of fixed termination is in Table 3.4). In some cases, they applied asymmetric remedies according to the principle of proportionality for example by imposing lighter cost control obligations on newly established operators.⁵⁸²

Table 3.4a: Current level of fixed termination charges



Source: European Commission, Annex to 11th Implementation Report, p. 27 and 31

⁵⁸² In Lithuania (Case LT/2005/263), Slovenia (Case SI/2005/258) and Slovakia (Case SK/2004/102), there was only one operator active on the market, such that there was no need to impose asymmetric remedies.

Table 3.4b: Reciprocity of fixed termination charges

	Reciprocity imposed	Comments	Reciprocity applied in practice
AT	Yes	Note that entrants may charge higher charge if they prove higher costs	Yes
BE	Yes	Delayed reciprocity (difference of max 15% over three years) Previously, not imposed and difference of 400%	Yes, except in two cases (Telenet and Versatel)
CY	No		Yes
CZ	Yes		Yes
DK	No	No price control for entrants	Yes
EE	No	No price control for entrants	No
ES	Yes	Delayed reciprocity (4 year, difference of max 30%)	No
FI	No	No price control for entrants	Not always
FR	Yes	Delayed reciprocity: 3 years time lag; difference of 10%	No
DE	No	Difference of 25%	No
EL*	No		No
HU	No		No
IE	No		Yes
IT	Yes	Delayed reciprocity (4 years)	No
LT	No		Yes
LU*	No		Yes
LV	No	No price control for entrants	Yes
LV	No	No price control for entrants	Yes
MT	Yes		No agreement yet
NL	Yes	Delayed reciprocity (three years)	No
PL	No		Yes
PT	Yes	Delayed reciprocity (2 years, max difference of 20%)	No
SE	No	The NRA decision imposing reciprocity has been quashed in Court	Yes
SI	No		No
SK	No		No
UK	Yes		Yes

*: Market analysis not yet done

Source: Cullen International (as of June 2006)

B. Fixed narrowband data markets

For fixed data services, the Commission made a distinction between: (1) narrowband access, (2) broadband access in excess of 128 kbits/s,⁵⁸³ and (3) dedicated access of varying

⁵⁸³ The minimum bandwidth for broadband access vary according the authors and regulatory authorities and will evolve and increase over time according to technological developments (for instance, Crandall et al. (2002) use 56 kbits/s referring to the FCC practice, whereas Ofel in a document of 28 April 2003 is thinking to use a limit of 256 kbits/s, see http://www.ofel.gov.uk/publications/eu_directives/2003/state0403.htm. Even in the European regulatory framework, the minimum may differ as in the Recommendation on relevant markets, broadband is defined as capacity in excess of 128 kbits/s (footnote 33 of the Explanatory Memorandum), whereas in the Universal Service Directive, broadband is understood as a capacity in excess of 56 kbits/s (Recital 8 of the Directive).

capacity.⁵⁸⁴ Narrowband and broadband have different characteristics and their market definition has been debated.⁵⁸⁵ On the one hand, narrowband is provided with dial-up access over telecom network and offers limited capacity that can be insufficient for some hungry bandwidth applications. On the other hand, broadband access can be provided over several infrastructures (like telecom copper pairs with DSL or upgraded cable TV), offers large capacity, and is always-on. The Commission considers that narrowband and broadband form two separate markets, mainly due to the asymmetric substitution. It may well be that the narrowband marginal customer would switch to broadband if the price of narrowband access increases. But the reverse does not hold because broadband access provides such specific features that customers do not want to switch back to narrowband access in case of broadband price increase.

Thus, there is a retail market for narrowband access.⁵⁸⁶ It comprises metered and un-metered (flat rate) offers because the substitution possibilities are important for the demand (i.e. end-users would easily switch between both products as the only difference between them is the way in which tariffs are structured), as well as for the supply (i.e. suppliers of metered Internet access could easily switch to offer un-metered access in case a hypothetical monopolist would increase its price if obligation exist to allow new entrant to buy wholesale call origination on an un-metered basis).

To define the relevant wholesale markets related to narrowband data access, the inputs necessary for an Internet Service provider (ISP) supplying dial-up Internet should be determined: call origination from the end-user, call termination to the ISP, and Internet connectivity.

⁵⁸⁴ Internet dial-up access has been distinguished from dedicated access (*Telia/Telenor*, para 105; Commission Decision of 27 March 2000, *BT/Esat*, M. 1838, para 7).

⁵⁸⁵ Hausman et al. (2001) consider that broadband and narrowband are in two separate markets. Similarly, a study done by Novartis (cited in Commission Report on Competition Policy 2002, p. 345) for the Commission services calculate that, faced with a price variation of 10%, 80% of subscribers would stick to broadband access, with only 7% returning to narrowband, and concludes that the two markets are separate. Squire-Sanders-Dempsey and WIK-Consult (2002:229) and others (references in Crandall, Sidak et al., 2002:note 51) consider that they are part of the same market because there was not yet sufficient hungry capacity applications and/or there is a chain of substitution between the different levels of bandwidth access. A possible distinction between narrowband and broadband has been considered, but left open in Case M.1845 *AOL/TimeWarner*, para 38-41; Commission Decision of 24 January 2001, *UGC/LibertyMedia*, M. 2222, para 12-13.

⁵⁸⁶ There may be a distinction between dial-up Internet access offered to different subsets of customers: residential, SME, corporate (inter alia *Telia/Telenor*, para 60; Commission Decision 27 May 1998, *Telia/Telenor/Schibsted*, JV. 1, para 17; *AOL/TimeWarner*, para 33).

First, the market for call origination is the same as the one defined above, i.e. all telecom local networks comprising both voice and data communications. Thus market 8 covers both voice and data Internet dial-up communications. Metered and un-metered call origination are part of the same market as the choice between metered and un-metered access is only a question of remedy to be imposed on the SMP operator.

Second, the termination of Internet calls to the ISP servers constitutes a different market than the termination of voice calls between two end-users because the economics and conditions of competition between both types of termination differ. On the one hand, most end-users can not chose between different fixed networks to terminate their calls at home and they do not pay termination charges. On the other hand, the ISPs can usually choose between different network providers to terminate their traffic, and depending of the business models, they may have to pay the termination of Internet calls. ISPs have thus a possibility and an incentive to minimise the termination charges, hence this market could be competitive and does not meet the TCT. Thus contrary to origination market, market 9 is limited to voice termination and does not include Internet termination.

Third, there may be one or several markets for Internet connectivity⁵⁸⁷ that ensure that the data packets sent by the Internet user reach the intended destination on the public Internet. Again, it can be shown that the economics of Internet connectivity markets differ from the voice call termination because there is no problem of economies of scale neither of externalities.⁵⁸⁸

C. Fixed broadband data markets

At the retail level, it is appropriate to define a fixed broadband access market that comprises all substitutable available technologies, like for instance telecom and cable infrastructures.⁵⁸⁹

⁵⁸⁷ The Recommendation on relevant markets left open the definition of Internet connectivity markets. A distinct market for the provision of 'top-level' or 'universal' Internet connectivity has already been identified (Case M. 1069 *WorldCom/MCI*, para 62-70; and Case M. 1741, *WorldCom/Sprint*, para 57-60).

⁵⁸⁸ See Cremer et al. (2000), Economides (2005), Malueg and Schwartz (2003), Pelcovits and Cerf (2003), WIK Consult (2002).

⁵⁸⁹ Crandall et al. (2002:961). Similarly, see Decision *BiB/Open*, para 38.

To enter this retail broadband data market, a new entrant needs a transmission channel from the end-user, a termination to the ISP and an Internet connectivity. Currently, the possible transmission channels from the end-users are the telecom networks upgraded with DSL technologies, the coaxial cable, and sometimes the satellite capable of passing data in both directions at an appropriate rate. In the future, other technologies (like wireless local loop, WiFi and WiMax, digital broadcast systems and power-line systems) may be widely available. Two markets may thus be defined: access to the metallic loops and wholesale broadband access.

Market 11: Wholesale fixed the local loop

The Commission defined the market for “wholesale unbundled access (including shared access) to metallic loops and sub-loops for the purpose of providing broadband and voice services”. There are three elements in this definition. First, it aims at metallic loop or telecom copper pairs.⁵⁹⁰ By excluding alternative technologies that may provide the same wholesale services (and be used to provide the same retail services), market 11 is not defined in a technological neutral way and is not based on antitrust methodologies. This violation of the principles of the 2003 framework is due to the maintenance of the Unbundling Regulation, one legal instrument of the previous (and non-technologically neutral) regulatory framework.⁵⁹¹ Second, the market aims at local loops and sub-loops. The local loop is the physical circuit connecting the network termination point at the subscriber’s premises to the main distribution frame or equivalent facility in the fixed public telephone network.⁵⁹² The sub-loop means the partial local loop connecting the network termination point at the subscriber’s premises to a concentration point or a specified intermediate access point in the fixed public telephone network.⁵⁹³ Third, the market aims at full access and shared access.

⁵⁹⁰ In addition and to clarify the relationship between market definition and choice of obligations, the Explanatory Memorandum of the Recommendation considers at p. 13 that it is not necessary to define each technical area as a relevant market in order to impose access to this area. It suffices to prove that this access is proportionate in order to remedy a competition problem on an identified market. For instance, it is not appropriate to define a market for co-location facilities but it suffices to consider this access as part of the overall remedy related to the unbundling of the local loop. Nevertheless, some overlap between the market definition and the choice of remedies is inevitable, and what ultimately matters is that the obligations imposed will ensure an overall long-term efficiency.

⁵⁹¹ Regulation 2887/2000 of the European Parliament and of the Council of 18 December 2000 on unbundled access to the local loop, OJ [2000] L 336/4, hereinafter *Unbundling Regulation*.

⁵⁹² Article 2 of the Access Directive.

⁵⁹³ Article 2d of the Unbundling Regulation.

Full access means the provision of the full frequency spectrum of the loop, whereas shared access refers only to the use of the non-voice band frequency spectrum of the loop.⁵⁹⁴

The Commission considered that the last mile infrastructure constitutes a relevant market⁵⁹⁵ because a hypothetical monopolist would be able to raise its price profitably as the possibilities of substitution are limited for the demand (i.e. a new entrant may need access to the local loop and can not rely on any other infrastructures), as well as for the supply (i.e. neither the new entrant nor any other firm can easily put in place a new local network due to the important economies of scale and scope).⁵⁹⁶ The Commission identified access to loop in the Recommendation because it is listed in the Annex I of the Framework Directive and because it fulfils the TCT as it is still uneconomic to duplicate infrastructure between the Main Distribution Frame and the end-user's premises.

The NRAs have generally followed the technology-specific market defined by the Commission.⁵⁹⁷ In particular, the German NRA excluded fibre from the market definition and removed the obligations imposed on it to spur investment incentives. However, the Commission reminded the NRA to analyse a separate fibre market before removing existing obligations.⁵⁹⁸ All NRAs have designated the incumbent as having Significant Market Power.⁵⁹⁹ And they have imposed the full suite of the remedies, including price regulation often at FL-LRIC.⁶⁰⁰

Market 12: Wholesale fixed broadband access

Next to unbundling, the Commission defined a market for "wholesale broadband access". It covers bit-stream access over telecom infrastructure, which refers to the situation where the incumbent installs a high-speed access link to the customer premises and then makes this link

⁵⁹⁴ Articles 2f and 2g of the Unbundling Regulation

⁵⁹⁵ In this sense as well, Vintje and Kalimo (2000).

⁵⁹⁶ Existing cable networks without upgrade or the Wireless Local Loop systems were not considered to be an immediate substitute for the PSTN network (Communication from the Commission on the unbundled access to the local loop, OJ [2000] C 272/55, para 3.2; *Telia/Telenor*, para 32 and 35). The electricity cable was not considered to be substitutable to the telecom network (Commission Decision 18 March 1998, *Nortel/Norweb*, M. 1113, para 8)

⁵⁹⁷ However, the British regulator included cable, which the Commission disagreed: Case UK/2004/94.

⁵⁹⁸ Case DE/2004/119 and DE/2005/150.

⁵⁹⁹ The Finnish regulator defined all the 44 regional operators as having SMP: Case FI/2003/30.

⁶⁰⁰ The Commission is recommending FL-LRIC methodology: Annex II to the Communication on Market Reviews, p. 6.

available to third parties to enable them to provide high-speed services to customers. This amounts to the provision of transmission capacity between an end-user and the point of interconnection available to the new entrant.⁶⁰¹ It also covers wholesale access provided over other infrastructures if and when they offer equivalent facilities to bitstream. For instance, it may comprise cable when it is widely deployed and is able to provide the same services as bit-stream.

Wholesale broadband access constitutes a separate market from access to the local loop for at least two reasons. First, it implies access further up in the network (at an ATM or at the IP interconnect point and not at the Main Distribution Frame), which means that the network of the access seeker may be less extensive. Second, it leaves less flexibility for the access seeker to tailor its services and to differentiate itself from the incumbent. For instance, if the incumbent proposes an ADSL bitstream offer, the new entrant could not rely on it to provide an SDSL retail service. Hence, the demand substitutability between both types of access is limited. If the hypothetical monopolist increases the price of broadband access, the marginal new entrant will not switch to the unbundling as that requires additional, and possibly uneconomic, investments to enlarge its network. Conversely, if the hypothetical monopolist increases the price of the unbundling, the new entrant will not necessarily switch to broadband access as it loses some flexibility to tailor its services.

The Commission identified this market in the Recommendation although it was not instructed to do so by Annex I of the Framework Directive because such market meets the three selection criteria in most of the Member States. Indeed, if wholesale broadband access can only be provided by one infrastructure (telecom) and that it may be shown that it is uneconomic to duplicate infrastructure between the ATM interconnect point and the end-user's premises, then the market presents some elements of a natural monopoly. However, if alternative infrastructures already exist (like cable, fibre or satellite) between the end-user's

⁶⁰¹ The Explanatory Memorandum of the Recommendation considers at p. 24 that resale of an end-to-end broadband offer (like the resale of the DSL offer of the incumbent) is not in the same market that wholesale broadband access because resale offers do not include the provision of interconnection or transmission capacity in such way as to allow new entrants to offer their own tailor-made DSL offers. The selection of this resale market was not deemed to be justified because the aim of the new regulatory framework is ultimately to achieve a situation where there is full competition between a number of different infrastructures.

premises and the interconnect point, there is no element of natural monopoly and the market would fail to meet the selection criteria.⁶⁰²

Most NRAs defined the market with some deviations⁶⁰³ or additional market fulfilling the three criteria test.⁶⁰⁴ Many NRAs⁶⁰⁵ wanted to include the cable infrastructure next to the telecom network, arguing that broadband access by telecom network or by cable is substitutable at the retail level and that the retail price indirectly constrains the wholesale price.

Table 3.5a: Inclusion of cable in market 12

	Inclusion of cable	Retail analysis Indirect pricing constrain	Wholesale analysis Substitutability	SMP on cable operators	Compulsory access on cable operators
AT	Yes	Yes	No	No	--
BE*	No	Insufficient	No	No	--
CY	No	No		No	--
CZ	No	No		No	--
DK	No Initially yes			No	--
EE	No yet analysed				
ES	No	No	No	No	--
FI	Yes		Yes	No	--
FR	No		No	No	--
DE	Yes for IP bitstream No for ATM bitstream	Yes	Yes No	No No	-- --
EL	No			No	--
HU	No	Yes	No	No	--
IE	Yes	Yes	No	No	--
IT	No	No		No	--
LT	No	No	No	No	--
LU*	No			No	--
LV	No yet analysed				
MT*	Yes	Yes	Yes	Yes	Yes
NL	Yes for high quality broadband	Yes	No	No	--
PL	No analysis				
PT	Yes	Yes	No	Yes	No
SE	No			No	--
SI	No	No	No	No	--
SK	No yet analysed				
UK	Yes	Yes	No	No	--

* Still under consultation Source: Cullen International (as of June 2006)

⁶⁰² As already explained, the delineation of market boundaries and the fulfilment of selection criteria move together and more the markets are defined broadly, higher the probability that the selection criteria would be met will be small.

⁶⁰³ Case FI/2004/62 excludes local tail; Case NL/2005/281 distinguishes between low and high quality broadband.

⁶⁰⁴ Case FR/2005/175: add national bitstream, Case UK/2003/32-34.

⁶⁰⁵ Case AT/2005/312, Case DE/2005/262, Case FI/2004/62, Case IE/2004/93, Case IT/2005/253 CHECK, Case NL/2005/281, Case PT/2004/118, Case SE/2004/83, Case UK/2003/32-34 and ERG Amended Common Position of 25 May 2005 on Bitstream Access, ERG(03) 33rev2, section IV. Interestingly, all the NRAs of the new Member States so far did not want to include cable in market 12.

A detailed analysis shows that the different approaches in each Member State can not only be explained by difference in market characteristics, but also (and more importantly) by differences in methodologies. As explained by Schwarz (2006:20) from which Table 3.5b is taken: "Countries with relatively high cable (retail) market shares have not included cable (most notably Hungary with 34%) while others included cable despite low retail market share and coverage (most notably Ireland with 8.5% and 10%). Although network coverage and market shares of alternative platforms are certainly not the only criteria which are considered in a market definition, this still suggests that, in addition to differences in market conditions, difference in approaches may explain the market definitions adopted. And indeed most of the countries which included cable explicitly alluded to the constraints via the retail level while most of the other countries seem not to have done so".

Table 3.5b: Market definition and SMP assessment in wholesale broadband market

	Retail market shares June 2006			Adm. operators' LLL DSL lines as % of total DSL, 2005	Coverage		Market definition, market analysis			
	DSL	Cable	Other		DSL (2001-2004, 2005)	Cable (all Sat) 2004	Date of notification	Market definition (admn. Platforms included)	Incumbent DSL-CATV	SMP*
Austria	58.1%	42.9%	n/a	15%	100%	20.11.2005	Cable VLL Free	no	no	
Belgium	n/a	n/a	n/a	n/a	n/a	20.12.2005	-	no	no	
Denmark	83.3%	16.2%	11.1%	100%	99%	20.09.2005	-	yes	yes	
Finland	87.0%	13.0%	1.0%	25%	94%	22.04.2004	Cable	no	yes	
France (retail)	65.4%	34.6%	0.1%	2.7%	86%	15.04.2005	-	no	yes	
France (wholesale)	65.4%	34.6%	0.1%	2.7%	86%	15.04.2005	-	no	yes	
Germany (1 st level)	86.8%	13.2%	0.0%	21%	83%	11.10.2005	Cable	no	yes	
Germany (2 nd level)	86.8%	13.2%	0.0%	21%	83%	11.10.2005	-	no	yes	
Hungary	82.8%	17.2%	0.0%	0%	81%	10.06.2005	-	no	yes	
Ireland	8.5%	91.5%	0.0%	1%	100%	20.07.2004	Cable FWA	no	yes	
Italy	54.1%	45.9%	0.0%	1%	23%	10.10.2005	Cable Sat, FWA	no	yes	
Latvia	n/a	n/a	n/a	0%	n/a	21.10.2005	-	no	yes	
Netherlands (high quality)	83.5%	16.5%	0.0%	28%	99%	04.11.2005	-	no	yes	
Netherlands (low quality)	83.5%	16.5%	0.0%	28%	99%	04.11.2005	Cable	no	off comp	
Norway	81.2%	18.8%	0.0%	n/a	90%	11.01.2006	Cable CATV	no	yes	
Portugal	52.1%	47.9%	0.0%	1%	74%	24.11.2004	Cable	yes	yes (2 nd level)	
Sweden	66.0%	34.0%	0.0%	2.7%	9.7%	07.01.2004	-	no	yes	
UK (symmetric DSL only)	71.8%	28.2%	0.0%	1%	100%	17.12.2005	Cable	no	yes	
UK (full symmetric)	71.8%	28.2%	0.0%	1%	100%	17.12.2005	Cable	yes	yes	
Source	DECC	DECC	DECC	ECTA	UKEU No/Yes/None	Arystos No/Yes/None	Not/Yes/None	Not/Yes/None	Not/Yes/None	Not/Yes/None

* Remedies were only imposed with respect to DSL

Source: Schwarz (2006:19)

In addition to the methodological differences across Member States, the Commission has constantly held that cable TV should not be included in the wholesale broadband access market. It held that, in the presence of evidence excluding demand side substitutability at the wholesale level, such an indirect competitive constraint should not influence the definition of the market (read justify an inclusion of cable TV in market 12) but should have been taken into account the stage of the assessment of SMP. This is because an NRA should start its

market analysis at the wholesale level and assess what are the demand and supply side substitutability at that level.⁶⁰⁶

I disagree with the Commission. On the one hand, the proposed approach does not respect the principle of technological neutrality and create an asymmetry in regulation between the telecom and the cable TV networks that is not justified in the countries where the penetration rate of both networks is important.⁶⁰⁷ On the other hand, it ends up protecting wholesale competitors (in this case the independent Internet Service Providers) and not the retail end-users (in this case the Internet broadband access customers). By doing so, it goes against the basic principles of competition law⁶⁰⁸ and sector-specific regulation.⁶⁰⁹

Thus, the Commission attitude may be explained by industrial political considerations in the context of the i2010 Action Plan, possibly to protect the weak cable industry in Europe and develop a strong alternative to the telecom network.⁶¹⁰ In practice however, the divergence between the NRAs and the Commission has an impact only in the Dutch case where the fact of including the widespread cable makes the market 12 effectively competitive. In this case, the Commission did not veto the Dutch NRA on the condition that it will redo its analysis after one year.⁶¹¹

The other controversial issue related to the delineation of the broadband access market is the inclusion of mixed new transmission input like VDSL lines.⁶¹² The Commission opened a second phase review against a draft decision of the German NRA that excluded VDSL

⁶⁰⁶ See Case AT/2005/312, Case DE/2005/261-2, Case FI/2004/62, Case IE/2004/93, Case PT/2004/118, Case SE/2004/83, Case UK/2003/32-34, and in particular Case NL/2005/281.

⁶⁰⁷ Until 2005, there was a similar asymmetry in regulation in the US, that was heavily criticised by many authors: Crandall et al. (2002). This asymmetry was lifted by the FCC when deciding not to regulate cable in 2002 (which was endorsed by the Supreme Court in 2005 in *National Cable & Telecommunications Association and Others v Brand X Internet Services and Others* 545 U.S. ___) and deciding to deregulate the telecom network in 2005: see Larouche (2006b).

⁶⁰⁸ See Section 2.3.1.A.

⁶⁰⁹ In the Explanatory Memorandum of the Recommendation on relevant markets, p. 6, the Commission has itself declared that the market analysis should start at the retail level, implying that if there were no competitive problems at that level, there would be no need to intervene at the wholesale level.

⁶¹⁰ However, this strategy may backfire because if cable is excluded from market 12, it should be analysed as a stand alone market, hence cable operators have more probability to be designated as having SMP.

⁶¹¹ Case NL/2005/281. In all other cases, the cable penetration is so small that its inclusion in market 12 has no impact on the SMP assessment.

⁶¹² This product, as regards the access part of the service, is offered over so-called "hybrid local loops" between the main distribution frame (MDF) and the customer's premises. Hybrid local loop lines are lines partially consisting of fibre optic, either from the main distribution frame to the remote concentrator (*Kabelverzweiger*) or to the street cabinet (*Einzelverzweiger*), whereas the part of the local loop leading into the premises of the end-user consists of copper.

connections from market 12. The NRA did so because it could not predict which retail services could be provided on the VDSL connections, hence the market was emerging.⁶¹³ The Commission disagreed and considered that if the same retail services could be provided on the new VDSL connections than on the existing ADSL 2/2+ connections, both infrastructures should be regulated in the same way. Once month later, the Commission withdrew its serious doubts when the NRA decided to include the VDSL connection in market 12 and regulate in the same way the infrastructure needed to provide the same retail.⁶¹⁴

Table 3.6: Inclusion of fibre loops in markets 11 and 12 in the EU 15

	Inclusion in M. 11	Rationale	Inclusion in M. 12	Rationale
AT	No	Network no significant	Yes	Network no significant
BE*	No	Network no significant	Not addressed	
DK	Not addressed		No	Network no significant
ES	No	Network no significant	No	Network no significant
FI	No	Community definition is limited to metallic loop	Not addressed	
FR	Not addressed		Not addressed	
DE	No	- Community definition is limited to metallic loop Fibre is deregulated - Hybrid network (consisting of fibre optic and capper pair) is included	No	Hybrid network (consisting of fibre optic and capper pair) is included
EL	Not addressed		Not addressed	
IE	No	Network no significant	No	Network no significant
IT	No	Fibre is deregulated	Yes	Fibre is regulated
LU*	Yes	If fibre deployed under monopoly conditions	Not yet analysed	
NL	No	No substitution	Not addressed	
PT	Not addressed		Not addressed	
SE	No	Network no significant	Yes	
UK	No	Change in future with equivalence of access	Not addressed	

* Still under national consultation

Source: Cullen International (as of June 2006)

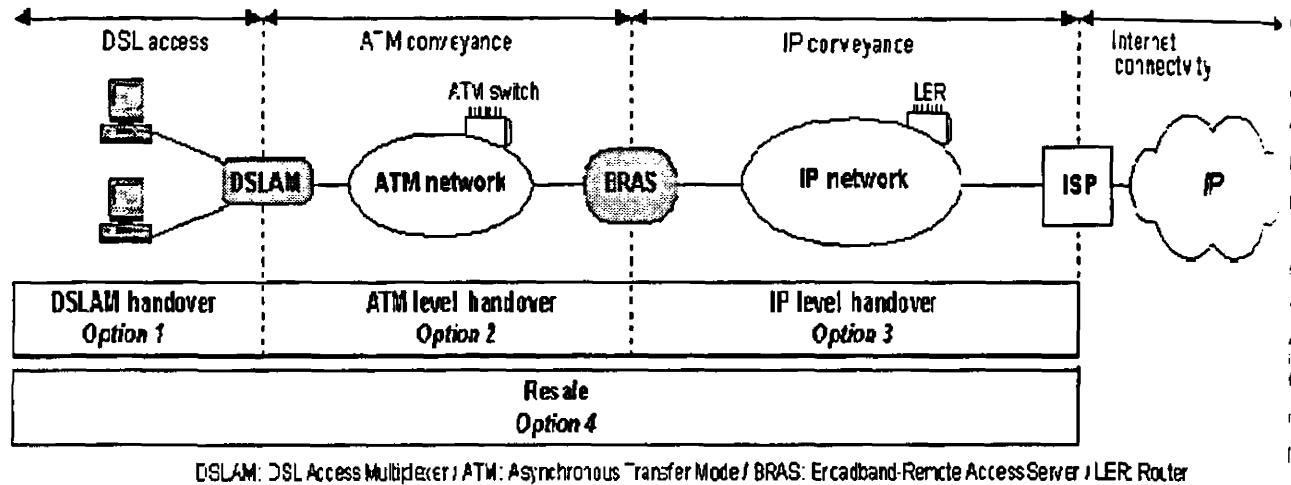
All the NRAs have found the incumbent PSTN operators dominant, except in one submarket in the Netherlands. In almost all cases, they imposed the full set of remedies, in particular access obligations at several levels of the network (at DSLAM level, at ATM, or at IP level) as illustrated in Figure 3.10 below. Sometimes, it was even accompanied with a 'naked' DSL obligation, which refers to a situation where DSL service can be provided to an end-user by an alternative operator using wholesale bitstream access without a requirement from the

⁶¹³ Case DE/2005/262 (Decision of 11 November 2005: opening of Phase II).

⁶¹⁴ Case DE/2005/262 (Decision of 23 December 2005: Withdrawal of serious doubts).

incumbent that the end-user has (and retains) a PSTN voice telephony subscription over the same loop.⁶¹⁵

Figure 3.10: Different levels of access imposed in the wholesale broadband access market



Source: Cullen International

D. Leased lines markets

Retail markets of leased lines may have links with some of the above described access data markets as for instance dedicated connections may be an alternative to unbundled local loops in certain circumstances. But in general, leased lines are in separate markets as they offer a dedicated connection between two specific points and can provide capacity above a DSL or cable modem connection. Then, wholesale markets may be defined in parallel of the retail markets⁶¹⁶ and it is possible to distinguish between the terminating segments (or local tails or local segments) and the trunk segments

⁶¹⁵ As in Belgium, Denmark, Italy, Sweden.

⁶¹⁶ The leased lines offers have generally been examined in competition cases within the context of the broader wholesale market for carriers services, and the question of whether the provision of carriers services should be defined in terms of country pairs or on more global basis was sometimes left open (Decision *Phoenix/GlobalOne*, para 10; *Unisource*, para 28; Case JV 15, *BT/AT&T*, para 74-79). But the Commission Working Document on the initial results of the Leased Lines Sectoral Inquiry, 8 September 2000, p. 11 proposed narrower definition than used previously: distinction between short distance and long distance leased lines, and also according to the capacity of the relevant circuits.

Market 7: The minimum set of leased lines

The Commission defined a market for 'the minimum set of leased lines (which comprises the specified types of leased lines up to and including 2Mb/sec as referenced in Article 18 and Annex VII of the Universal Service Directive).⁶¹⁷ It did not identify specific market for each category of leased lines since the market structure will be similar for each sub-set. The Commission selected the market because of Annex I of the Framework Directive.

The NRAs generally followed the market of the Recommendation, while some defined the market more narrowly⁶¹⁸ or more broadly.⁶¹⁹ Others have defined additional markets⁶²⁰. All NRAs designated the incumbent as having SMP.⁶²¹ The regulators imposed all the remedies provided for by Annex VII of the Universal Service Directive (discrimination, cost orientation and transparency), with two exceptions.⁶²²

Market 13: Wholesale terminating leased lines

The Commission defined a market for 'wholesale terminating segments of leased lines'. As it was the case for call origination/termination and call transit, the Commission left the NRAs to decide the precise boundaries between terminating and trunk segments according to the topology of each network.

The NRAs generally followed the market defined in the Recommendation, while some segmented further.⁶²³ All notifying regulators found that the fixed incumbent operator(s) had SMP,⁶²⁴ except one part of the UK market.⁶²⁵ They have imposed the full suite of remedies.

⁶¹⁷ Commission Decision 2003/548 of 24 July 2003 on the minimum set of leased lines with harmonised characteristics and associated standards referred to in Article 18 of the Universal Service Directive, O.J. [2003] L 186/43.

⁶¹⁸ Case NL/2005/279: broken down in analogue, digital < 2Mbit/s, digital 2 Mbit/s, digital >2 Mbit/s.

⁶¹⁹ Case AT/2004/97; Case UK/2003/35-36.

⁶²⁰ Case IE/2004/128 and IE/2005/138: leased lines above 2Mbps and international leased lines. This is however a paradox to select a new market (which should meet the three criteria test) and then to find it effectively competitive. But that may be explained by transitional requirements: markets were identified to lift regulation imposed under the previous legal framework; Case NL/2005/279: international leased lines broken down in analogue, digital <2Mbit/s, digital 2 Mbit/s, digital >2 Mbit/s.

⁶²¹ The Finnish regulator designated all the 42 regional operators as having SMP: Case FI/2004/79.

⁶²² Case FI/2004/79 where the Commission reminded the NRA that it should impose all the obligations provided in the Directive otherwise it will infringe EU law; and Case HU/2005/167.

⁶²³ Case NL/2005/282: according to capacity: < 2Mbit/s, = 2 Mbit/s, > 2 Mbit/s, UK/2003/37-38: according to bandwidth

⁶²⁴ The Finnish regulator designated all 43 regional operators as having SMP: Case FI/2004/80.

Market 14: Wholesale trunk leased lines

The Commission defined a market for 'wholesale trunk segments of leased lines'. The NRAs followed the market defined in the Recommendation. The regulators have notified the incumbent as having SMP but some have found the market competitive.⁶²⁶ Those NRAs which intervene have imposed the full suite of remedies.

*E. Mobile voice markets*⁶²⁷

Similarly to the fixed markets, the Commission distinguishes at the retail level between mobile voice and mobile data services⁶²⁸ (including SMS). At this stage of technological development, substitution possibilities are limited for the demand (i.e. the marginal consumer can not easily switch between voice and data services), as well as for the supply. With regard to mobile data markets, the delineation of their boundaries is quite complex as they are mainly emerging markets under important technological innovation.

The mobile voice market is much less segmented than its fixed counterpart because of the additional supply substitutability. It covers analogue and digital technologies (GSM-900 and DCS-1800).⁶²⁹ In addition, the market includes residential and business customers. There is demand substitutability (i.e. end-users may be indifferent between tariffs package designed for business or residential users provided the terms suit their usage profile) and more importantly, there is supply substitutability (i.e. an undertaking serving the business market may easily switch to supply residential users because the network coverage of each mobile provider is extensive). Pre and post pay mobile are also in the same market because the possibilities of demand and supply substitutability are important. Finally, it includes national, international and roaming calls.⁶³⁰ Indeed, if demand substitutability is limited (i.e. these three

⁶²⁵ Case UK/2003/37-38.

⁶²⁶ Case AT/2004/74, Case FI/2004/81, case NL/2005/283, Case SE/2006/341, Case HU/2005/169.

⁶²⁷ On the economics of the mobile industry: Gans et al. (2005), Gruber (2005), Gruber and Valletti (2003), Hausman (2002).

⁶²⁸ Similarly, Commission Decision of 11 March 1994, *RWE/Mannesmann*, M. 408, para 11-14.

⁶²⁹ See *inter alia* Case M. 1795, *Vodafone/Mannesmann*, para 11.

⁶³⁰ In its Recommendation on relevant markets (p. 29), the Commission states that retail roaming is part of the broader outgoing calls market because supply substitutability is easy. In its Working Document on the Initial Findings of the Sector Inquiry into Mobile Roaming Charges, 13 December 2000 (p. 15), the Commission

types of calls are not interchangeable for the end-users), the supply substitutability is important (i.e. mobile operators can easily switch in offering these different services). Nevertheless, this market is not identified in the Recommendation for the usual reasons applying to retail markets.

On the basis of the retail mobile voice market, the linked wholesale markets are defined by determining the elements needed to offer services to end-users. Four key elements are required: network access and call origination, international roaming (which is an access to a foreign network), call conveyance, and call termination.

Market 15: Wholesale mobile access and call origination (MVNO, ESP and SP)

The Commission defined a market for “mobile access and call origination”. It comprises all mobile networks of the appropriate geographical area (often the national territory). This market covers different sorts of access depending of the margin of freedom of the access seeker:⁶³¹ (1) Mobile Virtual Network Operators (MVNO) which have their own SIM cards, own mobile network code, own roaming agreements, and own interconnection agreements; (2) Enhanced service providers (ESPs) which resell the services of a mobile operator and their own additional services, do not issue their own SIM cards, market their services independently of the mobile operator, do no control over roaming agreements, may or may not have own interconnection agreements; (3) Service providers (SPs) which obtain a discount on connection charges or usage from the mobile operator, market the services offered by the mobile operator, and have limited possibilities to offer a different price structure.

This market was selected in the Recommendation because it is listed in the Annex I of the Framework Directive, although it might not fulfil the second and the third selection criterion and the Commission indicated that it did not anticipate retaining this market in future

considers that retail roaming is a separate market mainly on the basis on a demand-side analysis. In its competition practice, the Commission has also identified a separate retail market for seamless pan-European mobile telecommunication services to internationally mobile customers (Case M. 1795 *Vodafone/Mannesmann*, para 12-21).

⁶³¹ This market does not cover national roaming access. However to ensure that a new 3G operator may enter the market with a sufficient covering offer, some countries imposed 2G/3G national roaming under specific legislation outside the SMP regime: Austria, France, Greece, Ireland, Italy, Luxemburg, Spain, United Kingdom for the EU 15. Larouche (2000a:369-374) argues that the national roaming issue could not be satisfactorily dealt with by a antitrust based SMP regime.

revisions of the Recommendation.⁶³² Indeed if there are high legal entry barriers due to the limited amount of available spectrum, there could be sufficient competition between networks existing behind the barriers.

The NRAs have generally followed the market defined in the Recommendation, in particular by including self-supply, including 2G and 3G networks,⁶³³ including MVNO, including SMS and data services.⁶³⁴

The SMP assessment on this market 15 has been the most controversial because it involved the difficult concept of collective dominance. So far, most NRAs found the market effectively competitive. Two NRAs from the new member States (Cyprus and Slovenia) designated one operator as having single dominance because their markets is less developed and more concentrated than in the other Member States.⁶³⁵ The Finnish NRA also wanted to designate the incumbent TeliaSonera as having individual SMP.⁶³⁶ The Commission vetoed such draft decision because the NRA did not sufficiently take into account the numerous service providers and Mobile Virtual Network Operator agreements concluded without the threat of regulation. Redoing its analysis, the Finnish NRA finally concluded that the market was effectively competition.⁶³⁷

The first authority that tries to use the collective dominance route was the Irish NRA. In January 2005, it considered that two of the three mobile operators (Vodafone and O2)⁶³⁸ had a joint dominance because the retail mobile market was not sufficiently competitive and because all operators denied wholesale access to third party. The Commission was sceptical of this analysis but did not oppose considering that the NRA had not exceed its margin discretion given the complex economic assessment. It just reminded the NRA to closely

⁶³² Explanatory Memorandum of the Recommendation on relevant markets, p. 30.

⁶³³ Except Case UK/2003/1, Case NL/2005/242.

⁶³⁴ Except Case DK/2005/243, Case CY/2006/333 which excludes advanced data services.

⁶³⁵ Case CY/2006/333 and Case SI/2005/230.

⁶³⁶ Because it had a market share of more than 60%, the most important service provider operated on the TeliaSonera network, the lack of countervailing buying power and network effects, economies of scale and scope and financial strength

⁶³⁷ REF

⁶³⁸ The structure of the Irish retail mobile market in September 2004 was as follows: Vodafone (54%), O2 (39%) and Meteor (3%). A fourth pure 3G player, '3' was about to enter the market.

monitor the effects of fringe competitors on the stability of the tacit collusion.⁶³⁹ However in December 2005, a national Appeal Panel annulled the decision of the NRA.⁶⁴⁰

Then in May 2005, the French authority wanted to designate the three mobile operators (Orange, SFR, and Bouyges)⁶⁴¹ as having joint SMP because the retail market was sufficiently competitive and because all the operators refused to conclude attractive wholesale access deals.⁶⁴² The Commission was about to oppose as it had serious doubts that the NRA had proven the existence of a collective SMP to the requisite legal standard (because the NRA had failed to consider the effects of the recently concluded MVNO agreements, the complexity to find a focal point, the lack of transparency and the asymmetry between operators). To alleviate a possible veto, the NRA withdrew its draft decision⁶⁴³ and did not take a new draft decision since then.

Finally in January 2006, the Spanish NRA wanted to designate the three mobile operators (Telefonica Mviles, Vodafone, and Amena)⁶⁴⁴ as having collective SMP because the retail market was not sufficiently competitive and because all operators denied wholesale access to third party. As in the Irish case, the Commission was sceptical but did not oppose considering that the NRA has not done a marginal error. It only instructed the NRA to better justify the retaliation mechanisms and to closely monitor the effects of fringe competitors on the stability of the tacit collusion.⁶⁴⁵ The Commission decision has been appealed at the Court of First Instance by Vodafone⁶⁴⁶ and the final decision of the NRA has also been appealed before the Spanish Courts.

On those string of decisions, Cave et al. (2006:91-92) caution against the finding of collective dominance and recall that the incentives of the mobile operators to give access to their

⁶³⁹ Case IE/2004/121.

⁶⁴⁰ ECAP Decision 08/05 of 14 December 2005, *Vodafone, 02, Meteor v ComReg*.

⁶⁴¹ The structure of the French retail mobile market was: Orange (48.5%), SFR (34.5%), Bouyges (16.1%) calculated on number of clients.

⁶⁴² The French NCA did not oppose to the designation of the joint SMP although it has doubts that the second conditions of the Airtours criteria was met: Competition Council Opinion 05-A-09 of 4 April 2005, para 68. Later on, the NCA condemned the mobile operators for explicit collusion: Competition Council Decision 05-D-65 of 30 November 2005.

⁶⁴³ Case FR/2005/179.

⁶⁴⁴ The structure of the retail mobile market was: Telefonica Mviles (52.3% in minutes and 53.4% in revenues), Vodafone (31.8% in minutes and 28.7% in revenues), Amena (15.9% in minutes and 17.9% in revenues). A fourth pure 3G player, Xfera, was about to enter the market.

⁶⁴⁵ Case ES/2005/330.

⁶⁴⁶ Case T-109/06 *Vodafone v Commission*, pending.

networks is different than those of the fixed operators to give access to the local loop because there are always several infrastructure in parallel⁶⁴⁷. First, an MNO that gives access to a MVNO will share with other MNOs the revenue loss caused by additional entry and this mitigates the negative impact that entry may have on the revenues of the host MNO. Second, even if a MNO denies access to its network, there is no guarantee that the entrant will be blocked as it may obtain access elsewhere. Third, if entry cannot be blocked, then it is probably better for each MNO to be the one that gives access to the entrant. This allows the host MNO to earn additional wholesale revenues, that at least partially compensate the loss in retail revenues caused by the entrant. Thus, incumbent MNOs may face a prisoners' dilemma: they would be jointly better off if entry did not occur, although individually they have incentives to rush to be the one who gives access to the entrant. In general, whether an entrant will be supplied in practice, has to do with whether the incumbents' inputs are homogeneous or differentiated (i.e. whether cannibalisation from the entrant's product impact incumbents proportionally or differentially) and on what each incumbent believes about its rival's strategy⁶⁴⁸.

The few NRA which decided to regulate the market imposed remedies chosen in the standard list of the Access Directive, but none of them decided to release additional spectrum which would be the best remedy to solve a single dominance problem.⁶⁴⁹

Market 17: Wholesale mobile international roaming

The Commission defined also a 'wholesale national market for international roaming on public mobile networks'.⁶⁵⁰ It covers access and airtime minutes that a foreign mobile network operator (home network) requests to a domestic mobile network operator (visited network) to enable its subscribers to make and receive calls on another operator's network while being abroad.⁶⁵¹

⁶⁴⁷ On the incentives of the mobile operators to give access to MVNOs, see, Brito and Pereira (2005), Dewenter and Haucap (2006), Ordober and Shaffer (2005).

⁶⁴⁸ For instance, other things equal, it would seem that a big firm should be more reluctant to grant access since it has more to lose from cannibalisation. However, the bigger firm also knows that under some conditions the entrant will be supplied regardless, therefore the bigger firm may prefer winning to losing, and thus outbidding the smaller rival in order to supply the entrant.

⁶⁴⁹ See Valletti (2004:56).

⁶⁵⁰ International roaming is a high-margin activity that accounts for 10-20% of the mobile operators' profits.

⁶⁵¹ Similarly, *Telia/Sonera*, para 19; Commission Decision of 26 June 2001, *Vodafone/Airtel*, M. 2469, para 13. Three markets have been distinguished: wholesale roaming to foreign mobile network operators, national roaming to mobile network operators, and wholesale airtime to national service providers (Commission Working

The Commission considered that international roaming is a different market than access and call origination because this latter market can not provide the features of coverage, accessibility and mobility inherent to international roaming. It is also a different market than national roaming because the latter arises in most cases from temporary regulatory obligations aimed at facilitating entry of new operators and does not involve foreign mobile operators. Contrary to what it decided in the pending antitrust cases,⁶⁵² the Commission defined the international roaming as comprising all the national mobile operators because the foreign mobile operator may easily substitute one national operator with another one with the introduction of traffic direction technologies.⁶⁵³ The Commission selected such market because it is listed in the Annex I of the Framework Directive, but it may be argued that it does not fulfil the TCT. The case is similar to the access and call origination, albeit to a lesser extent due to the lack of transparency of the retail roaming charges.

The market for international roaming is the prototype of the problem that should be dealt at the European level according to the economic theory of federalism as it entails important externalities across Member States. Indeed when an NRA regulates and lowers the wholesale international roaming charges, that would benefit the foreigners coming to that country and paying lower roaming charges, but that would not benefit the nationals (and it may even adversely affect them if the operators increase national tariffs to compensate the decrease of international roaming charges). Therefore, it is not surprising that such market was the last to be analysed by the NRAs,⁶⁵⁴ firstly collectively inside the European Regulators and then individually.

The European Regulators Group follows the market definition of the Recommendation considering that it should encompass all operators in a given country and comprise inbound originating roaming services over 2G and 3G networks.⁶⁵⁵ However contrary to the

Document on the Initial Findings of the Sector Inquiry into Mobile Roaming Charges, 13 December 2000, p. 14).

⁶⁵² Where the Commission defined each mobile network as being a market: see *supra* Chapter 3, section 3.1.2.

⁶⁵³ Explanatory Memorandum of the Recommendation on relevant markets, p. 31.

⁶⁵⁴ Next to externality and incentives, there were additional reasons why the international roaming market was the last to be analysed: the NRA were waiting the outcome of the pending antitrust cases and the market is the most complicated to understand.

⁶⁵⁵ ERG Common Position of 25 May 2005 on the coordinated analysis of the market for wholesale international roaming, ERG(05) 20, para 23-34.

mission, the ERG considers that the market include voice but may also include SMS services according to the national circumstances.⁶⁵⁶

The most contentious issue however is the market analysis. Given the number of operators, their relative market shares and the existence of strategic alliances, the NRAs were unlikely to find single SMP in most of the Member States (similarly to market 15 analyses).⁶⁵⁷ But the ERG concluded that the characteristics of the market (in particular maturity and homogeneity of the products, low elasticity and moderate growth of demand, high entry barriers and lack of potential competition) may be conducive to collective dominance.⁶⁵⁸

However when doing its analysis, the Finnish NRA found neither single SMP (because of the future effect that traffic redirection may have on wholesale tariffs) nor collective SMP (because of the lack of wholesale transparency), and declared the market effectively competitive⁶⁵⁹. More controversially, the French NRA considered that the market was not effectively competitive and was in need of a regulatory intervention but could not find a single or collective SMP.⁶⁶⁰ It claimed to face a similar 'gap' than the one existing under the previous 1989 Merger Regulation.⁶⁶¹ Hence, the French NRA suggested three solutions, all of them outside its control: first, to extend the SMP concept to situation of tight oligopoly beyond tacit collusion;⁶⁶² second to review the exemption that was given by the Commission to the SITRA agreement of the GSM Association; or third to take an ad-hoc European Regulation for international roaming.

This last suggestion was rapidly picked up by the Commission which has recently proposed to the European legislature an ad-hoc Regulation that regulates wholesale and retail prices applying the so-called European Home Market Approach, which means that the prices paid by consumers for roaming services within the EU should not be unjustifiably higher than those they pay for calling within their own country.⁶⁶³ At the wholesale level, the price would be

⁶⁵⁶ *Ibidem*, para 26-27

⁶⁵⁷ ERG Common Position on international roaming, para 37-50.

⁶⁵⁸ ERG Common Position on international roaming, para 51-67.

⁶⁵⁹ Case FI/2005/304.

⁶⁶⁰ Consultation publique de l'ARCEP de décembre 2005 sur le marché national pour les services internationaux d'itinérance sur les réseaux mobiles ouverts au public.

⁶⁶¹ See *supra*, Chapter 3, section 3.1.3.

⁶⁶² This suggestion was picked up by the E/IRG in its submission to the 2006 Review, p. 21-22.

⁶⁶³ Proposal of the Commission of 12 July 2006 for a Regulation of the European Parliament and of the Council on roaming on public mobile networks within the Community and amending Directive 2002/21 on a common regulatory framework for electronic communications networks and services, COM(2006) 382, and the extensive

capped on the basis of a European Mobile Termination Rate. This European rate would be calculated as an average national weighted of the national rates, which in turn would be calculated as the average subscribers weighted of the regulated rates of the operators with SMP. Thus, the wholesale price to give a call in the same country where a customer is roaming, a national call (e.g. a Belgian customer roaming in Italy and giving a call in Italy) would be capped at twice the European MTR. And the wholesale price to give a call in another country than where the customer is roaming, an international call (e.g. a Belgian customer roaming in Italy and giving a call at home in Belgium) would be capped a three times the European MTR.

To ensure that the wholesale reduction would be passed through the end-users, the proposed Regulation provides that retail prices would also be capped six months after the regulation of wholesale charge to enable operators to adapt. The retail price to give a national or an international call would be capped at the wholesale price plus 30%. The retail price to receive a call would be capped at the European MTR plus 30%.⁶⁶⁴ In addition at the retail level, the operators,⁶⁶⁵ the ERG⁶⁶⁶ and the Commission⁶⁶⁷ are pushing for more transparency in retail tariffs, but without much success so far.

Figure 3.11: Maximum prices under the proposed Regulation on international roaming

	Wholesale prices	Retail prices
TO GIVE A CALL		
national calls	European MTR * 2	wholesale price * 1.3
international calls	European MTR * 3	Wholesale price * 1.3
TO RECEIVE A CALL	----	European MTR * 1.3

- *European MTR: Average National MTR weighted on the total basis of the total number of active subscribers in each Member State*

- *National MTR: Average of the Per-SMP Operator MTRs, weighted on the basis of the number of Active Subscribers per SMP Operator*

Impact Assessment, SEC(2006) 925. Such Proposed Regulation aims to cut the cost of using mobile phones abroad by up to 70%.

⁶⁶⁴ There would be no regulation of the wholesale charge to receive a call while roaming abroad, because in practice the operators do not charge themselves such services.

⁶⁶⁵ GSM Europe Revised Code of Conduct of 29 October 2003 for information on international roaming prices.

⁶⁶⁶ ERG Report of October 2005 on International Roaming Retail Tariff Transparency, ERG(03) 43rev1 calling for national websites with retail roaming tariffs, SMS indicating the tariffs initiated by end-user (pull mechanism) or by the operator (push mechanism).

⁶⁶⁷ See the dedicated website of the Commission containing sample of international roaming tariffs at http://europa.eu.int/information_society/activities/roaming/index_en.htm

The fundamental issue is that either there is no economic problem to be solved and an ad-hoc Regulation would be unjustified and possibly harmful, or there is an economic problem and the 2003 framework, which was supposed to be able to deal with all problems with its underlying economic antitrust approach, has failed.

Market 16: Wholesale mobile call termination

Finally, the Commission defined a wholesale market for “voice call termination on individual mobile networks”. Similarly to the fixed termination, the Commission considered that each mobile network constitutes a separate relevant market⁶⁶⁸ for several reasons, the main one being the externality generated by the calling-party-pays principle. The Commission identified such market because it was listed in the Annex I of the Framework Directive, but also because it fulfilled the TCT, mainly due to the externality generated by the calling-party-pays principle.

The mobile termination market was a priority for the regulators because the high termination charges lead to important financial transfer from the fixed to the mobile industry,⁶⁶⁹ and today all NRAs have completed their analysis. They have generally followed the network specific market definition proposed by the Commission, and respected the principle of technological neutrality by including 2G and 3G voice.⁶⁷⁰ Most excluded SMS and other data services⁶⁷¹, although the French NRA define a new market for SMS termination.⁶⁷² They have defined a market by Mobile Network Operator and also by MVNO when they were able to set their own termination services at a price which is not controlled by the host network.⁶⁷³

The NRAs designated all the operators (the big and the small) as having single SMP on their own market. However already in four Member States,⁶⁷⁴ a national appeal Court annulled the

⁶⁶⁸ See also Case M.2803 *Telia/Sonera*, para 31.

⁶⁶⁹ Such transfer has been estimated at 18 billion EUR between 1998 and 2002 for the three main EU countries (France, United Kingdom and Germany) which can be extrapolated to 39 billion EUR for the EU 15 Bomsel et al. (2003). The value of the MTR in the revenues of the mobile operators may be estimated between 15 and 25%.

⁶⁷⁰ Case CY/2006/334 excludes 3G because it does not yet exist in the country and Case MT/2005/214 excludes pure 3G operator.

⁶⁷¹ Note that EL/2004/78 excluded GSM gateways whereas FR/2004/104 included GSM gateways.

⁶⁷² Case FR/2006/413.

⁶⁷³ Case AT/2004/99, Case DK/2005/204, Case NL/2005/215, Case SE/2004/52.

⁶⁷⁴ In Finland: Decision of the Administrative Supreme Court of 28 October 2005, *TeliaSonera, Finnet, Elisa*, Joined Cases Dno 715/2/04-717/2/04-722/204; in Ireland: ECAP Decision 02/05 of 26 September 2005, *Hutchison 3G v ComReg*; in the Netherlands: Decision of the Appeal Court of 29 Augustus 2006, AWB 05/903

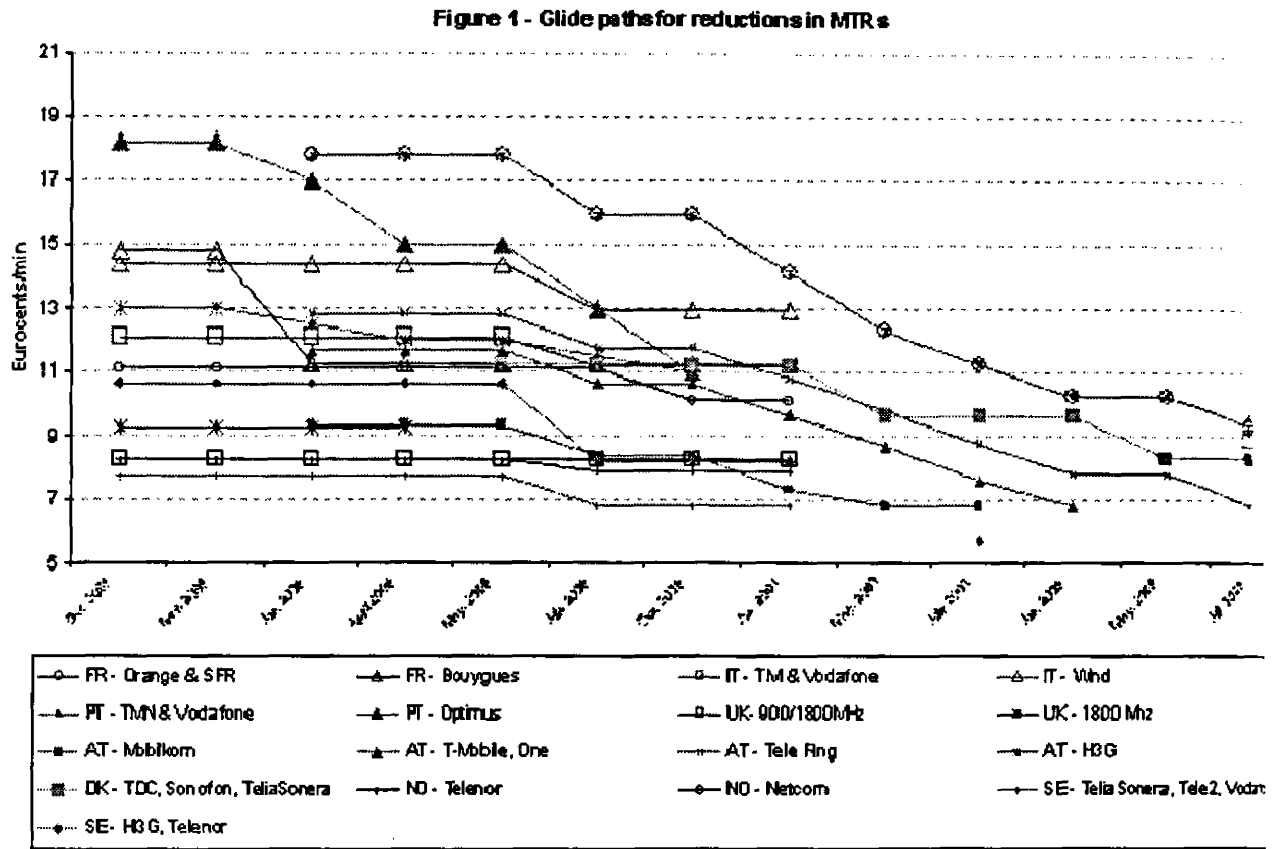
finding that small operators have SMP because the countervailing buying power of the bigger players was not sufficiently taken into account, and similar cases are pending in other Member States. NRAs generally imposed the full set of obligations set out in the Access Directive, including price control at FL-LRIC. Sometimes, NRAs choose a glide-path for a limited period of time to ease the transition as shown in Figure 3.12 below.⁶⁷⁵ Moreover as with fixed termination, the NRAs imposed in some cases less stringent obligations on smaller operators to respect the principle of proportionality (e.g. the price should be reasonable and not necessarily cost oriented or should be benchmarked against the price of the incumbent). However, they did not go outside the box and did not reflect upon imposing a Bill and Keep system at the wholesale level (in effect a wholesale termination price at 0) and/or a Receiving-Party-Pays principle at the retail level to remove the externality problem at the basis of the regulation.⁶⁷⁶

and 05/921 until 05/931; and in the United Kingdom: Competition Appeal Tribunal Decision of 29 November 2005, Case 1047/3/3/04 *Hutchison 3G v Ofcom*.

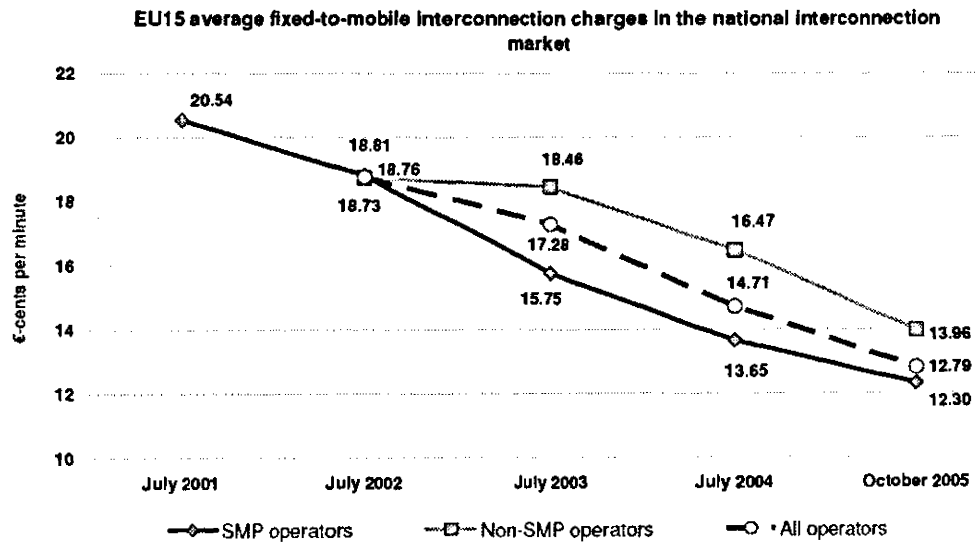
⁶⁷⁵ Case ES/2005/251 imposed remedies on fixed-to-mobile calls but not on mobile-to-mobile calls because such segment of the market was deemed to be effectively competitive. Conversely, Case FI/2003/31 imposed remedies on mobile-to-mobile calls but not on fixed-to-mobile calls because there were prohibited from doing so by the national law (which was a violation of European law).

⁶⁷⁶ In favours of wholesale Bill and Keep: de Graba (2002), and of retail Receiving Party Pays principle: de Bijl et al. (2005), Crandall and Sidak (2004), Littlechild (2006). For an early analysis of the issue: Crocioni and Veljanovski (1999).

Figure 3.12: Reduction and level of MTR



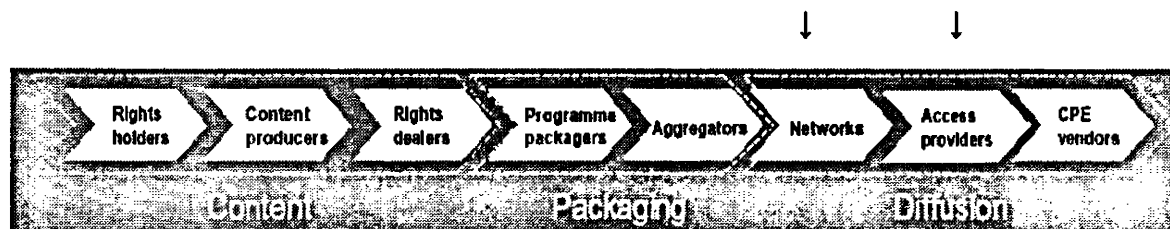
Source: Cullen International



Source: European Commission, 11th Implementation Report

F. Content related markets

The last market segment is the broadcasting one. The retail markets consist of the delivery of radio and television broadcasting (that may be free or subscription based), as well as interactive services. Currently, these services are mainly delivered over three types of platforms: terrestrial, cable or satellite. Each of the platforms may be analogue or digital. The related wholesale markets refer to the infrastructures necessary to provide broadcasting services: transmission network and ancillary technical services. Thus along the value chain, they cover and are limited to the activities of networks and access providers.



The Commission did not identify any retail broadcasting market in the Recommendation⁶⁷⁷ because they intrinsically mix two elements, one related to content (the services transmitted) and the other one related to network (the underlying infrastructure needed to provide the content). The first is outside the scope of the 2003 regulatory framework, hence could not be regulated by the NRA under the SMP regime, whereas the second is covered by the framework but should not be selected as it does not pass the TCT.

However, in November 2005 the Dutch NRA wanted to select and intervene on the retail market for cable free-to-air radio and TV packages. The Commission opened a second phase review because it considered that each of the three criteria (entry barriers, tendency towards effective competition, sufficiency of competition law) were not fulfilled given the prospective competitive dynamics in the market brought by Internet TV, digital terrestrial TV and satellite TV and the possibility of the NCA to regulate excessive price.⁶⁷⁸ One month later, the Commission accepted the decision solely because the NRA agreed to impose lighter

⁶⁷⁷ Consecutively their precise definitions were not decided. In its antitrust practice, the Commission distinguishes between free-TV, pay-TV, and interactive services (Case JV 37 *BSkyB/KirchPayTV*, para 23 and 40; *BiB/Open*, para 23-24)

⁶⁷⁸ Case NL/2005/247 (decision of 3 November 2005: opening of phase II).

remedies than originally planned and for a shorter period.⁶⁷⁹ This is open to criticism because the selection of a market is solely function of the TCT and not of the remedies imposed. Thus, the Commission should not have changed its mind merely because the NRA agreed to lighten the remedies.

*Market 18: Wholesale broadcasting transmission services*⁶⁸⁰

At the wholesale level, the Commission defined a market for 'broadcasting transmission services to deliver broadcast content to end-users'. It noted the limited substitutability of the demand (i.e. a broadcaster has few choice but to use the existing platforms), as well as the supply (i.e. an existing network supplier can not easily adapt its network to provide broadcasting services and the establishment of a new network takes time and may be uneconomic due to the important economies of scale and scope). It selected such market because it fulfils the TCT, even though it was not listed in the Annex I of the Framework Directive.

The main issue is the precise segmentation of the market between platforms (i.e. terrestrial, cable and satellite)⁶⁸¹ and between technology (i.e. analogue and digital platforms).⁶⁸² The constraints that the platforms exercise on each other and the appropriate market definition depend mainly on the feasibility for the broadcasters to switch between platforms. In turn, that depends on the switching possibilities for the end-users and on the coverage, the capabilities and the price of each platform. All regulators that notified the broadcasting market so far, have separated it into various more narrowly defined product markets on the basis of the

⁶⁷⁹ Case NL/2005/247 (Decision of 21 December 2005: withdrawal of serious doubts). The NRA decided to impose a price control of RPI-0 and a soft transparency requirement for one year instead of obligations of full transparency, unbundling and cost-orientation until the next market review.

⁶⁸⁰ The Commission did not identify a market for associated facilities (CAS, API, EPG) because their regulation is normally outside the SMP regime: see supra on Articles 5(1b) and 6(1) of the Access Directive. In antitrust practice, different markets for the provision of CAS, for services relating to access the EPG, for service relating to the writing of applications compatible with the API have been defined: *BiB/Open*, para 3. For each of the facilities, the Commission tilted in favour of an inter-platforms market (including terrestrial, cable, and satellite) although the question was left open: *Bertelsmann/Kirch/Premiere*, para 21; *DeutscheTelekom/BetaResearch*, para 18.

⁶⁸¹ On this point, the Commission competition practice varies according to countries and over time. Cable and satellite were considered to be in separate markets in Germany (Case M.469, *MSG Media Service*, para 41; Case M. 1027, *Deutsche Telekom/BetaResearch*, para 19-21; *BskyB/KirchPayTV*, para 62-63). Similarly, cable and satellite were considered to be in separate markets in the Nordic region (Case M. 490, *Nordic Satellite Distribution*, para 57). On the other hand, no distinction between platforms was made for the pay-TV market in the U.K. or in France (*BiB/Open*, para 26; *TPS*, para 30).

⁶⁸² Analogue and digital platforms have consistently held to be part of the same market (Case M. 993, *Bertelsmann/Kirch/Premiere*, para 18; Decision *TPS*, para 26; *BiB/Open*, para 25; *BskyB/KirchPayTV*, para 26).

platform used (cable, satellite or terrestrial), the transmission mode (analogue or digital), the geographical coverage of the network (local or national) and/or the signal transmitted (radio or television). Concrete market circumstances, underlying the market definition, appear to vary substantially from one Member State to the other. However in most Member States, the main bottlenecks seem to lay with the national analogue and digital terrestrial transmission systems. Where NRAs wanted to exempt parts of the market from regulation (for example cable transmission networks), they had to show that the market did not fulfil the TCT.

NRAs imposed transparency and non-discrimination obligations in all cases, while access, accounting separation and cost-orientation obligations were imposed in the majority of the cases.

Table 3.7: Result of market 18 analysis

	Terrestrial		Cable		Satellite		Others
	Analogue	Digital	Analogue	Digital	Analogue	Digital	
AT	ORS as SMP	Exclude TCT	Exclude TCT		Exclude trans-national		
DE	Exclude TCT		Market of "analogue and digital feeding of broadcasting signals in individual broadband cable networks": KDB, Unity Media, and KBW Market of "delivery for cable network providers with analogue and digital radio signals by cable network providers of a preceding network level": KDB, Unity Media, and KBW		Exclude trans-national		
DK	Exclude bec existing regulation on access to spectrum and access to masts and sites		Possibly regulation		Exclude trans-national		
FI	Included - Nation TV - Nation radio Excl. TCT - Local TV - Local radio	Included - Nation TV - Nation radio Excl. TCT - Local TV - Local radio	Exclude TCT		Exclude trans-national		
FR	SMP :TDF		Exclude TCT		Exclude trans-national		Exclude TCT IPTV
IE	Included TV Radio	Excl. TCT DTT	Exclude TCT		Exclude trans-national		
IT	Included - Nation TV - Nation radio Excluded - Local TV - Local radio	Include National TV Excl. TCT Local TV Nation radio Local radio	Exclude TCT		Exclude trans-national		Exlude TCT IPTV
NL	Included Radio Excl. TCT TV	Excl. TCT	SMP : UPC, Casema, Essent, Delta, Multikabel		Exclude trans-national		
ES	SMP : Albertis		Exclude TCT		Exclude trans-national		
SE	SMP on TV :Teracom SMP on radio	SMP on TV : Teracom Excl. TCT : radioa	Exclude TCT		Exclude trans-national		
UK	SMP Arquiva and National Grid		Exclude TCT		Exclude trans-national		

Source: Cullen International

3.2.3. The application of the other parts of economic regulation

The interconnection clause

Next to the SMP regime, there is a safeguard interconnection clause which enables the NRA to impose on operators controlling access to end-users all obligations (in particular interconnection) necessary to ensure end-to-end connectivity.⁶⁸³ Normally, the interconnection (or two way access) issues are dealt with the SMP regime under fixed and mobile termination markets (number 9 and 26) and the interconnection clause is only a (dangerous) safeguard. Fortunately, such provision with huge potential has only been applied once so far by the Dutch NRA wanting to take an interoperability decree requiring all providers of public telephone services and operators of the underlying networks to ensure that retail customers are able at all times to make calls to all other retail customers, regardless of whether they are on the same or different networks. The obligation imposed is limited to ensuring end-to-end connectivity and the decree does not regulate the terms and conditions on which operators must interconnect. Although the Commission reminded the NRA to use the interconnection clause with caution, it did not oppose the NRA decision because of its limited scope and impact on the undertaking concerned.⁶⁸⁴

The digital TV associated facilities regime

Next to the SMP regime, there is also a specific regime for digital TV associated facilities (CAS, API, EPG) to ensure effective competition and pluralism.⁶⁸⁵ So far, this regime has been only used by the British NRA. In a first case, the NRA wanted to impose on Sky Subscribers Services compulsory access at fair, reasonable and non-discriminatory terms to its certain technical broadcasting services contained in the Sky digital-TV set-top boxes. The Commission accepted such measure but reminded that the specific associated facilities regime should be used with caution.⁶⁸⁶ In the second case, the British NRA wanted to impose on BSkyB a compulsory access to its EPG on fair, reasonable and non-discriminatory terms. Again, the Commission accepted the draft measure.⁶⁸⁷

⁶⁸³ Article 5(1a) of the Access Directive.

⁶⁸⁴ Case NL/2003/17. The Commission also asked the NRA to consider whether a horizontal interconnection obligation remains necessary once the retail market analysis and the imposition of universal service obligation have been done.

⁶⁸⁵ Articles 5(1b) and 6 of the Access Directive.

⁶⁸⁶ Case UK/2003/19.

⁶⁸⁷ Case UK/2004/41.

3.3. INSTITUTIONAL DESIGN

After having described the substantive law, I now turn to the institutions that should give 'life' to these substantives rules. Such study, often overlooked by the legislature and the literature, is crucial because the 2003 regulatory framework is process-based, hence its results depend on its institutional design. Indeed as I show later, one of the reasons for the failure of the framework lies in its inappropriate institutional design. I first study the institutional actors at the national level: national regulatory authorities, national competition authorities and national Court and appeal bodies. I then turn to the actors at the European level: Communications Committee, European Regulators Group and Independent Regulators Group, European Commission and European Courts, and the absence of a European regulatory authority.

3.3.1. National level

A. National Regulatory Authorities (NRAs)

Tasks and tools of the NRAs

The first national actor is the National Regulatory Authority (NRA).⁶⁸⁸ The Framework Directive gives a functional definition of the NRA⁶⁸⁹ and leaves the freedom to the Member States to create several NRAs provided the division of tasks is clear and transparent.⁶⁹⁰ Such division may be done according to theme (e.g. one NRA for the allocation of frequencies) or according to the internal division of competence in a federal State (like in Belgium or in Germany).⁶⁹¹

As we have seen, the NRAs are the main body in charge of the Significant Market Power regime, and concentrate investigative and decision-making power.⁶⁹² To do so, the NRAs

⁶⁸⁸ In general, see Geradin and Petit (2004), Stevens and Valcke (2003)

⁶⁸⁹ Article 2(g) of the Framework Directive provides that: 'national regulatory authority' means the body or bodies charged by a Member State with any of the regulatory tasks assigned in this Directive and the Specific Directives.

⁶⁹⁰ Article 3(4) of the Framework Directive. For the implementation in the Member States, See Green Paper of the Commission of 21 May 2003 on the Services of General Interest, COM(2003) 270, and Geradin and Petit (2004:19-20).

⁶⁹¹ There is a tendency now to concentrate all competences related to the telecoms and media to one authority (like in the UK, Italy, Austria) or to concentrate the competences to all network industries to one authority (like in Germany).

⁶⁹² The NRAs have other powers next to the SMP regime on which this dissertation is focussed. Their tasks can be grouped in four categories: (1) market organisation (e.g. the SMP regime); (2) market monitoring (e.g.

have extensive right to get proportionate information from the operators, the Commission and the regulators of the other Member States and have to respect the appropriate level of confidentiality.⁶⁹³ They have also strong enforcement powers, including the possibility to impose financial penalties to induce compliance of their decisions, but the Directives are not very specific in that regard.⁶⁹⁴

To perform their tasks effectively and impartially,⁶⁹⁵ the NRAs should have sufficient resources and staff with the relevant expertise.⁶⁹⁶ Importantly, they should be legally and functionally independent⁶⁹⁷ of the market players in the electronic communications sector. That would ensure that the NRAs remain impartial. In particular the Member States that retain control of some operators should ensure effective structural separation between the regulatory function and the activities associated with ownership and control.⁶⁹⁸ However although the European Parliament was in favour,⁶⁹⁹ the European legislature did not go as far as requesting that the NRA should be independent of the political power, as it is the case for the European central banks.⁷⁰⁰

sanction if case of violation of a authorisation condition, Article 10 of the Authorisation Directive); (3) dispute resolution (Article 20 and 21 of the Framework Directive); and (4) information collector and dissiminator (e.g. publication of information to contribute to effective competition, art. 5 of the Framework Directive).

⁶⁹³ Article 5 of the Framework Directive.

⁶⁹⁴ Article 10 of the Authorisation Directive.

⁶⁹⁵ The principle of effectivity results from Article 10 EC and the general EU law whereas the principle of impartiality is specifically mentioned in the Article 3(3) of the Framework Directive.

⁶⁹⁶ Recital 11 *in fine* of the Framework Directive and the general obligation derived from Article 10 EC (Temple Lang, 1998:119). Usually, the NRAs are well resourced because they are not financed by the State budget but through (authorisation) fees paid by the operators: Article 12 of the Authorisation Directive.

⁶⁹⁷ On those concepts, Nihoul and Rodford (2004:22-23), Queck (2000). Laffont and Tirole (2000:279) note that the benefit of independence is decisions less biased in favour of domestic firms and powerful interests groups and the cost is lack of accountability. On balance, they reckon that independence in the context of network industries is a virtue.

⁶⁹⁸ Article 3(2) of the Framework Directive. The separation of the regulatory and economic activities was first introduced by the Court of Justice on the basis of Article 86(1) EC noting that: 'A system of undistorted competition, as laid down in the Treaty, can be guaranteed only if equality of opportunity is secured as between the various economic operators. [...] In those circumstances, the maintenance of effective competition and the guaranteeing of transparency require that the drawing up of technical specifications, the monitoring of their application, and the granting of type-approval must be carried out by a body which is independent of public or private undertakings offering competing goods or services in the telecommunications sector': Case C-18/88 *Régie des télégraphes et des téléphones v GB-Inno-BM* [1991] ECR I-5941, para 25 and 26. Similarly, Case C-202/88 *Terminal Directive*, para 51 and 52 and Temple Lang (1998b:306). Independence and impartiality are also required under the para 5 of the WTO Reference Paper.

⁶⁹⁹ See the Amendment 22 proposed by the European Parliament to the Framework Directive in his first reading of the Framework Directive Proposal: OJ [2001] C 277/91. Geradin and Petit (2004:25) are also in favour of political independence as one the main reason for creating regulatory agencies was to remove politically sensitive issues from the hands of the government.

⁷⁰⁰ Article 108 EC.

Regrettably, this combination of strong power and the requirement of independence clash with a conservative interpretation of the Constitutions of some continental Member States and may lead to narrow mandate for the NRA or remaining political control.⁷⁰¹ In fact, this concentration of power is a standard feature of an administrative system, but its acceptability implies that NRAs decisions are taken in full respect of due process and are subject to effective internal and external checks and balances to ensure following Montesquieu that *le pouvoir arrête le pouvoir*. Thus, the NRAs should exercise their powers transparently⁷⁰² and their decision should be objectively justified.⁷⁰³ They should also consult with other national authorities (competition and consumers authorities)⁷⁰⁴ and hold public consultation during a reasonable period on all measures that have a significant impact on the market, which include the decisions related to the SMP regime.⁷⁰⁵ NRAs are also submitted to an extensive national judicial review.⁷⁰⁶

Given that the NRAs are at the cornerstone of the implementation of the 2003 framework, the Commission controls with great attention whether Member States have implemented correctly all the provisions related to such authorities and has already opened several infringement procedures in that regard. The Commission notes that the main problem in most of the Member States is that the NRAs lack of enough enforcement power to ensure an effective application of their decisions.⁷⁰⁷ In addition, the Commission notes problems in some specific Member States regarding the lack of transparency and coordination between several NRAs entrusted with different tasks, the lack of margin of discretion for the market analysis, the lack of independence (mostly in the new Member States), and the lack of transparency of the decision making process.⁷⁰⁸

⁷⁰¹ In France, Conseil d'Etat français (2001). In the Netherlands, Larouche (2006a)

⁷⁰² Article 3(3) of the Framework Directive.

⁷⁰³ Nihoul and Rodford (2004:28). Such obligation of motivation derived from the general principal of EU law and the need to have an effective appeal mechanism.

⁷⁰⁴ Article 3(4) of the Framework Directive.

⁷⁰⁵ Article 6 of the Framework Directive and para 144-145 of the Guidelines on market analysis, the Commission notes that the NRAs should consult on the market definition and the reasons therefore, the evidence relating to the finding of dominance and the full details of sector remedies and that a reasonable period should be two months. The public consultation should be open to all relevant stakeholders and not limited to the incumbent or the regulated operators: see the comments of the Commission in several cases in Slovakia: Case SK/2005/172-173 (markets 1 and 2), Case SK/2006/344-345-347-349 (markets 3 to 6); Case SK/2004/103; Case SK/2004/102; Case SK/2005/136.

⁷⁰⁶ Article 4 of the Framework Directive, analysed *infra*. In this respect, it is important to recall that the European Court of Human Rights has held that decision-making powers can be entrusted to administrative authorities as long as they are subject to effective judicial review by an independent and impartial tribunal: *A/73, Ozturk v. Germany*, Judgment of the European Court of Human Rights (ECtHR) of Feb. 21, 1984.

⁷⁰⁷ Annex to Commission 11th Implementation Report, p. 49.

⁷⁰⁸ Annex to the Commission 11th Implementation Report, p. 47-49.

The horizontal coordination between the NRAs

To ensure that the increased flexibility of the NRAs would not take place at the expense of the internal market, regulators should cooperate with each other and with the Commission in a transparent manner to ensure a consistent application in all the Member States of the regulatory framework.⁷⁰⁹ In particular, the NRAs should consult each other on any draft measure that would affect the trade between Member States.⁷¹⁰ They should also collaborate for the analysis of the trans-national markets and the resolution of cross-border disputes.⁷¹¹ Finally, a new and original inter-institutional body is created, the European Regulators Group. Moreover, the powers of the Commission over the Member States and their NRAs have been increased.⁷¹² To ensure that such cooperation is functioning properly, the authorities may exchange information, including confidential ones, provided that the receiving authority ensures the same level of confidentiality as the originating authority.⁷¹³

B. National Competition Authorities

The National Competition Authorities play a dual role in the electronic communications sector. The first role is to take antitrust cases because in all Member States, the application of sector-specific regulation does not remove the jurisdiction of national and European competition law. Thus, when there is jurisdiction of sector-specific regulation, this leads to an overlapping of competences between both legal instruments and between the NCA and the NRA (see Section 4.1.2.)

The second role of the NCA is to participate in the making of the (antitrust-based) regulation and advise the NRA when doing their market analysis. According to the general principles of European law, the NRAs could not violate European antitrust when adopting their decisions. Now that sector-specific regulation has been aligned on antitrust methodologies, this principle is even more important. It is therefore appropriate that the NRAs consult the NCAs on a

⁷⁰⁹ This derived from the general loyal cooperation obligation of Article 10 EC (Temple Lang, 1998b:300) and is recalled by Article 7(2) of the Framework Directive.

⁷¹⁰ Article 7(3) of the Framework Directive. Until now, very few NRA have comment draft decisions of the counterpart because of language problems and lack of resources.

⁷¹¹ Articles 16(5) and 21 of the Framework Directive.

⁷¹² Article 7(4) of the Framework Directive.

⁷¹³ Articles 3(5) and 5(3) of the Framework Directive. See Nihoul and Rodford (2004:31-32).

proper application of the antitrust principles. This result from the general effectiveness principle in EU law⁷¹⁴ and also more specifically from the Framework Directive⁷¹⁵ which provides that NRAs and the NCAs should cooperate between each other and exchange information, including confidential one, for the SMP market analysis.⁷¹⁶

The implication of the NCA in the making of sector-specific regulation has several advantages which help to meet good governance principles. First, NCAs might ensure the integrity of antitrust methodologies in the country, thereby achieving legal certainty. Second, they are strongly 'Europeanised' and might ensure common regulatory culture, thereby achieving harmonisation.⁷¹⁷ Third, NCAs have fewer incentives to regulate due to their horizontal nature, thereby achieving proportionality. However, the NCAs' involvement has also drawbacks. The NCAs may not grasp the full context of the sector-specific regulation and either apply mechanically antitrust concepts or misunderstand the consultation of the NRAs.

In addition, the dual roles of the competition authorities may lead to conflicting incentives. Indeed, the NCAs may use the SMP regime to endorse extension of antitrust doctrines (like collective dominance) proposed by the NRAs, in order to make their life easier for their own antitrust proceedings.⁷¹⁸ NCAs may do so especially because by simply endorsing a NRA's decision, their opinions could probably not be challenged directly before a national court. For instance, the French Competition Council⁷¹⁹ endorsed the analysis of the NRA which found a collective dominant position on the wholesale mobile access and call origination market (market 15), although it recognised that the second of the three conditions of the *Airtours* case (i.e. the possibility of retaliation) was not met. The Competition Council noted that a collective dominance situation might develop in the future and that the NRA was justified to intervene to prevent such possibility. In fact, the Competition Council adopted an approach appropriate for the merger control which is one-off, but not for sector-specific regulation which is continuous.⁷²⁰

⁷¹⁴ Larouche (2005b:170).

⁷¹⁵ Articles 3(4), 3(5) and 16(1) of the Framework Directive; Commission Guidelines on market analysis, para 135; IRG Position Paper on the collaboration between the National Regulatory Authorities and National Competition Authorities of the IRG members' countries.

⁷¹⁶ Under European law, a information obtained for an antitrust investigation can not be used for a regulatory analysis: Case C-67/91 *Spanish Banks* [1992] ECR I-4785.

⁷¹⁷ Larouche (2002:148).

⁷¹⁸ This is also the case for the Commission, see *infra*.

⁷¹⁹ Opinion 05-A-09 of the French Competition Council of 4 April 2005, para 68.

⁷²⁰ Commission Guidelines on market analysis, para 32

C. National Courts and appeal bodies

The national Courts and appeal bodies are an increasingly important actor in the regulation of the electronic communications sector as we see the same tendency of judicialisation in Europe than in the United States.⁷²¹ I detail the two roles of the national Courts (deciding on an appeal of a decision of the NRA and deciding disputes between operators) and then I touch upon their horizontal coordination between Member States.

Appeal of the decisions of the National Regulatory Authorities

The Framework Directive⁷²² provides that Member States should ensure effective national appeal mechanism for user or operator affected by an NRA's decision. A person is affected by a decision if he or she is an addressee of the decision or if the operative part of the decision has a direct effect on the particular rights or interests of a person.⁷²³ Such person may appeal if the NRA decision has adverse effect on those rights. This is a minimal harmonisation requirement and does not preclude the Member States to create more extensive right of appeal for additional classes of person.⁷²⁴ The Directive also provides that the NRAs decisions shall stand pending the appeal procedure unless the appeal body decides otherwise, which reflects a general principle of administrative law.⁷²⁵ For the rest, the Directive leaves large discretion to the Member States according to their procedural autonomy.⁷²⁶

⁷²¹ Sidak (2003:207) notes that the number of pages in the official compendium of the FCC decisions and proceedings has nearly tripled since the passage of the Telecommunications Act in 1996, while the membership in the Federal Communications Bar Association increased by 73% between 1995 and 1998 and has remained essentially at that level

⁷²² Article 4 of the Framework Directive. Note that the Court of Justice judged, contrary to the Opinion of the Advocate General Geelhoed, that Article 5a(3) of the previous ONP Directive 90/387 as modified by Directive 97/51 has a direct effect and that national appeal body should dis-apply any contrary national law: C-462/99 *Connect Austria Gesellschaft für Telekommunikation v Telekom-Control-Kommission, and Mobilkom Austria* [2003] ECR I-5197, para 38 to 42. See also Article 2(5) of the Consolidated Liberalisation Directive.

⁷²³ The question whether a competitor of an operator that the regulator has decided not regulate is a 'affected party' and may appeal the decision of the regulator has been raised at the Court of Justice in the pending Case C-426/05 *Tele2 UTA Telecommunication v Telekom-Control-Kommission*. Note also that in Sweden, the right of appeal has been limited to the addressee of the NRA decision: Annex to the Commission 11th Implementation Report, p. 53.

⁷²⁴ Lasok (2005:791).

⁷²⁵ Case 101/78 *Granaria v Hoofprodukschap voor Akkerbouwprodukten* [1979] ECR 623, paras 4–6. However, there are seven Member States where NRAs decisions are often or always suspended in case of appeal: Annex to the 11th Report, p. 53. Sweden appears to be particularly problematic.

⁷²⁶ See in particular, Recital 12 *in fine* of the Framework Directive stating that "This appeal procedure is without prejudice to the division of competences within national judicial systems and to the rights of legal entities or natural persons under national law". On the duty of national Courts to raise point of Community law, see Temple Lang (1998b:310).

The appeal body is not necessarily a Court, and if it is not, it should give written reasons and its decisions should be subject to review by a Court or a tribunal within the meaning of Article 234 EC.⁷²⁷ Thus, each Member State decides the number of levels of appeal. In practice, most of the Member States choose two levels and no Member States has more than three levels. In the majority of the Member States, the appeal body is a Court already at the first level (sometime specialised in antitrust matters), either judicial or administrative and the superior levels are always a Court.⁷²⁸ Further, the Framework Directive does not exclude the possibility of several appeal bodies so that recourses concerning certain NRAs' decision are heard by one body while appeals against other decisions are heard by a different body.⁷²⁹ In any case, the appeal bodies should be independent of the parties involved and have the in-house or outsourced expertise to perform their duties.⁷³⁰ Moreover, the appeal bodies have a right of access to all the information, including the confidential ones, upon which the NRA has taken the contested decision and should guarantee the confidential treatment of such data when appropriate.⁷³¹

⁷²⁷ On the notion of tribunal within the meaning of Article 234 EC, see Chapter 3, section 3.2.2., and Lenaerts et al. (2006:35-45).

⁷²⁸ Most of the Member States have shortened the number of appeal levels with the implementation of the 2003 regulatory framework.

⁷²⁹ See Cullen International (2006). Out of the 16 Member States surveyed, this is the case in 6 countries. For instance, this is the case in France where appeals on dispute resolutions are heard by the Cour d'appel de Paris whereas appeal against market analysis procedure are head by the Conseil d'Etat. This is also the case in United Kingdom where most appeals go to the Competition Appeal Tribunal but price control matters go the Competition Commission: Electronic Communications (Disputes and Appeals) Regulation 2003, regulations 11 and 12.

⁷³⁰ On these issues of independence and expertise, see Lasok (2005:792-793).

⁷³¹ This is not directly provided by the Directive but derives from the condition of effective appeal: Case C-438/04 *Mobistar v IBPT*, ECR [2006] I-0000, para 41-43.

Table 3.8: The appeal procedure in the Member States (as of March 2006)

	Number of stages	Administrative/ judicial/ special tribunal	Does decision pending appeal?	NRA stand	Binding timeframe for appeal body to decide?	Possibility of appeal body to replace NRA decision
AT	1	Adm	Yes		No	No
BE	2	Jud	Yes		No	No
DK	3	Special Trib	Yes		3 months	Yes
FI	2	Adm	Yes		No	Yes
FR	1 or 2	Adm or Jud	Yes		No ⁷³² (aim: 6 months)	Yes
DE	2	Adm	Yes		No	No
EL	2	Adm	Yes		6 months	No
IE	3	Special Trib	Panel discretion		No (aim: 4 months)	No
IT	2	Adm	Yes		No	No
LU	2	Adm	Yes		No	No, except on sanctions
NL	1/2/3	Jud	Yes		No	Yes
PT	3	Adm	Yes		No	No
ES	3	Adm	Yes		No	Yes
SE	3	Adm	Yes		No	Yes
UK	2	Special Trib	yes		No	No
IIU	2	Jud	Yes		No	Yes

Source: Cullen International (2006)

When compared with the previous 1998 regulation, the role of the appeal body has been enhanced⁷³³ for at least three reasons. First as explained below, the standard of judicial review has been broadened to include the merits of the case.⁷³⁴ Second, the incentives to appeal have been increased by the alignment of the SMP regime with competition law methodologies. Indeed, if an operator is designated as having SMP, it will probably be presumed to have a dominant position in an antitrust proceeding as well.⁷³⁵ Hence, the operator has a double incentive to appeal the NRA's decision: to lift regulation, and also not to be presumed as being dominant. Moreover, as dominant position is difficult to assess, it is quite easily challengeable. Third, in some countries, the appeal of regulatory decisions is now located at a

⁷³² Both the administrative and the judicial Court have informally agreed to solve an appeal in 6 months.

⁷³³ Note however that Cullen International (2006:5) is more nuanced noting that "The interaction of multiple features of the appeals process, such as whether there is a binding timeframe and the number of levels of appeal, make it difficult to determine the effect of the procedural system on either inputs (the incentive for, or likelihood of, filing an appeal) or outputs (the efficiency of taking decisions or the substantive outcome of the appeal.)" On the role of the national Courts under the 1998 regime, see Andenas and Zleptnig (2004); Ottow (2006).

⁷³⁴ Note that under the national implementation of the 1998 framework, the judicial review was already broad in some countries (like Germany or the Netherlands) but not in others (like Austria or the UK).

⁷³⁵ Note however, that a SMP designation does not automatically imply a dominant position under competition law: Commission Guidelines on market analysis, para 30.

Court specialised in antitrust law, which would then be more at ease to strictly review and possibly set aside an NRA decision.⁷³⁶

Thus as of August 2006, 55 NRAs decision have been appealed:⁷³⁷ 13 have been annulled,⁷³⁸ 3 have been confirmed and the remaining ones are still pending. An additional problem in most of the Member States is the length of the appeal.⁷³⁹

Table 3.9: Number of appeal in the Member States (as of August 2006)

	A T	B E	C Y	C Z	D K	E E	E S	F I	F R	D E	E L	H U	I E	I T	L T	L U	L V	M T	N L	P L	P T	S E	S I	S K	U K		
1																											
2																											
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13																											
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15																											
16																											
17																											
18																											

	Appeal pending
	Appeal, NRA decision cleared
	Appeal, NRA decision annulled

Source: Cullen International (as of August 2006)

The difficult issue is to determine the standard of judicial review of the appeal bodies (which is not to be confused with the standard of proof incumbent to the NRA)⁷⁴⁰ and to determine

⁷³⁶ For instance, in the UK, the appeals of Ofcom's decisions have been located to the Competition Tribunal. In Belgium, the appeals against BIPT's decisions have been moved from the Council of State to the Appeal Court of Brussels.

⁷³⁷ In Sweden, there were more than 80 courts cases pending in June 2006, which is the highest degree of appeals in Europe on market reviews and ex ante obligations. In the Annex of the 11th Implementation Report, the Commission noted at p. 52 that there is a systematic appeal of NRA decisions in Belgium, Greece, Estonia, Italy, Cyprus, Hungary, the Netherlands, Poland, Slovakia and Sweden. Defraigne (2005:599) notes systematic appeal in Belgium, Germany, Greece, the Netherlands, Portugal and Sweden.

⁷³⁸ Two in Austria (markets 5 and 6), one in Finland (market 16), two in Ireland (markets 15 and 16), one in Sweden (market 9), one in the United Kingdom (market 16).

⁷³⁹ Annex to the Commission 11th Implementation Report, p. 52.

whether the appeal body may replace the regulators decision by its own judgement.⁷⁴¹ Those two related questions vary across Member States according to their national administrative traditions. The general principles of Community law only require that the appeal mechanism is effective and equivalent in case of a violation of national law.⁷⁴² The Framework Directive adds that the appeal bodies should duly take into account the merits of the cases,⁷⁴³ which implies that the standard of judicial review for an NRA decision is stricter than the standard used for the Commission antitrust decisions.

Lasok (2005:795) goes as far as stating that: “the appellate body, at least at the stage of the first appeal (if the system has more than one levels of appeal), has jurisdiction over all the factual aspects of the case and may therefore pass judgment on the NRA’s disposal of questions of complex fact and discretionary evaluations. In that sense, the appellate body is the real regulator.” I disagree for reasons of law and of opportunity. First, the formulation of the law is cautious enough and mainly aims at ensuring that the appeal bodies would not limit themselves to control whether the procedures have been respected (as it was the case in some Member States under the 1998 regulatory framework).⁷⁴⁴ Second, the rationale justifying the restrained control of the Community Courts towards complex economic assessment of the Commission applies to some extent to the control of the national Courts: both the Commission and the NRA function in an administrative system, both apply the same antitrust methodologies that are not based on the applications of precise scientific rules but on criteria

⁷⁴⁰ ECAP Decision 02/05, *Hutchison*, para 5.2. On the distinction between the standard of proof of the NRAs and the standard of judicial review of the appeal bodies, see also Chapter 3, section 3.2.1.B.

⁷⁴¹ In the US, there is a strong tendency to defer to the nominally expert agency. In *NCTA v BrandX*, 545 U.S. ____ (2005), the Supreme Court held that: “If a statute is ambiguous, and if the implementing agency’s construction is reasonable, Chevron requires a federal court to accept the agency’s construction of the statute, even if the agency’s reading differs from what the court believes is the best statutory interpretation”. This is based on *Chevron v. Natural Resources Defense Council*, 467 U. S. 837 (1984). In addition, the role of the Courts in regulatory decisions is weaker than in antitrust (where the NCA should put the case before the Court to be decided): Katz (2004:246).

⁷⁴² Both conditions derive from Article 10 EC, see Lenaerts at al. (2006:92-93), *inter alia* Case C-276/01 *Steffensen* [2003] ECR I-3755, para 60, Case C-453/99 *Courage v Crehan* [2001] ECR I-6297, para 29, Case C-255/00 *Grundig Italiana* [2002] ECR I-8003, para 33. The effectivity principle is recalled in Article 4(1) of the Framework Directive.

⁷⁴³ Temple Lang (1998a:119) notes judiciously that judicial review by national Courts of NRAs’ actions is essential from the harmonisation perspective because issues of Community law are involved and solely national Court may refer preliminary rulings to the Court of Justice. Thus, he concludes that is appropriate that national administrative and regulatory authorities are subject to more strict legal judicial review in the Community law sphere than in purely national sphere.

⁷⁴⁴ This was the case in the United Kingdom. See Article 4(1) of the Commission Proposal for a Framework Directive: “...The appeal body shall be able to consider not only the procedure according to which the decision was reached, but also the facts of the case...”.

and principles which are open to question such as economic ones,⁷⁴⁵ both have probably more expertise than the appeal bodies (especially if such appeal body is a Court and not a specialised institution). Moreover, if the appeal body were to become the real regulator, it would have to follow the Article 7 review, with the surprising and probably unintended result⁷⁴⁶ of judicial decision being possibly vetoed by the Commission

Thus, I submit that the legislature and the appeal body should choose a slightly stricter standard of judicial review than the one used in European antitrust, but that the appeal body should not become the real regulator by substituting its own decision with the one of the NRA (see also Table 3.8 above.)⁷⁴⁷ This intermediate approach has been followed by the Irish Electronic Communications Appeal Panel that applied a standard of review for complex economic assessment that goes beyond (i.e. the scrutiny is stricter) the marginal error test used in antitrust but below a full review and a re-assessment *de novo* of the case. The Panel held in the Hutchison 3G case⁷⁴⁸ that:

10.1 It seems therefore that what is envisaged (...) *is an examination of the decision of the Regulator as opposed to a reassessment de novo by the Panel (...)* This will mean that Panel can focus on evidence and materials upon which the Regulator based its decision and look at the inferences and conclusions it drew from those materials. Whilst the panel has appropriate expertise, and has expertise available to it, it is not the type of expertise which the Regulator itself has, for example, in collating data and information on the market and carrying out an investigation and analysis of that market. Rather it is the type of expertise which allows the Panel to understand the specialist or technical matters which the Regulator has regard to in carrying out its functions and making its decision. To this extent, a degree of deference can be shown but not the same degree which the court in *Orange* or *Gleeson* would have shown.

10.2 The Panel is of the view, therefore, that the standard as envisaged by the Regulations is broader than the standard as set out in *Orange*, *Gleeson* and *Carrickdale*. The Regulations envisage that the Panel can annul or annul in part the decision of the Regulator if on an examination of the Regulator's decision and the decision making process there are *errors of fact or law (which includes erroneous inferences of fact, or errors as to jurisdiction and procedure) such as would vitiate the decision. In practical terms, therefore, the error (or*

⁷⁴⁵ To take the formulation of Advocate General Tizzano in his Opinion in *Tetra Laval*, para 73.

⁷⁴⁶ One indication that the European legislature did not expect the appeal body to be a regulator and its decision to be vetoed by the Commission is that it did not adopt a safeguard provision similar to Article 35(3) of Regulation 1/2003 stating that the decrease power of the Commission (under Article 11(6) of Regulation 1) does not apply to the national court when reviewing NCA decision.

⁷⁴⁷ See also Maxwell (2002:I.1-31) and Taton (2005:806).

⁷⁴⁸ ECAP Decision 01/05 of 18 February 2005, *Hutchison v ComReg*. This standard was confirmed in ECAP Decision 03/05 of 10 October 2005, *Vodafone, O2 and Meteor v ComReg*, para 3.6 and 3.6.

errors) would need to be of significance before the Panel could annul the decision, in whole or in part. It should not be a trivial error. It should be one which, when objectively assessed had a bearing on the decision reached by the Regulator. However, the error(s) need not go to the root of the decision either. Rather the error(s) should be material in the sense that they are objectively relevant to and have a bearing on the conclusion the Regulator came to. In coming to this conclusion, the Panel will take into account the view of the Regulator given its expertise on certain technical matters, but ultimately can substitute its own opinion if it takes a different view in respect of these matters (emphasis supplied).

Another related issue is whether there is a different standard of judicial review between the different steps of the Significant Market Power regime. I submit that there is because the Community Courts apply a different standard of review when reviewing an antitrust market definition or dominance assessment and when proportionality and balancing of objectives are involved, and because the principle of proportionality only applies to the fourth step of the SMP regime (i.e. the choice of remedies).

Indeed when reviewing the application of the proportionality principle, the Courts apply varying degree of strictness depending on a number of factors like the restrictive effect of the measure and the type of interest adversely affected, the technicality of the matter and the expertise required, the temporary effect of the measure.⁷⁴⁹ In practice, three broad types of cases may be distinguished.⁷⁵⁰ (i) The first type is cases where an individual argues that his rights (like civil liberties) have been unduly restricted. The Courts engage in vigorous scrutiny because they are the ultimate protector of such right in a regime of rule of law. (ii) The second type is cases where an individual attacks a penalty imposed as being excessive. The Courts are reasonably searching because penalties impinge on personal liberties but the Court may strike down the penalty without undermining the entirety of the administrative policy with which it is connected. (iii) The third type is cases where individual argues that the very policy choice made by the authority is disproportionate (as the costs are excessive in relation to the benefits). The Courts are more circumspect because they should not substitute their own judgment to the one of the authority.⁷⁵¹ This is so in particular when the objectives that the

⁷⁴⁹ Trimidas (1999:122).

⁷⁵⁰ I follow the categories proposed by Craig and de Burca (2002:373).

⁷⁵¹ Note however that in some continental European countries where the combination inside an NRA of large discretion power and independence from the political power has been seen with suspicion by the traditional legal doctrine, the Courts control very strictly if the NRA has no exceed its competences when taking a decision. This

authority should follow can be contradictory such that the authority has to make discretionary choice, often under strict time constraints, in order to decide how best to balance and attain these aims. For instance in *Fedesa*,⁷⁵² the Court of Justice held that

14. (...) the legality of a measure adopted in that sphere can be affected only if the measure is manifestly inappropriate having regard to the objective which the competent institution is seeking to pursue.

Applying those three categories to the 2003 framework, the choice of remedies belongs to the third type of cases because it involves policy choice and arbitrage between contradictory objectives.⁷⁵³ This would mean a less intense judicial review for the fourth part of the SMP regime than for the three first parts.⁷⁵⁴

Resolution of disputes

Next to being an appeal body, the national Courts maintain their standard role of deciding disputes that are brought before them by operators. They may decide national disputes, but also cross-border disputes⁷⁵⁵ (in which case the competent jurisdiction will be determined according to the national international private law).⁷⁵⁶ In doing so, they apply the national law implementing European law and, in some cases, the provisions of EU law that are directly applicable.⁷⁵⁷

Interestingly, an operator may take a national or a cross-border dispute before a Court while bringing the same dispute in parallel before the NRAs.⁷⁵⁸ This necessitates coordination between national Court and NRAs or the creation of the same superior body which hears the appeal of the decisions of the NRAs and the national Courts and is responsible for the consistency of the case-law. Unfortunately, the regulatory framework does not provide any

has the unfortunate consequence that many decisions are annulled on competence grounds and not on merit grounds. For an account of the Dutch experience, see Larouche (2006a).

⁷⁵² Case C-331/88 *Fedesa*. See also Case 265/87 *Schröder* [1989] ECR 2237, para 21 and 22; Case T-30/99 *Bocchi Food Trade International v Commission* [1989] ECR II-943, para 92.

⁷⁵³ Valcke et al. (2005:61) noting however that some remedies (like compulsory access) might also be part of the first category as infringing the operator's property right.

⁷⁵⁴ This may be the reason why Temple Lang (2006:17) submits that "The judicial review of the decisions of [the NRAs and the NCAs] ought to be similar (not necessarily identical, as regulators may be making new rules and competition authorities will be applying existing ones)".

⁷⁵⁵ Article 21(4) of the Framework Directive.

⁷⁵⁶ Such international private law rules are partly harmonised at the EU level.

⁷⁵⁷ On the possibility to invoke the direct effect of a Directive: Case 41/74 *van Duyn v Home Office* [1974] ECR 1334, para 12.

⁷⁵⁸ Respectively, Articles 20(5) and 21(4) of the Framework Directive.

coordination rules (to respect the procedural autonomy of the Member States whose national rules would then apply).⁷⁵⁹ Moreover in general, the national Courts are the only ones entitled to grant damages.

Horizontal coordination between national Courts and appeal bodies

The regulatory framework does not provide any coordination mechanism between national Courts and appeal bodies to achieve consistent approach. Thus the coordination takes place with the standard ways of European law.

First, the national Courts may, and in some cases have to,⁷⁶⁰ ask a preliminary question at the Court of Justice (see *infra*, section 3.3.2.D). Although the interpretations of the Court is limited to the meaning and the effect or the validity of the EU law, such clarifications are very useful for a regulatory framework that is process-based and leaves a wide margin discretion to the Member States and their NRAs. Thus, I disagree with Lasok (2005:799) who considers that the preliminary ruling question would be of a limited use for European coordination between national Courts and appeal bodies because many problems are not in the meaning of the European legislation but rather in their application on which preliminary ruling have no effect. First, I think that the issues rose at the Courts or appeal bodies level are mainly of legal meaning. Second and more importantly, it seems to me on the basis of the preliminary ruling cases of the previous 1998 regulatory framework, that the Court of Justice had an impact on the way the provisions were applied.⁷⁶¹ Regrettably, the timeframe to get an answer from the Court (2 to 3 years) is inadequately long for a fast moving sector like electronic communications.

Second, the national Courts may coordinate through informal routes like reading decision of NRAs or appellate bodies in other Member States and commentaries on them published in books of periodicals. To stimulate this and in an effort to increase transparency, the

⁷⁵⁹ See Nihoul and Rodford (2004:636) calling for European Guidelines on coordination between NRAs and national Courts.

⁷⁶⁰ The responsibility of the State may in certain circumstances be invoked when a Supreme Court refuses to ask a preliminary question: Case C-224/01 *Gerhard Köbler v Republik Österreich* [2003] ECR I-10239, para 53-55 and Case C-173/03 *Traghetti del Mediterraneo v Repubblica italiana* [2006] ECR I-0000, para 43.

⁷⁶¹ Hocepić and de Streeck (2006:83). A similar critique on the limited usefulness of preliminary ruling question in antitrust law context was rejected by Lenaerts and Gerard (2004:339) analysed in Chapter 3, section 3.2.1.B.

Commission publishes on its website the national Courts and appeal bodies decisions regarding market analysis procedure.⁷⁶²

Third, a national court may ask for an opinion to the Commission that should reply according to the obligation of loyal cooperation of Article 10 EC.⁷⁶³ However, no similar mechanism equivalent to the antitrust decentralisation is provided like the possibility of *amicus curiae*.⁷⁶⁴ In addition, a more subtle means for coordination and consistency of Community law by the national Courts may be the Commission Article 7 Decision. Currently, the legal value of such decisions and the importance of them in national courts proceedings are not clear and in practice, some national judges have completely ignored such decisions. However, I submit that national Courts should take them into the utmost account according to Article 10 EC, although they would not be obliged to obey them as it is the case in antitrust law.⁷⁶⁵

3.3.2. European level

A. *Communication Committee (CoCom)*

The Communications Committee is a standard comitology Committee set up by the Framework Directive.⁷⁶⁶ It is composed of representatives of the Commission and of the Member States, in particular the Ministries although some NRAs are represented as well. It is chaired by the Commission and it meets on average five times a year.

The Committee has an informal role as a forum for discussion and exchange of best practices among Member States. For instance, the national transposition process of the 2003 regulatory framework and the difficulties encountered by certain Member States have been discussed in the Committee, and the Commission had played a crucial pedagogic role in ensuring a common interpretation of directives.

⁷⁶² http://europa.eu.int/information_society/policy/ecom/article_7/national_judiciaries/index_en.htm. As of August 2006, 5 judgements are listed in the database.

⁷⁶³ Case C-2/88 *Imm Zwartveld* [1990] ECR I-3365, para 16, Case C-234/89 *Delimitis* [1991] ECR I-935, para 53. Temple Lang (1998b:333).

⁷⁶⁴ See section 2.3.1.

⁷⁶⁵ See section 2.3.1. On Article 10 EC in general, see Temple Lang (2000b).

⁷⁶⁶ Article 22 of the Framework Directive and Council Decision of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission, OJ [1999] L 184/23. See the website of the CoCom at: <http://forum.europa.eu.int/Public/irc/info/cocom1/home>.

The Committee has also a more formal role of assisting (and controlling) the Commission in implementing the directives. It follows two very different procedures according to the type of implementing measure foreseen by the Commission. On the one hand for the measures that are not binding on the Member States and their NRAs (which constitute in practice the majority of the implementing measures) as well as for vetos on NRAs' draft market analysis decisions, the CoCom gives a non-binding opinion to the Commission under the so-called advisory procedure.⁷⁶⁷ Until now, seven such Commission Recommendations⁷⁶⁸ have been adopted after discussions in the CoCom that led to a consensus or quasi consensus on their content and five NRA's draft decisions have been vetoed.

An analysis of the votes⁷⁶⁹ on the Commission veto decisions shows that the attitudes of the Member States are mainly driven by their own national interest. They support the Commission in vetoing draft decisions that undermine their own internal policy. Thus, many Member States support the first Finnish veto (markets 4 and 6) because the NRA draft decision could be seen as undermining the dominance presumption at 50% market shares. They also support the German veto (market 9) because the NRA draft decision could be seen as a no-regulation rule for the small fixed and mobile operators.⁷⁷⁰ Otherwise, the Member States tend abstain because on the one hand, they favour national discretion (hence would oppose a veto), but on the other hand, they do not want to antagonise the Commission and jeopardise their own notifications process. This was the case for the second Finnish veto (market 15) and the Austrian veto (market 10).⁷⁷¹

⁷⁶⁷ According to the Article 19 of the Framework Directive.

⁷⁶⁸ Four are relevant to economic regulation: Commission Recommendation 2003/561 of 23 July 2003 on notifications, time limits and consultations provided for in Article 7 of 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, O.J. [2003] L 190/13; Commission Recommendation 2005/57 of 21 January 2005 on the provision of leased lines in the European Union (Part 1 – Major supply conditions for wholesale leased lines), O.J. [2005] L 24/39 and Commission Recommendation 2005/268 of 29 March 2005 on the provision of leased lines in the European Union (Part 2- Pricing aspects of wholesale leased line part circuits), O.J. [2005] L 83/52; Commission Recommendation 2005/698 of 19 September 2005 on accounting separation and cost accounting systems under the regulatory framework for electronic communications, O.J. [2005] L 266/64.

⁷⁶⁹ See also Cawley (2006).

⁷⁷⁰ Case FI/2003/24-26 of 20 February 2004: 11 in favour, 3 against, 1 abstention; Case DE/2005/144 of 17 May 2005: 10 in favour, 1 against, 9 abstentions.

⁷⁷¹ Case FI/2004/82 of 5 October 2004: 5 in favour, 1 against, 12 abstentions; AT/2004/90 of 20 October 2004: 5 in favour, 2 against, 17 abstentions.

On the other hand for the measures that are binding on the Member States, the CoCom has more power as it may block the Commission Decision under the so-called regulatory procedure. In practice, few binding implementing acts can be adopted under this procedure as its scope is limited to numbering and standardisation issues.⁷⁷² Until now, only one such instrument has been issued by the Commission.⁷⁷³

B. Independent Regulators Group (IRG) and European Regulators Group (ERG)

The Independent Regulators Group is more original in the EU institutional landscape and was spontaneously created by the NRAs of the Member States and the EEA countries in 1997⁷⁷⁴ to share experience and exchange point of view on issues of common interest amongst its members. The IRG is composed of the 25 Member States and members, and with an observer status, the NRAs of the EEA and candidate countries.⁷⁷⁵ It is chaired by one NRA.

The IRG aims to contribute to the development of a common regulatory culture. To do so, it looks at several detailed regulatory issues and decides Principles of Implementation and Best practices (PIBs) like on mobile call termination, cost recovery principle, local loop unbundling, LRIC cost modelling.⁷⁷⁶

However, the Commission is not part of the IRG and to be involved in the consensus building, it sets up the European Regulators Group with a Decision in 2002.⁷⁷⁷ The ERG is composed of representatives of the Commission and the 25 independent NRAs with the primary

⁷⁷² According to Article 10(4) and 17(4) of the Framework Directive.

⁷⁷³ Commission Decision of 24 July 2003 on the minimum set of leased lines with harmonised characteristics and associated standards referred to in Article 18 of the Universal Service Directive, OJ [2003] L 186/43.

⁷⁷⁴ The website of the IRG is: <http://irgis.icp.pt/site/en/>.

⁷⁷⁵ Iceland, Liechtenstein, Norway, Switzerland as well as Bulgaria, Romania, Turkey, and Croatia.

⁷⁷⁶ In the context of economic regulation: PIBs of 8 February 2006 regarding the use of current cost accounting methodologies as applied to electronic communications activities; PIBs of 8 February 2006 regarding the implementation and use of Retail Minus pricing as applied to electronic communications activities; PIBs of 1 April 2004 on the application of remedies in the mobile voice call termination market; PIBs of 24 September 2003 regarding cost recovery principles; PIBs of 18 October 2001 regarding Local Loop Unbundling (as amended in May 2002).

⁷⁷⁷ Recital 36 of the Framework Directive; Commission Decision 2002/627 of 29 July 2002 establishing the European Regulators Group for Electronic Communications Networks and Services, O.J. [2002] L 200/38, as modified by Commission Decision of 14 September 2004, O.J. [2004] L 293/30. See also the ERG Guide of February 2006 to who we are and what we do. The website of ERG is: <http://crg.eu.int>. For the spectrum a similar Group has been created: Commission Decision 2002/622 of 26 July 2002 establishing a Radio Spectrum Policy Group, OJ [2002] L 198/49.

responsibility for overseeing the day-to-day operation of the markets,⁷⁷⁸ and with an observer status, the NRAs of the EEA and candidates countries. It has the same chairman as the IRG and it meets on average four times a year at the plenary level (heads of the NRAs). The work is prepared by permanent working groups (on SMP, on mobile markets, on fixed markets, on regulatory accounting, and on end-users) and ad hoc project teams (like on remedies) which meet more frequently.⁷⁷⁹

As the IRG, the European Regulators Group plays an informal role in providing an interface between its members to contribute to the development of a common regulatory culture.⁷⁸⁰ To do so, the Group looks in detail at certain particular and politically sensitive problems and tries to develop similar approaches. For instance, the ERG has looked at the regulation of bitstream access, international roaming, Voice over IP, or the implementation of the Accounting separation and cost accounting systems.⁷⁸¹ However, the Group is not able to impose any obligation on its members.

C. European Commission

I now turn to how the Commission applies the three powers it derived from Article 211 EC and secondary law⁷⁸² in the electronic communications sector: firstly an exclusive power to propose new Community laws, which enables it to control the European regulatory agenda; secondly a power to adopt implementing rules; and thirdly the power to monitor compliance of national measures with Community law.

⁷⁷⁸ Since the modification of the ERG decision in 2004, the Ministries with NRAs competencies are no more entitled to participate at the ERG, except at the invitation of the ERG for specific topics for which they are competent.

⁷⁷⁹ In its Annual Report 2004, ERG(05) 16, the ERG notes that the NRAs have devoted approximately 40 full-time equivalent and 710.000 € to the work of the ERG in 2004.

⁷⁸⁰ Article 3 of the Decision on European Regulators Group. There is thus a clear overlap between the activities of the ERG and the IRG, hence a risk that the main contentious issues are decided within the IRG and then presented for rubber stamping to the ERG.

⁷⁸¹ ERG Common Position of 25 May 2005 on Bitstream Access, ERG(03) 33rev2; ERG Common Position of September 2005 on guidelines for implementing the Commission Recommendation 2005/698 on Accounting Separation and Cost Accounting Systems, ERG(05) 29; ERG Common Position of 25 May 2005 on the coordinated analysis of the markets for wholesale international roaming, ERG(05) 20; ERG Report of October 2005 on International Roaming Retail Tariff Transparency; Revised ERG Working Paper of September 2005 on the SMP concept for the new regulatory framework, ERG(03) 09rev3; ERG Common Statement of February 2005 for VoIP regulatory approaches, ERG(05) 12

⁷⁸² For an overview of the role of the Commission in the electronic communications sector, see Van Ginderachter (2004).

CI. Commission as a rule-maker: the legislative powers

The first power of the Commission is to propose legislative measures. In the initial phases of the liberalisation programme (from 1987 to 1998), the Commission has made an extensive use of its legislative powers⁷⁸³ to set the regulatory agenda in the sector up to the details of the obligations to be imposed on the operators (e.g. regarding accounting separation and cost accounting methodologies).

However with the 2003 Framework, the Commission focuses more on procedures than on substance. More broadly, the Commission relies on the Open Method of Coordination to build a European Information Society with its successive Actions Plans.⁷⁸⁴ The method involves four steps:⁷⁸⁵ (1) Fixing guidelines for the Union combined with specific timetables for achieving the goals that they set in the short, medium and long terms; (2) Establishing, where appropriate, quantitative and qualitative indicators and benchmarks against the best in the world and tailored to the needs of different Member States and sectors as a means of comparing best practice;⁷⁸⁶ (3) Translating these European guidelines into national and regional policies by setting specific targets and adopting measures, taking into account national and regional differences;⁷⁸⁷ (4) Periodic monitoring, evaluation and peer review organised as mutual learning processes.⁷⁸⁸ The influence of the Commission under this method is obviously weaker than in case of drafting detailed rules and recommendations.

Thus, the Commission relies less on its legislative powers to shape the regulatory agenda in the sector to the benefit of more proactive Member States. An example is the regulatory

⁷⁸³ The Commission was helped by the Court of Justice, which interpreted the EC Treaty as giving the Commission broad liberalisation powers: Case C-202/88 *France and Others v Commission (Terminal Equipment Directive case)* [1991] ECR I-1223 and in Joined Cases C-271, C-281 and C-289/90 *Spain and Others v Commission (Service Directive case)* [1992] ECR I-5833.

⁷⁸⁴ Communication from the Council and Commission of 14 June 2000, *eEurope 2002: An information society for all*; Communication from the Commission of 28 May 2002, *eEurope 2005: An information society for all*. COM(2002) 263 Communication from the Commission of 1 June 2005, *i2010 – A European Information Society for growth and employment*, COM(2005) 229.

⁷⁸⁵ Para 37 of the Presidency Conclusions of the Lisbon European Council, March 2000.

⁷⁸⁶ Council Resolution of 18 February 2003 on the implementation of the *eEurope 2005 Action Plan*, OJ [2003] C 48/2.

⁷⁸⁷ National Broadband Actions Plans as referred in the Communication from the Commission of 20 March 2006, *Bridging the Broadband Gap*, COM(2006) 129.

⁷⁸⁸ Commission Communication of 19 May 2006, *i2010 – First Annual Report on the European Information Society*, COM(2006) 215. Also, *Information Society Benchmarking Report of 2005*, available at http://europa.eu.int/information_society/eeurope/i2010/index_en.htm

review performed by the British NRA, Ofcom, which is setting policy approaches such as forbearance and equivalence on the European agenda.⁷⁸⁹

C2. Commission as a coach: the implementation powers

The second power of the Commission is to adopt implementing measures. On that basis, the Commission endeavours to build a consensus among NRAs on a common regulatory vision, which is particularly important given the broad margin of discretion left to the NRAs. To do so, the Commission relies mainly on the Communications Committee and the European Regulators Group.

For instance, the Commission services provide interpretative guidance on particular provisions of the directives in reply to specific questions coming from Ministries, NRAs or undertakings and associations with interests in the communications sector. Bilateral discussions have been held with several Member States on draft transposition laws. Where possible, responses from Commission services have been made available on a collective basis, and at the level of the principles involved, within the framework of the Communications Committee. This approach aims to foster the objective of achieving consistency of application across the Community, makes interested parties aware of specific issues of interpretation which are probably also relevant to their own situations, and enables Committee members to give their views on the issues concerned.

At the ERG, the role of the Commission is to build consensus among the 25 NRAs. This can best be illustrated with its role to foster a consistent approach on remedies. In 2002, the Commission appointed economic consultants to reflect on which competition problems could be expected in fixed, mobile and broadband markets and which could be the proportionate remedies.⁷⁹⁰ A discussion between the Commission services, the NRAs and the consultants took place at the end of 2003 and the beginning of 2004. A steering group brought to the floor several fundamental issues that were further discussed by the heads of the NRAs at the ERG plenary meetings, and then arrived at a wording that revealed the complexities of the

⁷⁸⁹ Ofcom Final statements of 22 September 2005 on the Strategic Review of the Telecommunications and undertakings in lieu of a reference under the Enterprise Act 2002.

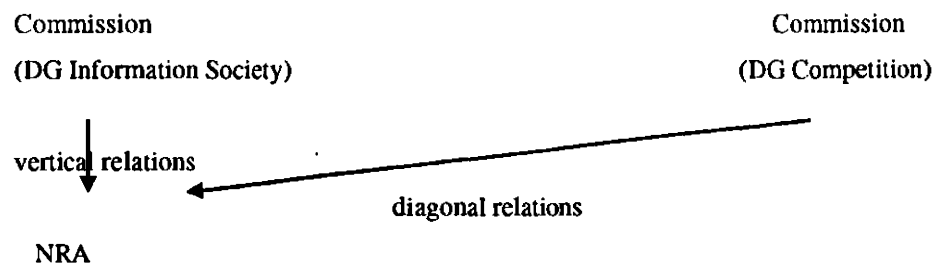
⁷⁹⁰ See the reports of the Economic Expert Group on Remedies, Sept. 2003, available at: http://www.europa.eu.int/information_society/topics/ecomm/useful_information/library/studies_ext_consult/index_en.htm

underlying issues as well as the different approaches taken by NRAs. At the end, a Common position was adopted by the ERG in April 2004 and updated in May 2006.

Interestingly, this leadership style of the Commission has been modelled by Barros (2004: section 3). Generally, he assumes that the Commission would take an average position among the different preferences of the NRAs, hence favouring less regulation than some NRAs and more regulation than others.⁷⁹¹ However Barros shows that, in certain circumstances where national regulation has strong spill-over effects over the other Member States, the Commission would prefer less regulation than any individual NRA. This is because the Commission internalises the negative effects of regulation on all European undertakings (being national or foreign to a specific Member State) whereas an individual NRA takes only into account the negative effects of regulation on national operators. In these cases, Barros shows that the ‘less regulation’ effect dominates the ‘averaging’ effect.

C3. Commission as a referee: the monitoring powers

The third power of the Commission is to monitor the implementation of Community law. The Commission controls the Member States and their NRAs with three means:⁷⁹² with its role in sector-specific regulation (vertical relations) by taking ex-post infringement procedures and by controlling ex-ante the NRAs’ draft decisions, as well as with its role in competition law (diagonal relations) by taking antitrust cases.



⁷⁹¹ For instance, the Commission supports the regulation of mobile termination rate (see Recommendation on relevant markets) whereas the German regulator opposes to it (see declaration of some BNetzA officials like Groebel (2003)).

⁷⁹² See also Commission Report on Competition Policy 2005, para 89.

Vertical coordination (1): ex-post infringement procedures

The Commission relies on several instruments to ensure Member States compliance with Community law.⁷⁹³ First, it relies on informal pressure mechanisms by adopting an annual review of the state of transposition of Community law in each Member State.⁷⁹⁴ These implementation reports aim to inform public opinion and stakeholders in such a way that pressure would be put, including peer pressure, on the concerned actors in the Member States. In marketing terms, this initiative would be seen as a “pull” approach.

If such informal mechanisms do not work, the Commission may open formal infringement procedures (Articles 226 and 228 EC), which can be compared to “push” approach in marketing terms. As of July 2006,⁷⁹⁵ it opened 11 procedures for non-communication of the transposition measures whose 6 have already been decided by the Court⁷⁹⁶ and 72 procedures for incorrect implementation whose some have already be closed but none have yet been decided by the Court.⁷⁹⁷ The Commission the Commission has responded with unusual speed to transposition delays⁷⁹⁸ for several reasons: because of the high political priority of the creation of a modern electronic communications environment as part of the re-launched Lisbon strategy;⁷⁹⁹ because infringement actions ensure legal certainty, which is important for directives that leave a wide margin of discretion to national legislatures; and because a decision of the Court may clarify the objectives of European law that it considers that Member States do not have correctly transposed and/or implemented.⁸⁰⁰

⁷⁹³ Communication from the Commission of 11 December 2002, Better monitoring of the application of Community law, COM(2002)725, adopted as a follow-up of the White Paper on the European Governance.

⁷⁹⁴ Available at: http://www.europa.eu.int/information_society/topics/ecommm/all_about/implementation_enforcement/index_en.htm.

⁷⁹⁵ 2003 framework, excluding the ePrivacy Directive and the Consolidated Liberalisation Directive.

⁷⁹⁶ See *infra*.

⁷⁹⁷ 32 cases related to economic regulation (mainly related to the independence and powers of the NRAs, the delay in the market review, and transitional measures between the 1998 and the 2003 framework) and 41 cases related to non-economic regulation (mainly related to must-carry, number portability, availability of 112 number, designation of universal service provider and directories services). See the Tables of the Commission at http://europa.eu.int/information_society/policy/ecommm/implementation_enforcement/index_en.htm. With regard to the previous regulatory frameworks, the Commission launched more 200 procedures, out of which about ten percent were conducted to the end and decided by the Court. Usually cases related to the liberalisation directives (about half of the cases) were dealt with by DG Competition, whereas the cases related to the harmonisation directives were dealt with by DG Information Society and Media.

⁷⁹⁸ As instructed by a Resolution of the European Parliament of 18 November 2003 on the Eight Report from the Commission on the implementation of the Telecommunications Regulatory package, A5-0376/2003.

⁷⁹⁹ Hogan & Hartson and Analysys (2006:121-122).

⁸⁰⁰ For instance, under the previous 1998 package, the Court specified that the lack of transparent rules was tantamount to discrimination as regards the granting of rights of way, since the non-discrimination obligation

Interestingly, all these cases relate to legal national provisions infringing EU law and no case have been opened against the action of a NRA. Yet a Member State may be held liable for an unlawful action of its NRA because the case-law makes a very broad interpretation of the categories of public bodies that render a Member State liable of its actions.⁸⁰¹ That may however pose a problem for the independence of the NRAs.⁸⁰²

Vertical coordination (2): ex-ante market definition and Article 7 review

The need for ex-ante additional powers

Regarding specifically the Significant Market Power regime, the European legislature gave to the Commission two additional means to control the NRAs in a preventive way:⁸⁰³ the Recommendation on relevant markets and the Article 7 review. It did so because on the one hand, it recognised that infringement procedures are ex-post and long to be decided,⁸⁰⁴ hence inadequate in fast moving markets where regulatory error can be costly, and on the other hand, the enhanced discretion of the NRAs had to be counterbalanced by an parallel reinforced control of the Commission not to undermine the internal market.

This ex-ante monitoring has been modelled by Barros (2004: section 4). He compares the costs for the Commission to force NRAs to change its decision ex-ante (i.e. before the decision is adopted) with the cost to force a change ex-post (i.e. after the decision is adopted). He submits that it is economically justified to have a systematic ex-ante control of NRAs' decisions if the differential of costs is important. In telecommunications Barros supposes that

had to be interpreted as aiming at the objective of market opening Case C-97/01 *Commission v Luxembourg (Rights of way)* [2003] I-5797.

⁸⁰¹ Case 103/88 *Fratelli Costanzo v Comune de Milano* [1989] ECR I-1839. Similarly, Geradin (2004:1550), Nihoul and Rodford (2004:671-672).

⁸⁰² Geradin and Petit (2004:28).

⁸⁰³ Those means go further that the normal loyal cooperation between the Commission and the NRAs derived from Article 10 EC: On such obligation see Temple Lang (1998b) and (2000).

⁸⁰⁴ Note that the relationship between the ex-ante review and the ex-post infringement procedures may be complex. The fact that the Commission refrain from signalling any violation of European antitrust during the Article 7 review does not impede the Commission to take an later action against the Member State for infringement (under Article 226 or 86 EC), nor to take an action against an operator for violation of Articles 81 or 82 EC: Recital 15 *in fine* of the Framework Directive and Case AT/2004/44 (Dispute settlement with regard to access and interconnection). See similarly in a case dealing with the power of the Commission to notify to the Member States a clear and manifest infringement of Community provision in the field of public procurement, according to Article 3 of Directive 89/665: Case C-359/93 *Commission v The Netherlands* [1995] ECR I-157, para 13.

the differential of costs is important, hence the Article 7 systematic control is justified. However, the model is incomplete because it only takes into account the cost of making the NRA change its decisions, but not the costs that the incorrect decisions create. As these costs are clearly higher in case of an ex-post control than ex-ante control because the incorrect decision will stay longer in the former case and as costs of regulatory errors are important in telecommunications (such cost may be particularly large when ex-post procedures are slow relatively to the rapid pace of market evolution and when innovation may be very beneficial.⁸⁰⁵), the conclusion of Barros that the Article 7 mechanism is justified can only be reinforced.

The Recommendation on relevant markets

The first means for the Commission to control the Member States is by issuing a Recommendation on relevant markets. For the first Recommendation, this means was very effective as the NRAs have generally followed the definitions proposed by the Commission. To be sure, some NRAs have deviated and have defined sometimes markets more narrowly or more broadly but the Commission has always verified whether the sum of markets defined covers the entire scope of the corresponding markets of the Recommendation.⁸⁰⁶ That said, the discretion of the Commission for the first Recommendation was strongly constrained by the Annex I of the Framework Directive, which contains a list of markets to be identified.⁸⁰⁷

For the next Recommendation set for the end of 2006, the role of the Commission will be more important as it will not any more be bound by the Annex I of the Framework Directive. The Commission may thus influence the phasing out of the regulation of certain markets, or conversely foster regulation of other markets. However, the NRAs have already announced that they will rely more on their flexibility and deviated more often than for the first round of market analysis.⁸⁰⁸

⁸⁰⁵ For instance, Hausman (1997) valued the delay of the introduction of voice messaging services from late 1970s until 1988 at US\$ 1.27 billion per year by 1994, and the delay of the introduction of mobile service at US\$ 100 billion, large compared with the 1995 US global telecoms revenues of \$180 billion/year.

⁸⁰⁶ Commission Communication on Market Reviews, p. 5. However in the broadcasting transmission market (number 18) all the NRAs so far deviate from the Commission Recommendation.

⁸⁰⁷ In practice, the Commission had merely to re-define the markets listed in the Annex I according to competition law methodologies and add the relevant markets related to the broadcasting sector.

⁸⁰⁸ I/ERG Response to the call for input on the 200R Review, p. 33.

The Article 7 review – Procedural aspects

The second means for the Commission to control the Member States is by reviewing the NRA's draft decisions that affect the trade between Member States, with a possibility to veto market definition deviating from the Commission Recommendation and SMP assessment as well as a possibility to give non-binding comments on the choice remedies. The goals of such systematic review are threefold: (i) ensuring consistent regulation across the Community on the basis of competition law principles; (ii) limiting regulation to markets where there is a persistent market failure; and (iii) bringing more transparency in the regulatory process.⁸⁰⁹

The veto power was the main contentious political issue during the adoption of the 2003 framework. The Commission,⁸¹⁰ the European Parliament⁸¹¹ and the industry were in favour of a broad veto right (covering all the four steps of the SMP regime) to strengthen the common regulatory culture and the internal market for electronic communications. The Council⁸¹² (partly lobbied by the NRAs) strongly opposed any veto power as upsetting the institutional balance of the Treaty (as the Commission, it was claimed, would play the role of the Court of Justice) and thereby being unconstitutional. These critiques are unconvincing because the Community Courts remain the ultimate judge of the European law and were in fact mainly motivated by the reluctance of the Council to concede any additional power to the Commission.⁸¹³ As a political compromise, the different branches of the European legislature agreed that the Commission would get a veto on the parts of the NRA's draft decisions that are linked to antitrust methodologies (where the Commission has the most expertise and an interest in preserving the integrity of law) and that this power would be subject to the non-binding opinion of the CoCom.⁸¹⁴

The procedure for the Commission review is inspired by the merger or the State aid control and evolves in several steps. First, the NRAs may hold pre-notification meetings with the Commission to identify and discuss issues of particular concern at an early stage and to

⁸⁰⁹ Commission Communication on Market Reviews, p. 1.

⁸¹⁰ Article 6(4) of the Commission Proposal for a Framework Directive, OJ [2000] C 365E/198.

⁸¹¹ Amendment 33 of the Opinion of the European Parliament of 1 March 2001 OJ [2001] C 277/91.

⁸¹² Article 6(4) of the Council Common Position of the 17 September 2001 as explained by the para III.A.B.1 of the Statement of reasons, OJ [2001] C 337/34. See also the more detailed analysis by a member of the Spanish NRA: Alonso Salterain (2002).

⁸¹³ Also in this sense, Larouche (2002:147).

⁸¹⁴ Note that Larouche (2002:147) suggested to rely on the opinion of the ERG instead of the CoCom because the NRAs can give a better informed opinion than the Ministries. Such solution has also the advantage of better respecting the independence of the NRAs with regard to the Ministries.

receive guidance as to the information and the level of analysis required to support their conclusions.⁸¹⁵

Then,⁸¹⁶ the NRAs should notify the draft decisions that concern economic regulation⁸¹⁷ and that affect the trade between Member States (i.e. that may have an influence, direct or indirect, actual or potential, on the pattern of trade between Member States in a manner that might create a barrier to the single market and they comprise measures that have a significant impact on operators or users in other Member States).⁸¹⁸ The NRA may notify all the steps of the SMP analysis at once or do several successive notifications (for instance the market definition only, and then the SMP analysis and the remedies). Also, NRAs may do the public consultation in parallel of the notification to the Commission of beforehand.⁸¹⁹ To do so, the NRAs use a standard notification form⁸²⁰ detailing the draft measure proposed and its rationale, the results of the public consultation and the opinion of the NCA if any. In case a NRA does not notify its decision to the Commission, the consequences have yet to be tested. An infringement procedure may be opened against the Member State. In addition, the NRA measure can not have any effect in the national legal order in some Member States.⁸²¹

At the notification, the Commission does a first phase review of (normally) one month⁸²² and has four options: (1) It may not adopt a decision; (2) it may adopt a decision stating that it

⁸¹⁵ Point 18 of the Commission Recommendation on procedures Article 7 and Commission Communication on Market Reviews, p. 3.

⁸¹⁶ Article 7(3) of the Framework Directive.

⁸¹⁷ Measures that fall within the scope of Articles 15 or 16 of the Framework Directive, Articles 5 or 8 of the Access Directive, or Article 16 of the Universal Service Directive.

⁸¹⁸ Recital 38 of the Framework Directive, derived from the case-law in competition policy and in the Internal market: Case 56/65 *Société Technique Minière* [1966] ECR 235 at 249; Joined Cases 6/73, 7/73 *Commercial Solvents* [1974] ECR 223 para 30-35 summarised in the Commission Guidelines of 30 March 2004 on the effect on trade concept contained in Articles 81 and 82 of the Treaty, OJ [2004] C 101/81. Joined Cases C-295/04 to C-298/04, *Manfredi v Lloyd, Cannito v Fondiaria, Tricarico v Assitalia* [2006] ECR I-0000, para 42.

⁸¹⁹ For reasons of transparency and efficiency, the Commission favours one single notification containing all the four steps of the SMP analysis and after the national consultation: Commission Communication on Market Reviews, p. 3 and 4.

⁸²⁰ Annex to the Commission Recommendation on procedures Article 7 review.

⁸²¹ For a similar solution in the context of the transparency Directive, see: Case C-194/94 *CIA Security International v Signalson and Securitel* [1996] ECR I-2201 para 45-55 and Case C-159/00 *Sapod Audic v Eco-Emballages* [2002] ECR I-5031 para 47-53. In Belgium, the Court of Appeal of Brussels has annulled a NRA decision because it was not notified to the Commission: Para 53-54 of the Decision of 30 June 2006. case 2003/AR/2474 *Belgacom Mobile v IBPT*, available at http://www.bipt.be/phpscripts/AffairesJuridiques/AffairesJuridiques_FR.php

⁸²² If the NRA notifies its decision in parallel of the national consultation, the timeframe is of one month minimum but may be longer if the national consultation is longer: Article 7(3) *in fine* of the Framework Directive.

does not have any comment;⁸²³ (3) it may adopt a decision with comments that the NRA should take into the utmost account; (4) or it may open a second phase examination if it considers that the market definition (other than the one provided in the Commission Recommendation) or the SMP assessment contained in the draft measure would create a barrier to the single market or if it has serious doubts as to its compatibility with the Community law (and in particular the objectives referred to in Article 8 of the Framework Directive).⁸²⁴

As the Framework Directive explicitly states that the Commission 'may' make comments, I submit that the Commission is not obliged to open a second phase even if it has doubts as to the legality of the NRA draft measure.⁸²⁵ Such discretion is appropriate and the Commission should not become a first European appeal body because it does not have the time to do so neither the required independence (as the Commission is also an honest broker between the national regulators in the ERG).⁸²⁶

Finally if the Commission has opened a second phase review, it has a further two months to decide between: (1) accepting the draft measure by removing its serious doubts, possibly after a modification of the draft measure by the NRA, or (2) vetoing the market definition or the SMP assessment contained in the NRA draft measure, after a non-binding opinion of the CoCom, indicating the reasons why the draft measure should not be adopted together with specific proposals for amending the draft measure.

In order to manage this review, a dedicated unit in DG Information Society (of about 15 people) and the officials of the Telecommunications Unit in DG Competition (of about 30

⁸²³ For reasons of transparency, the Commission has so far adopted a decision in every case, even where it has no comment: Communication on Market Reviews, p. 3.

⁸²⁴ Article 7(4) of the Framework Directive. It is not clear if the creation of a barrier to the single part constitutes a separate test or if it is included in the more general compatibility with Community law test (as internal market is referred to, *inter alia*, in Article 8(3) of the Framework Directive).

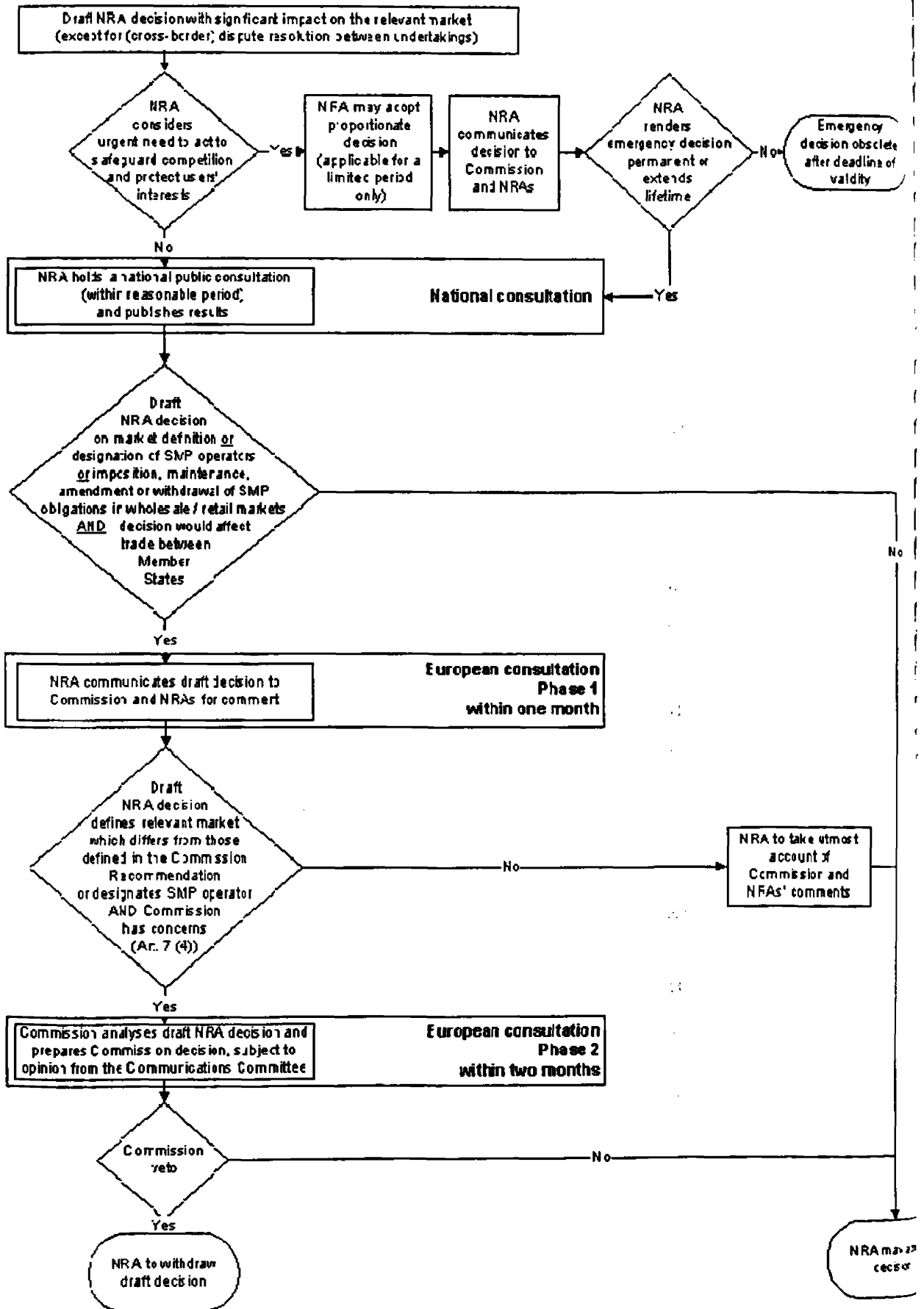
⁸²⁵ The formulation of Article 7 of the Framework Directive is similar to the one of Article 226 EC, from which the Court of Justice inferred the discretion of the Commission and the possibility not to take an infringement case against a Member State violating EU law: Case C-87/89 *Sonito v Commission* [1990] ECR I-1981 where the Court of Justice declared inadmissible an annulment action by a private party against the Commission refusal to open an infringement procedure, and Case 247/87 *Star Fruit v Commission* [1989] ECR 291, para 11 where the Court of Justice declared inadmissible a failure to act action by a private party against a Commission refusal to open an infringement procedure. The issue in Article 7 is now pending before the Court of First Instance where Vodafone has introduced an annulment procedure against a Commission not to open a Phase II (Case ES/2005/330 (market 15): Case T-109/06, *Vodafone v. Commission*).

⁸²⁶ Similarly already before the antitrust decentralisation, the Commission refused to be the appeal body of the NCA decisions: *Faull and Nikpay* (1999).

people) work very closely together and establish joint case teams for each notified draft decision in order to draft the Commission reaction within the imposed tight deadlines. In order to speed up the process, the College of Commissioners empowered two of its members (the Commissioner in charge of the Information Society and Media and the Commissioner in charge of Competition) to take jointly most of the decisions on its behalf.⁸²⁷ In practice, the full College has only to decide on veto decision.

⁸²⁷ See the habilitation of 23 July 2003, SEC(2003) 857, which relates to: decisions to declare a notification incomplete; decisions not to make comments at the end of Phase I; decisions to make comments at the end of Phase I; decisions to launch a Phase II review; decisions, at the end of Phase II, to withdraw the Commission's initial objections; decisions to approve "alternative remedies" under Article 8(3) of the Access Directive; decisions to reject "alternative remedies" under Article 8(3) of the Access Directive. Subsequently, a sub-delegation of powers was granted to the Directors General of DG Information Society and DG Competition as regards to phase I decisions: Decisions that a notification of a draft measure is incomplete; decisions to refrain from making comments on a notified draft measure within the one-month period; decisions to make comments on a notified draft measure and/or the reasoning on which it is based, within the one-month period provided.

Figure 3.13: The procedures of the SMP analysis



Article 7 review – the standard of review

The Commission itself submits that it exercises a marginal review of the assessment of facts given their inherent complexity,⁸²⁸ thereby implying the same scope of review than the Community Courts on the antitrust Commission decisions.⁸²⁹ However in the German veto, the Commission went further and did a full assessment of the merits and strongly recommends the NRA to adopt the Commission's view when doing its new market analysis.⁸³⁰

Larouche and de Visser (2005:9) criticized this extension of the scope of the review arguing that the Framework Directive only permits a marginal control with the advantage of encouraging regulatory competition among the NRAs. I disagree for reasons of law and of opportunity. On the one hand, the provision of the Framework Directive⁸³¹ states that the Commission may veto a NRA draft decision for two reasons: when violating Community law and when creating a barrier to single market. To me, this second reason implies that the Commission should go beyond a pure legal review and assess fully the merits of the case, at least regarding the establishment of the internal market.⁸³² On the other hand, the main arguments⁸³³ to limit the scope of judicial review of the European Courts against antitrust Commission decisions (i.e. the violation of the separation of power between the administration and the judiciary and the lack of expertise of the Courts) do not apply when the Commission is reviewing an NRA decision. To the contrary, the Commission is an administration like the NRA and has normally enough expertise to fully assess an NRA draft decision. Thus, I submit that the Commission may (but is not obliged to) go further than the scope of review usually relied upon by judicial Courts and may recommend an NRA to adopt the Commission view when doing again its market analysis.

⁸²⁸ *Inter alia* Case IE/2004/121 (market 15), p. 7; Case AT/2004/90 (Veto decision on market 10), para 15 and 31; Case FI/2003/24-27 Veto on markets 4 and 6), para 12 and 29; Case DE/2004/144 (Veto decision on market 9), para 17.

⁸²⁹ Case C-12/03P *TetraLaval*, para 39, analysed *supra*.

⁸³⁰ Tellingly, the concluding part of the German veto decision does not reproduce a standard paragraph that may be found in the three other veto decisions stating that: "NRAs are accorded discretionary powers correlative to the complex character of the economic, factual and legal situations that need to be assessed. Therefore, the Commission cannot prejudice the outcome of the market analysis."

⁸³¹ Article 7(4) of the Framework Directive.

⁸³² Which was the case in the German veto criticised by Larouche and de Visser (2005). An additional legal argument in favour of a broad scope of review for the Commission is that the Commission should in particular assess the compatibility of the NRA draft measure with the objectives of Article 8 of the Framework Directive. As we saw, these objectives are not prioritised and may internally conflict. Thus, if the NRA favours one objective over another, the Commission can veto such decision where it would have preferred another ranking.

⁸³³ On those arguments, see Vesterdorf (2005a) and the ECAP Decision 01/05.

Article 7 in practice

As of June 2006,⁸³⁴ the Commission services held 147 pre-notification meetings. It received 409 notifications of NRAs draft decisions and 364 cases have already been dealt with. 121 cases were closed in phase I without comment, 236 cases were closed in phase I with a comment letter, 2 cases were accepted in phase II, and 5 cases were vetoed in phase II.⁸³⁵ In addition, 12 cases have been withdrawn by the NRAs to prevent such veto, 2 cases were declared incomplete and 27 cases were still pending, one of which in Phase II. In addition, the Commission received 13 notifications of dispute resolution draft decisions and 28 notifications of further remedies related to previously notified cases.

Table 3.10: Statistics of Article 7 review cases (as of June 2006)

		Number decisions	%
Phase I	Without comments	121	33
	With comments	236	65
Phase II	Accepted (withdrawal of serious doubts)	2	0.5
	Vetoed	5	1.3
TOTAL		364	100
Withdrawal (before veto)		12	

Source: European Commission

On the basis of the Commission decisions, some observation may be done on the attitude of the Commission in each of the four steps of the SMP and regarding the general role of the Article 7 review.

The Article 7 review and market selection

Regarding the first step of the SMP regime (i.e. the market selection), the Commission reminded most⁸³⁶ (but not all)⁸³⁷ the NRAs that if they want to select an additional market not included in the Recommendation on relevant markets, they should perform the three criteria test. However once the NRA have done the test, the control of the Commission is usually

⁸³⁴ Communications Committee Working Document of 7 June 2006, Article 7 procedures, COCOM06-23.

⁸³⁵ As some decisions of the Commission refer to several notification cases, there were only 90 no comment letters, 135 comment letters and 4 veto decisions.

⁸³⁶ Case NL/2005/297 (additional fixed high capacity access market); Case NL/2005/279 (additional retail leased lines market); Case NL/2005/247 (additional retail broadcasting market)

⁸³⁷ Case UK/2003/11-16 (wholesale lines rental market); Case UK/2003/4 (wholesale unmetered narrowband termination services); Case UK/2003/6 (route-by-route wholesale international services).

marginal. In a very controversial case, the Commission opened a second phase against the Dutch NRA that wanted to select and intervene on the retail market for cable free-to-air radio and TV packages because it doubted that each of the three criteria were fulfilled. One month later, the Commission withdrew its serious doubts solely because the NRA agreed to impose lighter remedies than originally planned.⁸³⁸ In fact, this case was the result of a political bargain between the Commission and the Dutch authorities and shows how the Commission may use a threat of veto to influence the choice of remedies.

Article 7 review and market delineation

Regarding the second step of the SMP regime (i.e. the market delineation), the Commission focuses on several issues: it accepted the various approaches on the inclusion or not of Voice over IP in the retail fixed services markets provided it was sufficiently justified (see Table 3.3)⁸³⁹; it reminded the NRAs that the origination and termination market should include 2G as well as 3G according to the principle of technological neutrality;⁸⁴⁰ and it accepted more segmented markets than those of the Recommendation (in particular for the broadcasting markets) provided it was justified by the market conditions (see Table 3.7).⁸⁴¹

In October 2004, the Commission took a veto against a draft decision of the Austrian NRA related to the wholesale market for fixed transit (market 10)⁸⁴² which found that the incumbent Telekom Austria had no significant market power. The Commission considered that the NRA did not prove that the self-supply would exercise a sufficiently strong competitive pressure to be included in the market definition. Therefore, the Commission held that the draft decision was contrary to Community law (in particular Article 82b of the Framework Directive read in conjunction with Articles 10 and 82 EC) and requested the Austrian NRA to re-do a fresh analysis.⁸⁴³

Another major issue touched upon the definition of the wholesale broadband market (number 12). On the one hand, the Commission commented to many NRAs wanting to include cable

⁸³⁸ Case NL/2005/247 (Decision of 21 December 2005: withdrawal of serious doubts).

⁸³⁹ Case DE/2005/306; Case DK/2005/268; Case ES/2005/337; Case FR/2005/221; Case SE/2005/195.

⁸⁴⁰ Case UK/2003/1; Case CY/2006/334.

⁸⁴¹ Case AT/2003/18; Case ES/2005/252; Case FI/2004/76; Case IE/2004/42; Case NL/2005/246; CaseSE/2005/188; Case UK/2004/111.

⁸⁴² Case AT/2004/90 (Decision of 20 October 2004: Veto).

⁸⁴³ Contrary to the other vetos, the NRA refuses to withdraw its measure and tries to bring the Commission decision to the Court of Justice under the preliminary ruling. However, the Court found the case inadmissible: Case C-256/05 *Telekom Austria*, analysed *infra*.

TV infrastructure in the market that the effect of cable should only be taken into account at the SMP assessment stage. On the other hand, the Commission opened a second phase against the German NRA that wanted to exclude VDSL line from the wholesale broadband market. It only withdrew its serious doubt when the NRA accepted to include VDSL connections in the market (and regulate in the same way the underlying infrastructure providing similar retail services).⁸⁴⁴

Article 7 review and SMP assessment

Regarding the third step of the SMP regime (i.e. SMP/dominance assessment), the Commission was very attentive that the NRAs apply correctly the competition methodologies and indeed, most of the veto decisions relate to a misapplication of such methodologies when assessing dominance. In general, the Commission reminded the NRA that the SMP assessment should be based on a thorough evaluation of market dynamics and not a single indicator (like the market share)⁸⁴⁵ and without taking into account the regulation in place on the analysed operator (modified greenfield approach).⁸⁴⁶

The Commission took its first veto in February 2004 against two drafts decisions of the Finnish NRA related to retail markets for fixed international calls for residential and business users (markets 4 and 6) which found that the incumbent TeliaSonera has no SMP operator on both markets. The Commission considered that the NRA did not sufficiently rebut the presumption of dominance implied by the high market shares and did not apply the modified greenfield approach. Therefore, the Commission held that the draft decision was contrary to Community law (in particular Article 8.2b of the Framework Directive read in conjunction with Articles 10 and 82 EC) and required the Finnish NRA to do again a thorough analysis of the relevant markets.⁸⁴⁷

These vetos are interesting for two reasons. First, the Commission appeared to oppose a de-regulatory move from a NRA, contradicting its own 'less regulation' rhetoric. This is only a superficial view. In fact, the Commission argued only for an SMP re-assessment as it would be difficult for Commission officials to support without convincing evidence during the

⁸⁴⁴ Case DE/2005/262 (Decision of 23 December 2005: Withdrawal of serious doubts).

⁸⁴⁵ Case cited below and Case UK/2003/6.

⁸⁴⁶ See vetos case cited *infra* and Case FI/2003/23, Case FR/2005/206.

⁸⁴⁷ The NRA did the analysis again and concluded again in July 2005 that no operator had SMP, which was not opposed this time by the Commission because the market analysis was more substantial Case FI/2005/201-202.

Article 7 review that an undertaking with more than 50% market shares is not dominant, while arguing the opposite when dealing with competition cases. The Commission did not argue for more regulation and even suggested that the obligations already in place (like Carrier Selection and Carrier preselection) might suffice to deal with the supposedly dominant position. Second, this decision shows that the Commission respects the discretionary powers of the NRAs correlative to the complex character of the economic, factual and legal situation. It merely reviews the quality of the NRA's work and identifies possible manifest errors in the legal or factual analysis.⁸⁴⁸ The Commission did not intend to make the market assessment itself although it had probably as much factual background as the NRA, gathered in the preparation of the annual implementation reports as well as the *Telia/Sonera* merger. In this case, the control of the Commission on NRAs' draft decisions is similar to the control of the Court of First Instance on Commissions' decisions in competition matters.⁸⁴⁹

In May 2005, the Commission took a veto against a draft decision of the German NRA related to the wholesale markets for fixed termination (market 9),⁸⁵⁰ which found that the 53 small fixed entrants had no SMP on the 53 respective markets of their own network. The Commission considered that the NRA had not sufficiently rebut the presumption of dominance and not adequately proved that Deutsche Telekom had a countervailing buying power. Therefore, the Commission held that the draft decision was contrary to Community law (in particular Article 8.2a and 2b as well as Article 8.3b of the Framework Directive) and requested the German NRA to re-do the analysis, except for the part applying to DT designation.⁸⁵¹

Larouche and de Visser (2005:8) and Renda (2006:28) criticised this veto because, although the German approach was not shared by the Commission and by the other NRAs that had already ruled on the issue, the Commission did not explain whether, why and how the presence of two different approaches amongst NRAs would affect the internal market or be incompatible with Community law. Worse, the Commission claimed to exercise only a marginal control on the NRA given the complex economic assessment⁸⁵² and yet implicitly, imposed a certain result. Moreover given the decisions of the Irish, Finnish and British appeal

⁸⁴⁸ See para 12 and 29 of the veto decision. Guidelines on market analysis, para 22.

⁸⁴⁹ See Chapter 3, section 3.2.2.C.

⁸⁵⁰ Case DE/2005/144 (Decision of 17 May 2005: Veto).

⁸⁵¹ In September 2005, the NRA did the analysis again and found that the 53 new entrants had all individual SMP on their own markets: Case DE/2005/239.

⁸⁵² Para 17 of the decision.

courts,⁸⁵³ there is a possibility that a national German Appeal Court overturns the NRA's decision finding that the 53 have SMP because the countervailing buying power was not properly considered. In such hypothesis, the NRA may end up in the uncomfortable position of having to do its analysis taking into account the countervailing buying power (to respect the Court decision) but not finding that it has effect (to alleviate a Commission veto).

Again in October 2004, the Commission took a veto against a draft decision of the Finnish NRA related to the wholesale market for mobile access and origination (market 15)⁸⁵⁴ which found the incumbent TeliaSonera as having individual SMP. The Commission considered that the NRA did not sufficiently take into account the numerous service providers and Mobile Virtual Network Operator agreements concluded without the threat of regulation and gave undue weight to the other elements (networks effects, economies of scale and scope, financial strength). Therefore, the Commission held that the draft decision was contrary to community law (in particular Article 8.2b of the Framework Directive read in conjunction with Articles 10 and 82 EC) and required the Finnish NRA to do a fresh analysis.⁸⁵⁵

In addition, the Commission commented extensively to the NRAs that wanted to find collective dominance in the market 15 as it was usually sceptical that the NRA has proven SMP to the requisite legal standard but it refrained to veto because the NRA had not committed a marginal error. On the other hand, when the NRA decided not to designate only SMP operator on market 15, the Commission instructed the NRAs to closely monitor the evolution of the market.⁸⁵⁶

Article 7 review and choice of remedies

Regarding the fourth step of the SMP regime (i.e. the choice of remedies), the Commission gave extensive comments. The Commission often requested the NRA to clarify remedies,⁸⁵⁷ in particular the price control and accounting methodologies, and if there were substantial

⁸⁵³ See ECAP Decision 02/05 of 26 September 2005, *Hutchison 3G v ComReg*, Decision of the Swedish Court of 28 October 2005, and Competition Appeal Tribunal Decision of 29 November 2005, Case 1047/3/3/04 *Hutchison 3G v Ofcom*, analysed *supra*.

⁸⁵⁴ Case FI/2004/82 (Decision of 5 October 2004: Veto).

⁸⁵⁵ NRA did the analysis again and concluded that TeliaSonera did not have SMP.

⁸⁵⁶ Case AT/2004/63, Case IT/2005/259.

⁸⁵⁷ Case AT/2004/100 (market 13), Case DE/205/233-235 (markets 8-10), Case ES/2005/251 (market 16), Case ES/2005/252 (market 18), Case FI/2003/28-29 (markets 8-9), Case FI/2003/30 (market 11), Case FI/2003/31 (market 16), Case HU/2005/186 (market 12), Case SK/2004/102 (market 9), Case SK/2004/107 (market 11)

changes, to re-notify the remedies.⁸⁵⁸ The Commission also reminded the NRAs of the relationship between remedies imposed at the retail level and at the wholesale level.⁸⁵⁹

The Commission insisted that the remedies should be efficient and advised many NRAs to impose more far reaching remedies than originally planned⁸⁶⁰ or at least closely monitor their efficiency.⁸⁶¹ The Commission also noted that the NRA may impose differentiated remedies (e.g. different remedies according to the size of the operator) to address the same market failure provided it was justified with regard to the principle of proportionality and the implementation closely monitored.⁸⁶²

In addition, the Commission relied on its review power to signal to NRAs infringement of Community law.⁸⁶³ In one case⁸⁶⁴ the Commission instructed the Finnish NRA to dis-apply its own law supposedly violating the directives although the Commission had not yet opened an infringement procedure.⁸⁶⁵ However, this decision has been criticised by some NRAs⁸⁶⁶ as by-

⁸⁵⁸ Case AT/2004/74 (market 14), Case AT/2004/63 (market 15), Case EL/2004/78 (market 16), Case FR/2004/104 and 120 (market 16), Case IE/2004/46 (market 11), Case IE/2005/137 (market 7), Case IE/2005/139-140 (markets 13 and 14), Case SE/2004/50-51 (markets 10-11), Case SE/2004/48 (market 7), Case SE/2004/52 (market 16), Case HU/2004/101 (market 16), Case SK/2005/136 (market 16). As Valcke et al. (2005:45) hold, a general obligation (like the principle of cost orientation) but also its practical implementation (the price imposed to regulator) are both remedies to be notified to the Commission.

⁸⁵⁹ Case DK/2005/268 (market 3), Case ES/2005/336-337 (markets 1-2), Case FI/2003/20-21 (market 1-2), Case IE/2004/128 (additional retail leased lines market), Case HU/2005/132-135 (markets 3-6), Case CZ/2006/350 (market 3), Case SI/2005/231-232 (markets 1-2), Case SI/2005/264-265 (markets 3 and 5), Case SI/2005/298-299 (markets 4 and 6)

⁸⁶⁰ Annex to the Commission Communication on Market Reviews, p. 5, 6, 8. Case DK/2005/204 (market 16), Case EL/2004/78 (market 16), Case ES/2005/250 (market 9), Case ES/2005/251 (market 16), Case ES/2005/252 (market 18), Case FI/2003/20-21 (market 1-2), Case FI/2004/62 (market 12), Case IT/2005/316 (market 16), Case LU/2005/321 (market 16), Case NL/200/280 (market 11), Case NL/2005/281 (market 12), Case PT/2004/117 (market 11), Case UK/2003/40 (market 16), Case HU/2005/152 (market 9), Case HU/2005/185 (market 11), Case HU/2005/186 (market 12), Case CZ/2006/351 (market 8), Case SI/2005/257-258 (markets 8 and 9), Case SI/2005/274 (market 10), Case SI/2005/142 and 181 (market 11), Case SK/2004/103 (market 8)

⁸⁶¹ Case AT/2004/99 (market 16), Case DE/2006/343 (market 9), Case SI/2005/276 (market 16)

⁸⁶² For market 8: Case FI/2003/28, Case HU/2005/151. For market 9: Case DK/2005/207, Case FI/2003/29, Case FR/2005/228, Case PT/2004/92, Case SE/2005/50, Case HU/2005/152. For market 16: Case DK/2005/204, Case EL/2004/78, Case FI/2003/31.

⁸⁶³ Case AT/2004/66-70 (market 15) noting that the Austrian law does not provide for mobile number portability; Case DE/2006/343 (market 9) noting that the German law imposes a double dominance test (at the retail and the wholesale level) to impose price control; Case FI/2004/79 (market 7) noting that the Finnish law violates the provisions on the minimum set of leased lines; Case SK/2005/172-173 (markets 1-2) noting that the Slovakian law does not permit to impose cost accounting systems to support price control of CS/CPS.

⁸⁶⁴ Case FI/2003/31 where the Commission advised the Finnish NRA to dis-apply a Finnish provision that restricted regulation of mobile termination to mobile-to-mobile calls, thereby excluding fixed-to-mobile calls contrary to the Access Directive. It did so on the basis of Case C-198/01 *Consortio Industrie Fiammiferi (CIF) v Autorità Garante della Concorrenza e del Mercato* [2003] I-8055, para 48-49.

⁸⁶⁵ The Commission opened an infringement procedure later on and the law has now be changed (IP/05/430 and IP/05/1585).

⁸⁶⁶ See Conclusions of the 7th Plenary of the ERG, 30 January 2004, ERG(04) 11, p. 2.

passing the normal infringement procedure of the Treaty and upsetting the balance between harmonisation and subsidiarity at the heart of the 2003 framework.

Article 7 review – Final Observations

In practice, the Commission has been overburdened by the number of the notifications.⁸⁶⁷ The cause of this heavy workload is the high number of markets selected in the Commission Recommendation, but also the broad interpretation that the Commission and the NRAs have given to the jurisdictional condition of ‘measure that affect the trade between Member States’ (hence that should be notified to the Commission). In practice, the NRAs have automatically notified all the market analysis draft measures without analysing whether they had an impact on the internal market and the Commission rarely checked such the condition was met.⁸⁶⁸ This broad interpretation is in line with the standard interpretation given by the Court of Justice of the same concept in competition law.⁸⁶⁹ However, it is not in line with a more restrictive economic interpretation of the subsidiarity principle (and an efficient division of task between the Community and its Member States) as well as the interpretation that the Court has given in some cases of the internal market condition.⁸⁷⁰

The consequence of the heavy workload is that the Commission is concentrating on certain specific issues that it judges to be of European interest⁸⁷¹ and ignores others issues by sending standardised replies when the NRA notification is not problematic.⁸⁷² In particular it focuses on the competition law aspects of the decisions, namely the market definition and the SMP assessment, and a division of labour is taking place between the Commission and the NRAs: the former (in particular DG Competition) takes care of market definition and market power assessment⁸⁷³ whereas the NRAs look in more detail at the remedies.⁸⁷⁴

⁸⁶⁷ It could have been much worse if the Member States (legislature and NRAs) had complied with the timeframe originally planned and conducted all their market analysis in the second half of 2003.

⁸⁶⁸ The Commission considered that it was not met only two cases (one of them being surprisingly an additional wholesale market for international services: Case IT/2005/273 (market 14), Case UK/2003/6 (wholesale international services))

⁸⁶⁹ Commission Guidelines on market analysis, para 147.

⁸⁷⁰ Case C-376/98 *Germany v European Parliament and Council of the European Union (Advertising and sponsorship of tobacco products)* [2000] ECR I-8419 where the Court considered that the mere divergence between national laws was not sufficient to justify harmonisation and that it has also to be proved that such divergence had an economic impact on the internal market. I’m grateful to Pierre Larouche for this point.

⁸⁷¹ E.g. inclusion of cable in the wholesale broadband access market, use of modified greenfield approach, the differentiation remedies, the choice of cost accounting system.

⁸⁷² Larouche and de Visser (2005:10). Given its full discretion under Article 7(3), the Commission is entitled not to open a phase II investigation or veto a NRA draft decision although the latter violates Community law or create a barrier to the single market.

⁸⁷³ Commission Communication on Market Reviews, p. 6.

Diagonal coordination: the antitrust cases

Next to those direct ex-post and ex-ante means for the Commission to control NRAs, there is a more subtle indirect mean to ensure such control with the ever closer relationship between antitrust law and sector-specific regulation.⁸⁷⁵ Indeed as the European competition authority, the Commission (mainly DG Competition) controls Member States and their NRAs as well as telecom private and public operators. With regard to operators, European antitrust applies in addition to national sector-specific rules. Thus, firms' compliance with national regulatory decisions does not absolve them of their duty to abide by obligations imposed by EC antitrust.⁸⁷⁶ Article 86(1) EC is even more explicit for public undertakings and undertakings to which Member States have granted special or exclusive rights.

These extensive antitrust powers have allowed the Commission to control the NRAs in the past, and such role is reinforced with the alignment of sector-specific regulation to antitrust principles. Four types of cases should be distinguished depending of the type of competition law applicable (ex-post or ex-ante) and the competences of the NRA to intervene, as illustrated in Figure 3.14 below.

Figure 3.14: Typology of cases for diagonal coordination

	Ex post competition law	Ex ante competition law
No jurisdiction of sector-specific regulation/NRA	<i>Case 1</i> Commission supplements	<i>Case 3</i> Commission prevents
Jurisdiction of sector-specific regulation/NRA	<i>Case 2</i> Commission controls	<i>Case 4</i> Commission abstains

(*Case 1.*) The first hypothesis is when the Commission intervenes under ex-post antitrust and the NRA has no competence to tackle the competition problem. In such circumstances, the Commission will supplement the NRA and open itself the antitrust case. As seen in Chapter 3, the Commission opened individual cases for excessive international leased lines tariffs⁸⁷⁷ and closed them only after the operators changed their behaviours to the satisfaction of the

⁸⁷⁴ See Larouche (2004:43). Another unfortunate consequence of the heavy workload of the Commission is the high turn-over of officials in the administrative units in charge of the Article 7 review.

⁸⁷⁵ Also Larouche (2006b:12).

⁸⁷⁶ Commission Access Notice, para 22.

⁸⁷⁷ See section 2.3.2.C.

Commission. Similarly, it opened two international roaming cases at a time when the NRAs had no power to intervene on this market.⁸⁷⁸

(Case 2.) The second hypothesis is when the Commission intervenes under ex-post competition law but the NRA has competence to act. This is surely the most controversial case because it may lead to a diagonal conflict between the Commission and the NRA entailing duplication of procedures and conflicting decisions. In practice, different situations may be distinguished along a timeline.

When the NRA does not start a procedure, the Commission will open an antitrust case and then passes it to the NRA, hereby forcing the NRA to intervene. As seen in Chapter 3, the Commission opened cases related to excessive international accounting rates,⁸⁷⁹ excessive fixed retention and termination rates,⁸⁸⁰ abuses in national leased lines provisioning.⁸⁸¹ Most of these cases were closed only when the NRA had intervened satisfactorily at the Commission's view.

Then when the NRA is investigating a case, the Commission signals⁸⁸² that it will in principle give the precedence to the *lex specialis* and not intervene, unless the NRA is particularly slow (i.e. the matter is not solved within a reasonable period of time of 6 months or adequate interim relief is not available) or the case involves substantial Community interest.

Finally when the NRA does intervene but not satisfactorily (at the Commission's view) because it is lazy, incompetent or captured, the Commission will intervene and condemn the regulated operator if it enjoys some margin of discretion within the national regulation. Indeed in 2003, the Commission fined *Deutsche Telekom*⁸⁸³ for anti-competitive price squeeze between its wholesale charges and retail charges of the local loop (although both charges were regulated by the German NRA) because it considered that the obligations imposed by the NRA left to DT some leeway that may have been used to diminish the

⁸⁷⁸ See section 2.3.2.D.

⁸⁷⁹ See section 2.3.2.B.

⁸⁸⁰ See section 2.3.2.D.

⁸⁸¹ See section 2.3.2.C.

⁸⁸² Commission Access Notice, para 26-32. This stance is similar in other networks industries like energy: see Petit (2005:190).

⁸⁸³ See section 2.3.2.B. For an institutional critique of this decision, see section 4.1.2.D.

squeeze. In this context, it should be underlined that a NRA has a duty to avoid conflicts between its own decisions and those of the Commission.⁸⁸⁴

(Case 3.) The third hypothesis is when the Commission intervenes under ex-ante antitrust and the NRA has no competence to tackle the competition problem. In such circumstances, the Commission will impose extensive structural and behavioural remedies aimed at preventing abuse of dominant position from the merging parties that the NRAs would be unable to police. For instance, in *Telia/Telenor*,⁸⁸⁵ the Commission obtained from the parties a commitment to provide access to unbundled local loop that was not yet imposed in Sweden at the time of the merger. In *Telia/Sonera*,⁸⁸⁶ the Commission went further and imposed a legal separation between the operation of networks and services of their fixed and mobile activities in Sweden and in Finland. In *Vodafone/Mannesmann*,⁸⁸⁷ the Commission imposed third party access for three years on a non-discriminatory basis to the parties' integrated networks (wholesale services like interconnection and roaming) with a fast track dispute resolution procedure. Sometimes, such remedies have triggered a regulatory change to allow NRA to impose similar obligations (like the unbundling of the local loop imposed in *Telia/Telenor* in 1999 and then taken back in a sector specific Regulation in 2000).⁸⁸⁸

(Case 4.) Finally, the fourth hypothesis is when the Commission intervenes under ex-ante antitrust and the NRA has competence to tackle a possible future competitive problem. In such circumstances, the Commission will impose no or limited remedies during its merger or agreement control.⁸⁸⁹ For instance, in *BT/MCI 1*,⁸⁹⁰ the Commission went for very light remedies as the powers of the British and American regulators were extensive, whereas for the similar operations *Atlas* between France Telecom and Deutsche Telekom,⁸⁹¹ it imposed much more stringent remedies as the powers of the French and German NRAs were more limited at the time of the joint venture. Similarly, the Commission abstained to impose remedies in the 3G Network sharing agreement because of the extensive sector-specific

⁸⁸⁴ Temple Lang (1998b:321) on the basis of Case 14/68 *Walt Wilhelm and others v Bundeskartellamt* [1969] ECR 1.

⁸⁸⁵ See Chapter 2.

⁸⁸⁶ See Chapter 2.

⁸⁸⁷ See Chapter 2.

⁸⁸⁸ Regulation 2887/2000/EC of the European Parliament and of the Council of 18 December 2000 on unbundling of the local loop, O.J. [2000] L 336/4. In general, see Chapter 3.

⁸⁸⁹ This is line with the case-law: Joined Cases T-374/94, T-375/94, T-384/94, T-388/94 *European Night Services*, para 221.

⁸⁹⁰ See Chapter 2.

⁸⁹¹ See Chapter 2. See similarly, the Decisions *Unisource* and *Uneworld*.

regulation access remedy.⁸⁹² However in *NewsCorp/Telepiu*,⁸⁹³ the Commission imposed remedies although the Italian NRA had jurisdiction to act, but then relied on the NRA to monitor their implementation.

To conclude,⁸⁹⁴ Temple Lang (2006:46) insisted that DG Competition should not act as a substitute NRA because it does not have sufficient powers and staff, but should only act when appropriate to correct a defect in enforcement by a NRA. An appropriate division of tasks should take place. As Larouche (2000a:299) noted with regard to the previous 1998 regulatory framework, the relationship between the Commission and the NRAs would bear many similarities to that between the Commission and national courts or the National Competition Authorities. The Commission would concentrate on major cases and leave the NRAs to conduct first-line work. With the modification of the 2003 regulatory framework, this tendency is reinforced.⁸⁹⁵

On one hand, the means for the Commission to control NRAs via its antitrust powers are reinforced. The alignment of sector rules to competition law principles implies that the analysis and the results of the NRAs should be closer (albeit not identical)⁸⁹⁶ to what a competition authority would conclude. However, these re-inforced means may be less needed as the Commission has now an ex-ante mechanism to control NRA decisions and prevent any infringement of competition law. On the other hand, the role of the Commission to supplement and prevent NRAs decreases. As the criteria to impose sector-specific regulation are much more flexible under the 2003 framework than previously (going from the original sin to the inefficiency of antitrust remedies), the scope of NRAs jurisdiction is enlarged, hence there is less rationale to complement with an antitrust case. In particular, we may expect that the behavioural remedies imposed when reviewing electronic communications mergers would decrease. That should be welcomed as the procedure of the merger control are not appropriate for deciding far reaching remedies that structure the markets.⁸⁹⁷

⁸⁹² See Chapter 2.

⁸⁹³ Para 259 of the Decision. Note that in the similar merger in Spain *Sogecable/ViaDigital*, the Spanish Competition authority also imposed conditions to be monitored by the NRA.

⁸⁹⁴ On that issue, see also Temple Lang (1998b:314-318).

⁸⁹⁵ The effects of the 2003 framework should be combined with the effects of decentralization of competition law, which will lead the European Commission to concentrate on the most important cases with a major European interest, Van Ginderachter (2004:17). See also Larouche (2005b:176).

⁸⁹⁶ Commission Guidelines on market analysis, para 24-32.

⁸⁹⁷ Larouche (2000a); Veljanovski (2003).

C4. The schizophrenic role of the Commission

The different roles of the Commission have the advantage of ensuring harmonisation and consistency between antitrust and sectoral regulation.⁸⁹⁸ But at the same time, the Commission is playing conflicting tasks: be the coach of the NRAs trying to develop a common team spirit and, at the same time, the referee of these regulators sanctioning (under the control of the Court of Justice) those which infringe European law. This is not new as the EC Treaty itself requires the Commission to implement European law (often with the Member States committee, thus implying a coaching role) and to be the guardian of the Treaty. Yet, the 2003 regulatory framework reinforces both roles and radicalises their opposition.⁸⁹⁹ Future will tell us if this dual role was a good solution to achieve more harmonisation, but it was the only feasible political option at the time of the adoption of the directives and the Council was opposed to the creation of a European regulatory authority.

D. Community Courts

As explained in Chapter 3, the Community Courts have three roles that I examine in turn: deciding on infringement procedures, on annulment procedure and on preliminary ruling questions.

Infringement procedures

The first role of the Community Courts is to decide the infringement actions launched by the Commission against a Member State (or its NRA) under Article 226 EC or 228 EC, which takes on average 21 months to be decided.⁹⁰⁰ Under the previous framework, all cases related to delayed or incorrect implementation of the European Directives by the national legislature.⁹⁰¹ Some of these cases are still relevant under the 2003 framework (like importance of the NRA to intervene on its own initiative in interconnection disputes,⁹⁰² the

⁸⁹⁸ Valcke et al. (2005:124).

⁸⁹⁹ Such opposition has been mentioned by several authors: Geradin and Petit (2004:28); Hocepić and de Stree (2005:181); Larouche and de Visser (2005:8).

⁹⁰⁰ Annual Report of the Court of Justice 2005, p. 198.

⁹⁰¹ See the Commission Services Guide to the case law of the European Court of Justice in the field of Telecommunications 2003 and its update, available at http://europa.eu.int/information_society/policy/comm/implementation_enforcement/index_en.htm

⁹⁰² Case C-221/01 *Commission v Belgium* [2002] ECR I-7835.

importance of the compliance of cost accounting system,⁹⁰³ or the necessity of retail tariff rebalancing).⁹⁰⁴ However, no case was related to incorrect application by an NRA, although that would have been possible legally.⁹⁰⁵ Under the 2003 framework⁹⁰⁶, the Court has already decided several cases for delayed transposition against five Member States⁹⁰⁷ and some cases are already pending for incorrect implementation.⁹⁰⁸ However again, no case has yet been opened for incorrect application by a NRA.

Annulment procedures

The second role of the Community Courts is to control Commission decisions under Article 230 EC. The admissibility of an appeal against an Article 7 Commission is complex and should be decided case-by-case on the basis of a combination of three elements: the type of Commission decision (no comment, comment, withdrawal of serious doubts or veto), the type of NRA draft decision (regulatory i.e. the NRA does plan to regulate specific operator, or non-regulatory i.e. the NRA does not plan to intervene in the market), and the identity of the appellant (a Member State as privileged appellant, or a private party showing direct and individual concern).⁹⁰⁹

A veto position may be appealed by any Member State (the one whose NRA has been vetoed or any other one) without having to prove any interest. In addition, if the veto relates to a 'non-regulatory' draft decision and the Commission suggests regulating a specific operator, this veto can also be appealed by the potentially regulated operator.⁹¹⁰ For instance, the small

⁹⁰³ Case C-221/01 *Commission v Belgium* [2002] ECR I-7835 and Case C-33/04 *Commission v Luxembourg* [2005] ECR I-0000.

⁹⁰⁴ Case C-500/01 *Commission v Spain* [2004] ECR I-583.

⁹⁰⁵ See *supra*.

⁹⁰⁶ Excluding ePrivacy Directive and the Consolidated Liberalisation Directive.

⁹⁰⁷ Case C-236/04 *Commission v Luxembourg* [2005] ECR I-0000; Case C-240/04 *Commission v Belgium* [2005] ECR I-0000; Case C-299/04 *Commission v Greece* [2005] ECR I-0000; Case C-394/04, *Commission v Luxembourg* [2005] ECR I-0000; Case C-31/05 *Commission v France* [2005] ECR I-0000; Case C-250/04 Case 252/04, Case C-253/04, Case C-254/04 *Commission v Greece* [2005] ECR I-0000.

⁹⁰⁸ See the Tables of the Commission at http://europa.eu.int/information_society/policy/ecom/implementation_enforcement/index_en.htm

⁹⁰⁹ An interested party should prove a concern which is individual (i.e. the decision affect her in an individual manner by reason of certain attributes which are particular to her and distinguish her just as in the case of the person to which the decision is addressed) and direct (i.e. the decision has a direct impact on her economic situation): Case 25/62 *Plaumann* [1963] ECR 95, as firmly reaffirmed in Case C-50/00P *Union de Pequenos Agricultores* [2002] ECR I-6677, para 36 and Case C-263/02P *Jégo-Quéré* [2004] ECR I-3425, para 45. On those conditions, see Lenaerts et al. (2006:250-264).

⁹¹⁰ See the similar situation of the beneficiary of a state aid that may appeal a prohibition decision from the Commission: Case 730/79 *Philip Morris v Commission* [1980] ECR 2671 and Lenaerts et al. (2006:269). In this sense also, Larouche and de Visser (2005:11). In any event, it is important that the Court controls Article 7 to

fixed network operators in Germany might have appealed the veto where the Commission suggested that these operators should be regulated (implicitly by setting a very high threshold for the NRA not to regulate).⁹¹¹ However, if the veto relates to a 'regulatory' draft decision and the Commission suggests not regulating the operator, I do not think that the competitors of the potentially regulated operator have an individual and direct concern to lodge an appeal.⁹¹² For instance, a MVNO operator in Finland could not have appealed the veto where the Commission suggested not regulating TeliaSonera in the mobile access and calling origination market.⁹¹³

When the Commission does not make any comment on a specific finding or does not open a second phase review, no appeal is possible and private party could not force the Commission to comment because the Framework Directive leaves full discretion to the Commission to comment or not a NRA decision.⁹¹⁴ Thus I think that the appeal made by Vodafone against the Commission comment letter (not opening a phase review) in the Spanish market 15 should be declared inadmissible.⁹¹⁵

In all these hypotheses, the judicial review of the Court will vary depending of the steps of the SMP regime:⁹¹⁶ a marginal control for the comments related to the antitrust aspects of the draft decision, and a looser control for the comments related to the choice of remedies.

Regarding to the Recommendation on relevant markets, an appeal is not possible because such legal act is in principle not reviewable by the Court.⁹¹⁷ To be sure the Court might re-qualify the Recommendation as a Decision given that any divergence by the NRAs might be veto by the Commission. However, I do not think that such re-qualification would be

alleviate that the comments of the Commission, that have an impact in the implementation on sector-specific regulation as well as competition law, stay outside the Court review.

⁹¹¹ Case DE/2005/144 explained *supra*.

⁹¹² The case-law admitted that the competitors of the beneficiary of a state aid may appeal a go-ahead decision of the Commission, but that is linked to the procedural rights get take from Article 88 EC and its implementing Council Regulation 659/1999 of 22 March 1999 laying down detailed rules for the application of Article 93 of the EC Treaty, O.J. [1999] L 83/1, which there is no equivalent in Article 7 review: inter alia Case T-11/95 *BP Chemical v Commission* [1998] ECR II-3235, para 71; Lenaerts et al. (2006:270-273).

⁹¹³ Commission Decision FI/2004/82 explained *supra*.

⁹¹⁴ Indeed, Article 7(3) and 7(4) provide that the Commission may, but is not obliged, to comment on the NRA decision.

⁹¹⁵ Case T-109/06 *Vodafone v Commission*, appeal in the Case ES/2005/330.

⁹¹⁶ See *supra*, Section 3.3.1.C.

⁹¹⁷ Article 230(1) EC.

appropriate because the link between the Recommendation and the final imposition of remedies is fairly loose.⁹¹⁸

Preliminary ruling questions

The third role of the Community Courts is to answer preliminary ruling questions from the national courts under Article 234 EC (taking on average 20 months to be decided),⁹¹⁹ thereby ensuring a common interpretation of the European law and controlling the National Courts and the NRAs. Under the previous regulatory frameworks, the Court decided around 20 cases, whose some are still relevant under the current framework like on the need of independence of the NRA,⁹²⁰ or the effectivity of appeal against NRA decision.⁹²¹ For the 2003 framework, one case has been rejected,⁹²² one has already been decided⁹²³ and others are pending.⁹²⁴

The issue whether an NRA may directly ask a question to the Court of Justice is decided in the same way as for the NCA (see Chapter 3, section 3.2.2.C). The Court of Justice has to determine on case-by-case whether the NRA is of judicial character (as opposed to administrative character) on the basis of several criteria (type of jurisdiction, of procedure, independence). In this regard, it is important to distinguish when a NRA decides a dispute brought by operators and when it takes an own initiative decision (like for the market analysis). It is expected that most of the NRA will not be able to ask a question to the Court.⁹²⁵

So far only one NRA has referred a preliminary question to the Court in very particular circumstances. The Austrian NRA elapsed the 2 months period to request an annulment of the

⁹¹⁸ Note also that the legislative history of the Framework Directive goes also against a re-qualification. The Commission originally proposed to adopt a Decision on all relevant markets (national and trans-national): Article 14(1) of the Commission Proposal for the Framework Directive, OJ [2000] C 365E/198. However, the Council opposed and the final compromise was a Recommendation for national markets and a Decision for trans-national markets.

⁹¹⁹ Annual Report of the Court of Justice 2005, p. 198.

⁹²⁰ Joined Cases C-46/90 and C-93/91 *Lagauche* [1993] ECR I-5267; Case C-69/91 *Decoster* [1993] ECR I-5335; Case C-92/91 *Taillandier* [1993] ECR I-5383.

⁹²¹ Case C-492/99 *Connect Austria* [2003] ECR I-5197.

⁹²² Case C-256/05 *Telekom Austria*, analysed below.

⁹²³ Case C-438/04 *Mobistar v Institut belge des services postaux et des télécommunications* [2006] ECR I-0000.

⁹²⁴ Case C-426/05 *Tele2 UTA Telecommunication v Telekom-Control-Kommission* on the notion of affected parties in Articles 4 and 16 of the Framework Directive; Case C-190/06 *Belgacom Mobile v IBPT* on GSM gateways.

⁹²⁵ Temple Lang (1998b:302). On the absence of possibility for the administrative bodies to ask a preliminary ruling at the Court of Justice: Lenearts et al. (2006:39).

Commission veto decision against its analysis of the transit market.⁹²⁶ Therefore, it went for a preliminary ruling in validity under Article 234 EC which is not subject to any time limit. However, the Court of Justice declared the request inadmissible without even analysing whether the Austrian NRA was judicial in character.⁹²⁷ The Court merely noted that preliminary ruling may only be used by a national Court that has to decide a pending dispute, and in this case, no dispute was pending before the Austrian NRA.⁹²⁸

Another issue is the effects of the ruling of the Court of Justice to the proceedings of an NRA, even when this NRA was not at the origin of the preliminary ruling. Because the interpretation the Court gives to a rule of Community law clarifies the meaning and scope of that rule as it must be or ought to have been understood and applied from the time of its coming into force,⁹²⁹ such interpretation must be applied by an administrative authority in current proceedings.⁹³⁰ However to ensure legal certainty, the Court decided that the administrative authority should not reopen a closed case,⁹³¹ unless some specific circumstances are met: (1) under national law, the NRA has the power to reopen that decision; (2) the administrative decision in question has become final as a result of a judgment of a national court ruling at final instance; (3) that judgment is, in the light of a decision given by the Court subsequent to it, based on a misinterpretation of Community law which was adopted without a question being referred to the Court for a preliminary ruling under Article 234 EC; and (4) the person concerned complained to the NRA immediately after becoming aware of that decision of the Court.⁹³²

⁹²⁶ Case AT/2004/90 (Decision of 20 October 2004: Veto).

⁹²⁷ Note that the Advocate General Geelhoed noted at para 45 of his Opinion in Case C-492/99 *Connect Austria* that the Austrian NRA could not ask a preliminary question to the Court.

⁹²⁸ Case C-256/05 *Telekom Austria* [2005] ECR I-0000, para 10 and 11, citing Case 138/80 *Borker* [1980] ECR 1975, para 3; Case C-111/94 *Job Center I* [1995] ECR I-3361, para 9; Case C-447/00 *Holto* [2002] ECR I-735, para 17. The Court of Justice considered that the Austrian NRA proposed by its own initiative a draft measure on the state of competition on market 10 and was not seized by Telekom Austria to decide the state of competition in the relevant market, hence Telekom Austria was not a party to a pending dispute.

⁹²⁹ See, *inter alia*, Case 61/79 *Denkavit italiana* [1980] ECR 1205, para 16, and Case C-50/96 *Deutsche Telekom* [2000] ECR I-743, para 43.

⁹³⁰ Case C-453/00 *Kühne & Heitz and Productschap voor Pluimvee en Eieren* [2004] ECR I-837, para 22.

⁹³¹ *Ibidem*, para 24

⁹³² *Ibidem*, para 26-28.

E. No European Regulatory Authority

In the institutional landscape of the electronic communications sector, there are already some authorities of European character. First, there are co-ordination bodies established on a pure inter-governmental basis and that can only issue non-binding recommendations like the European Radio-communications Office (ERO). It was established in 1991 as a permanent office of the European Conference of Postal and Telecommunications Administrations (CEPT), regroups 30 out of the 46 country members of the CEPT, and is based in Copenhagen.⁹³³ It aims of being a permanent centre of expertise on electronic communications issues, liaise with national administrations, and draft long-term plans for future use of scarce resources. Second, there are specialised bodies like the European Network and Information Security Agency (ENISA). It was established in 2004, regroups the 25 Member States, and in based in Crete. It aims to collect information, provide assistance and advice to the Commission and the Member States, and stimulate broad cooperation between actors from the public and private sectors on network and information security.⁹³⁴

However, there is no broad Euro-regulator. During the adoption of the 2003 regulatory framework, the Euro-regulator was probably one of the only political issues dividing the three branches of the European legislature. The Commission⁹³⁵ was against such authority because the industry was not in favour of an additional regulatory body⁹³⁶ and because of its long-standing ambivalence towards the creation of new institutions with which it may have to compete,⁹³⁷ and did not propose it to the two other branches of European legislature.⁹³⁸ The European Parliament was in favour of an authority that might enhance the establishment of an internal market for electronic communications. However, the Council of Ministers was strongly opposed to a fully-fledged ERA as encroaching the powers of the NRAs. At the end, no authority was established, but an enhanced cooperation between the NRAs was set up with the creation of the ERG and the Commission gains significant new control power on the

⁹³³ Article 3 of the Convention of 1993, as modified in 2002. See <http://www.ero.dk/>

⁹³⁴ Articles 2 and 3 of the Regulation 460/2004 of the European Parliament and of the Council of 10 March 2004 establishing the European Network and Information Security Agency, OJ [2004] L 77/1. See <http://www.enisa.eu.int/>. The legal basis of the ENISA (Article 95 EC) has been confirmed by the Court of Justice in Case C-217/04 *United Kingdom v European Parliament and Council (ENISA Regulation)* [2006] ECR I-0000.

⁹³⁵ Communication on the 1999 Review, p. 9.

⁹³⁶ Eurostrategies and Cullen International (1999).

⁹³⁷ Steinberg (2001:14).

⁹³⁸ Commission Proposal for the Framework Directive, OJ [2000] C 365E/198.

NRAs draft decisions⁹³⁹. In the future, either the ERG or the Commission may become an implicit European regulator, but at this stage, it is still too early to tell if that will happen and which institution will take the lead.

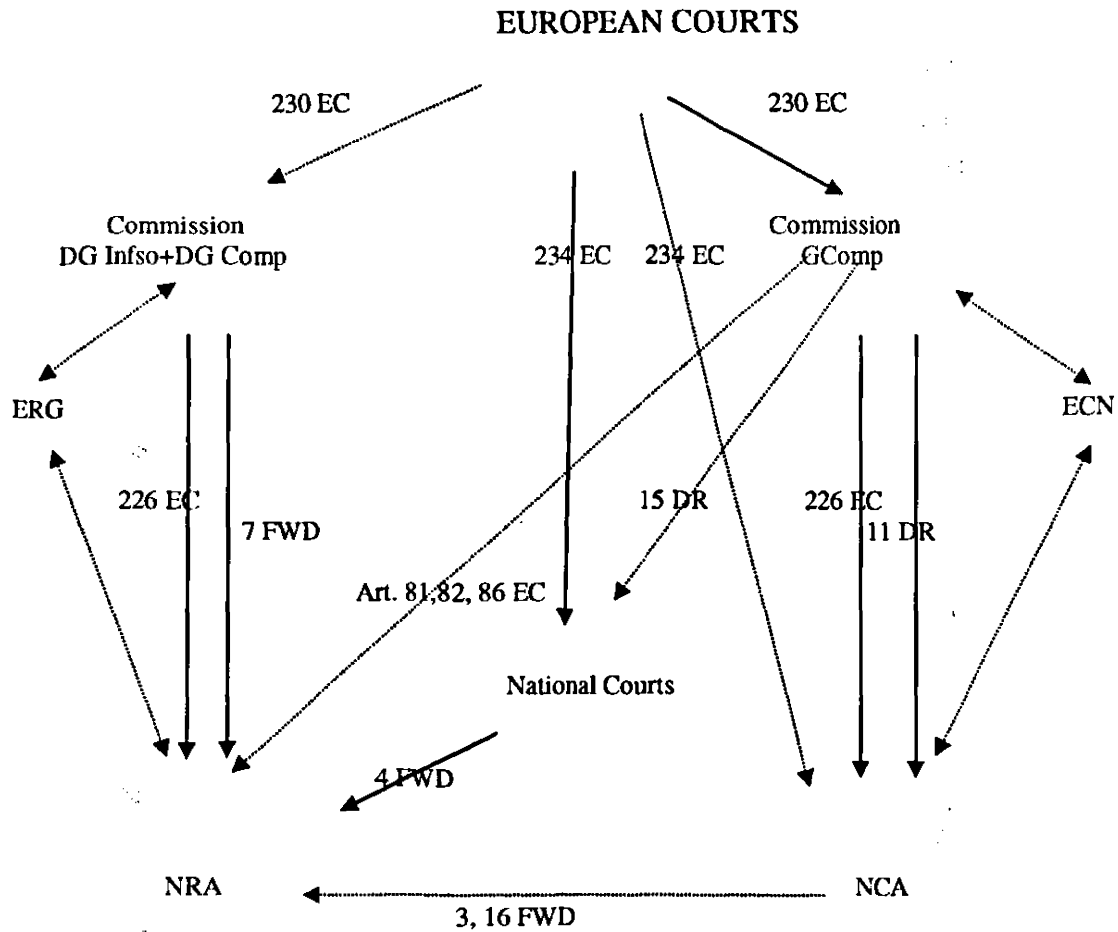
F. Summary

Figure 3.15: Procedural sectoral regulation steps

	National action	Means to safeguard harmonisation
Investigation	NRA does market analysis (Article 16.1 of the Framework Directive)	Joint analysis in case of trans-national market (Article 16.4 of the Framework Directive)
	Limited investigation powers (Article 5.1 of the Framework Directive Article 10 of the Authorisation Directive)	Exchange of information with the Commission and other NRAs (Article 5.2 and 5.3 of the Framework Directive)
	Need to conduct a public consultation and collaboration with NCA (Articles 3.4. and 6 of the Framework Directive)	
Decision	NRA has a draft decision	Notification to the Commission and others NRAs (Article 7.3 of the Framework Directive)
	Suspension during 1 month	Commission and other NRAs may comment (Article 7.3 of the Framework Directive)
	Suspension during additional 2 months	Commission may veto the draft decision investigation if it considers that - NRA draft measure would create a barrier to the single market - or if it has serious doubt as to the compatibility with Community law (Article 7.3 of the Framework Directive)
Appeal	Possibility of an effective appeal taking duly into account the merits of the cases (Article 4 of the Framework Directive)	

⁹³⁹ Garzaniti (2003:542) submits that: "there is in fact some scope to argue that NRAs will merely be executing Community law as a network of Commission 'outposts' as all deviations from the guiding principles as defined by the Commission must be justified".

Figure 3.16: Relationship between regulatory actors⁹⁴⁰



Straight line: Strict control and dotted line: Loose control

EC: EC Treaty

FWD: Framework Directive 2002/21

DR: Decentralisation Regulation 1/2003

ERG: European Regulators Group

ECN: European Competition Network

DG Infso: Information Society and Media Directorate-General of the European Commission

DG Comp: Competition Directorate-General of the European Commission

⁹⁴⁰ For simplicity, the role of the National Ministries, the CoCom and the Council is not included.

3.4. PRELIMINARY ASSESSMENT: TOWARDS A PRE-EMPTIVE COMPETITION LAW

The last step in the analysis of the 2003 framework is to reflect upon the results of the SMP regime after nearly three years of practice. This is only a preliminary assessment because many countries were late in the implementation of the 2003 regulatory framework. To do so, I suppose a direct relationship between regulatory setting which influences the fulfilment of good governance principles, which in turn influences the sector performances, which finally influences the state of the economy. Each of these four factors may be broken down and measured with different indicators as illustrated in Figure 3.17.⁹⁴¹

Figure 3.17: A framework for assessing regulation

Regulatory setting	Governance principles ⁹⁴²	Sector performance ⁹⁴³	State of the economy ⁹⁴⁴
<ul style="list-style-type: none"> - Substantive rules - Institutional design 	<ul style="list-style-type: none"> - Proportionality - Flexi-security - Transparency and participation - Subsidiarity and harmonisation - Technological neutrality 	<ul style="list-style-type: none"> - Static indicators - Dynamic indicators - Single market indicators 	<ul style="list-style-type: none"> - Static indicators - Dynamic indicators

Here I focus only of the achievement of governance principles for several reasons. First, the governance principles are at the forefront of the European policy debate since the Commission White Paper of 2001⁹⁴⁵ and the European legislature based the 2003 regulatory framework on such principles,⁹⁴⁶ hence it is relevant to check *ex post* if these principles have been achieved.

⁹⁴¹ For some relevant indicators, see yearly Commission implementation Reports; and also Jones Day and SPC Network (2006), Gilardi (2005), Ofcom Statement of 8 February 2006 on evaluating the impact of the Strategic Review of Telecommunications.

⁹⁴² Indicators on governance principles may include: (1) Regulatory index; (2) Use of public consultation, use of regulatory impact assessment; (3) Expertise, financing, staff number; (4) speed of decision-making, annual working plan; (4) Common position between Member States on specific regulatory issues.

⁹⁴³ Indicators on sector performance may include: (1) Price, quality, productivity, number of operators, market share repartition between the operators, employment; (2) Investment, introduction of new services; (4) Quality, choice and churn, customer satisfaction; (4) Number of EU wide operators, of EU wide offers, of trans-national markets.

⁹⁴⁴ Indicators on the state of the economy may include: Productivity, growth of GDP.

⁹⁴⁵ White Paper of the Commission of 25 July 2001 on the European Governance, OJ [2001] C287/17; Communication from the Commission of 2 February 2005, Working Together for growth and jobs: A new start for the Lisbon Strategy, COM (2005) 24; and Sapir (2004).

⁹⁴⁶ See *supra*, Section 3.1.2.B.

Second, as puts by Melody (2005:55): “policy development and implementation is contested ground where the results – good or bad – are most often unpredictable, especially during periods of major technological or institutional change. Good policy and regulation, like markets, are also judged more by their structures and processes, for example whether they are independent, transparent, inclusive and accountable, than by whether the specific policies and regulations shaped the future as predicted. This is because we have some clear agreed standards for judging the former and in most cases only a few vague highly contested reference points for judging the latter”.

Third, static indicators on sector performance are already widely reported by the Commission in its yearly implementation reports.⁹⁴⁷ However, it is regrettable that the Commission is focusing more on dynamic indicators (like the level of investment), although it is willing to do so in the future.⁹⁴⁸

Fourth the relationship between regulatory setting (especially when limited to one part of the regulation, i.e. the SMP regime) and sector performance or state of the economy is only indirect.

3.4.1. Governance principles: Successes and failures of the 2003 economic regulation

The Commission states that the functioning of the SMP is a success observing that:⁹⁴⁹

The system of market reviews established by the regulatory framework has on balance proved to be a success. Even though it necessitated some initial investment in analytical and organisational capacities on the part of the NRAs and the Commission, it has led to an approximation of regulatory approaches and has thereby helped to pave the way towards an internal market for electronic communications. It has also ensured that all regulators base their decisions on sound economic considerations and that regulation of markets for electronic communications has been kept to the minimum necessary.

⁹⁴⁷ Communication from the Commission of 20 February 2006, European Electronic Communications Regulation and Markets 2005 (11th Implementation Report), COM(2006) 68.

⁹⁴⁸ See the recent study done for the Commission services: London Economics and PricewaterhouseCoopers, 2006. Similarly, the UK regulator is trying to develop more dynamic indicators: Ofcom Statement of 8 February 2006 on evaluating the impact of the Strategic Review of Telecommunications.

⁹⁴⁹ Commission Communication on Market Reviews p. 10, and also the Commission 11th Implementation Report, p. 14. Some authors agree with the Commission: Marcus (2005:39).

Thus, the Commission considers that the system is basically sound and sees no need for fundamental changes, but only marginal improvement in decreasing the administrative burden and streamlining the procedures.⁹⁵⁰ Similarly, the Commission consultants Hogan & Hartson and Analysys (2006:132) consider that the framework is basically sound and that most of the problems in the markets are due to poor implementation. I would be more critical in my assessment. To me,⁹⁵¹ one principle is broadly achieved (transparency and participation); two principles are better achieved but problems remain (technological neutrality, subsidiarity and harmonisation); and two principles are not achieved (proportionality, flexi-security).

Transparency and participation

The principle of transparency and participation is broadly met, except maybe in the context of the Article 7 review that remains largely opaque⁹⁵² and some of the work of the ERG. Public consultations are now systematically organised (with the exception of some Member States having incorrectly implemented the Directives)⁹⁵³ and the vast majority of the information and the decisions of the NRAs and the Commission are available on the Internet.

Technological neutrality

The respect of the principle of technological neutrality has undoubtedly progressed compared to the previous 1998 regulation⁹⁵⁴ because such principle is embodied in the antitrust methodologies and the service market definition.

However in some cases, regulatory actors are reluctant to fully endorse the consequences of this approach.⁹⁵⁵ Such failure may explain why the increasing convergence between platforms is not sufficiently taken into account in the regulation and why regulation takes more time to decrease than initially expected. The most controversial case to date is the definition of the wholesale broadband access market (number 12 of the Commission Recommendation) and the possible inclusion of the cable infrastructure next to the telecommunication network.⁹⁵⁶ By

⁹⁵⁰ Commission Communication on 2006 Review, p. 11.

⁹⁵¹ This section is partly built on de Streel (2005).

⁹⁵² See Commission Communication on Market Reviews, p. 3; Hogan & Hartson and Analysys (2006:123). There is less need to be no transparent in the Article 7 pre-notification meeting than in competition law proceedings as under the former deal with ex-ante regulation and the latter with ex-post punishment.

⁹⁵³ Annex to the 11th Implementation Report, p. 47.

⁹⁵⁴ Larouche (2006b:15).

⁹⁵⁵ Renda (2006:10-12).

⁹⁵⁶ See *supra*, Section 3.2.2.C.

not including cable into the wholesale broadband market, the Commission does not follow the principle of technological neutrality. Another topical case is the treatment of the merging markets. By requesting that VDSL lines and FTTx lines would be protected from regulation some European incumbents are clearly violating the principle of technological neutrality.⁹⁵⁷

Subsidiarity and harmonisation

The principle of subsidiarity and harmonisation is better fulfilled today than under the previous 1998 regulation. National regulators follow in general the market definitions proposed by the Commission in its Recommendation and divergences remain limited to some specific markets (like the broadcasting transmission services). NRAs are also going towards a common approach on remedies for several major regulatory issues, although differences remain in the detail and implementation of such remedies (like the choice of costing methodologies or the imposition of reciprocity of termination charges between incumbents and new entrants).⁹⁵⁸

However, problems remain. First, some market segments with an obvious internal market dimension like international roaming have not yet been analysed by the majority of the NRAs. Second, the coordination mechanisms between NRAs are mainly voluntary (inside in the European Regulators Group). They do not impede some divergences reflecting different national circumstances but also different regulatory approaches and confidence in regulation to solve competitive problems.⁹⁵⁹ Third, no specific cooperation mechanism is set up between national courts, an increasingly important actor. More fundamentally, there is not yet a true single market for electronic communications.⁹⁶⁰

Proportionality

It is difficult to determine if the principle of proportionality is adequately met. It is undisputed that the level of SMP retail regulation has slightly decreased,⁹⁶¹ and the level of wholesale

⁹⁵⁷ Larouche (2006b).

⁹⁵⁸ Commission Communication on Market Reviews, p. 6.

⁹⁵⁹ The most outstanding example of such divergence is the approach recently followed by the UK regulator that imposed a quasi structural separation on BT as a *quid pro quo* for a removal of retail regulation: Ofcom Final statements of 22 September 2005 on the Strategic Review of the Telecommunications and undertakings in lieu of a reference under the Enterprise Act 2002. Another example is the difference regarding the inclusion of cable network in the wholesale broadband market which does not only reflect different market conditions (see Schwarz, 2006:20).

⁹⁶⁰ Hogan & Hartson and Analysys (2006:132).

⁹⁶¹ However in some cases, the regulation imposed under the SMP regime has simply been replaced by a regulation under the universal service provisions, changing nothing in practice.

regulation has increased (imposition of Wholesale Line Rental, naked DSL, regulation of wholesale SMS termination and retail international roaming prices)⁹⁶² That said, it is more difficult to determine whether there is too much regulation compared to a level that would maximise the long term consumers' welfare. To answer, two camps are opposed with theoretical and empirical arguments.

One camp (mostly new entrants and the regulators to some extent) argues in theory that low and multiple access prices stimulate the investment of new entrants (which are able to enter the markets) as well as the investment of incumbents (which have to compete against new entrants). In particular, it argues that a properly applied ladder of investment ensures a transition from services-based competition towards facilities-based competition.⁹⁶³ To support the argument, the new entrants' camp shows that the theory is verified in practice and comes with complex econometric analysis showing that investment was higher in the US States having lower access prices⁹⁶⁴ or in the European Member States having stricter regulation.⁹⁶⁵ In particular, it shows that the ladder of investment is verified by the European markets evolution where resale and bitstream is being replaced by shared access and full unbundling.⁹⁶⁶

The opposite camp (mostly incumbents) argues in theory that easy access removes investment incentives of the new entrants (which would prefer to buy cheap access instead of building infrastructure) as well as of the incumbents (which do not want to do risky investment that should then be shared with competitors). In particular, it argues that the ladder of investment is not manageable by the NRAs but instead leads to regulatory arbitrage between the different rungs of the ladder and micro-management.⁹⁶⁷ To support the argument, the incumbents' camp comes with sophisticated econometric analysis showing that investment was lower in

⁹⁶² Defraigne (2005:598), Larouche (2006b:13), Renda (2006), Temple Lang (2006:28). Such increase is recognised by the NRAs themselves: Ofcom 2005 or the interview of the chairman of Belgian regulator Van Heesvelde (2006:13). Thus, the statement of the Commission that the 2003 framework has helped to deregulate the sector (Commission Communication on Market Reviews, p. 5) can be misleading and should not be read as implying that the 2003 framework led to less regulation.

⁹⁶³ Cave (2006).

⁹⁶⁴ Chang et al. (2003), Ford and Spiwak (2004), Willig et al. (2002).

⁹⁶⁵ Jones Day and SPC Network (2006).

⁹⁶⁶ ERG Broadband market competition report of May 2005, ERG(05) 23. SPC Network (2006) calculates that, in 19 of the 25 Member States, for every 1% decrease in market concentration there is a 2.86% increase in broadband take-up, and the Commission 11th Implementation Report, p. 11 notes that low unbundling rates are not having an adverse effect on infrastructure competition. Also in this sense, London Economics and PricewaterhouseCoopers (2006).

⁹⁶⁷ Oldale and Padilla (2004), Renda (2006:13-20).

the US States having a lower access price.⁹⁶⁸ In particular, it shows that the predictions of the theory materialised neither in the US where the entrants did not climb the investment ladder nor in Europe where no operator has climbed the last rung of the ladder (and regulation has become unnecessary).⁹⁶⁹

In short, it is extremely difficult to decide between both camps⁹⁷⁰ because the investment decisions are influenced by many other factors than the level of regulation (mainly by the state of the financial markets and the expected evolution of consumer demand) and no uncontroversial indication on the relationship between regulation and innovation has been produced so far. However, several points can not be disputed. First, the increase of regulation does not match the de-regulatory rhetoric of the public authorities.⁹⁷¹ Second, the ladder of investment has sometimes been misapplied, for instance by not putting in place dynamic pricings.⁹⁷² Third, regulation has in some cases limited the retail offerings of the incumbents (like a combined fixed-and-mobile offer or low price offers for the low-end customers).

In addition, the cost of regulatory procedures has increased⁹⁷³ because the new SMP regime is more complex to implement, requiring many data to process and a systematic consultation of the Commission. Such complexity was aimed to allow a better knowledge of the market and a more fine-tuned regulation. In practice, the regulators better grasp the marketplace but they do not yet fine tune regulation, hence the price of this complexity may be unjustified.

Flexi-security

The principle of flexibility is broadly achieved and is not any more problematic in the sector. On the one hand, the European law allows for differentiation across Member States. On the other hand, the NRAs are given sufficient margin of discretion to adapt to dynamic market

⁹⁶⁸ Crandall (2004), Crandall et al. (2004), Wallsten (2005) See also Chang et al. (2003) for European data.

⁹⁶⁹ Hausman and Sidak (2005a).

⁹⁷⁰ Reviewing these studies, Cave (2006:224) concludes at the absence of clear empirical conclusions from cross-country studies.

⁹⁷¹ Along these lines: Larouche and De Visser (2005). See also the cautious note about the general liberalisation rules of Laffont and Tirole (2000:141): "One of our concerns with current regulatory reforms is that, beyond the liberalization and free-market rhetoric, one may be creating an environment that will lead to heavy-handed regulatory intervention".

⁹⁷² See the cautionary remarks in Cave (2006:226).

⁹⁷³ Cave estimated at a CEPT conference in April 2005 that the average costs for the initial market review at 5 million € per Member State, cited in Ovum and Indepen (2005c). Armbak at the 2006 ITS Conference in Amsterdam estimated that the costs of communications regulators in EU ranged from <1 € to 6.30 € per capita, the most expansive being the Portuguese, the Danish and the Finish NRA and the least expensive being the French and the Dutch NRA.

evolutions⁹⁷⁴ (with the exception of some Member States having incorrectly implemented the Directives).⁹⁷⁵

However, the principle of legal certainty is not achieved so far.⁹⁷⁶ First, there is a discrepancy between the rhetoric, which is mainly de-regulatory, and the actions of the regulators which has increased regulation with the endorsement of the NRA. Second, the strategy of the regulatory actors is not always predictable. For instance, it is not clear whether regulators directly protect the consumers, promote entry or merely prohibit abuses. If the former, it is not clear what type of entry should be promoted⁹⁷⁷ and whether infrastructure-based competition or service-based competition should be encouraged.⁹⁷⁸ In particular, regulators have not yet defined a consistent approach for the new markets, being the retail markets like Voice over IP,⁹⁷⁹ or the new underlying wholesale markets like VDSL infrastructure or 3G voice networks. Third, the role of the appeal bodies has increased but has not been clarified. There is a multiplication of lengthy appeals against regulators' decisions⁹⁸⁰ (which is particularly problematic in a fast moving sector), and the precise standard of legal review is not clear (manifest error or something stricter). Moreover the different appeal bodies are not coordinated across the Members States. In sum, many market players consider that appeals and dispute resolution processes are not working effectively in several countries.

⁹⁷⁴ Such flexibility has not been used much so far during the first round of market analysis because the NRAs were still learning of to apply the new regulation. For the second round of analysis, the NRAs may rely more of the flexibility: see ERG/IRG Response to the Review 2006, p. 33.

⁹⁷⁵ Annex to the Commission 11th Implementation Report, p. 49.

⁹⁷⁶ Also of this opinion, Knieps (2005:81). This is contrary to what the Commission, relying on the *méthode Coué*, observes in the 11th Implementation Report, p. 9.

⁹⁷⁷ *Inter alia*, this amounts to the question of what is an efficient entrant in a regulatory price squeeze test.

⁹⁷⁸ Dobbs and Richards (2004:718); Hocepić and de Sirel (2005:151). However, the European Regulators Group (ERG Revised Common Position on remedies, p. 63) and the Commission (Monti, 2004) argue that there is no conflict between both types of competition when the time dimension is taken into account and that NRAs should provide incentives for competitors to seek access from the incumbents in the short term and to build their own infrastructure in the long term. However, this ladder of investment theory is not easy to apply in practice and does not evacuate the balance to be made between short-term and long-term considerations.

⁹⁷⁹ See Table 4.3 and also the response of Yahoo! To the 2006 Review.

⁹⁸⁰ Hogan & Hartson and Analysys (2006:126).

3.4.2. The reasons of the failures

A. Substantive rules: The absence of clear objectives and the alignment of sector-specific regulation with antitrust methodologies

The absence of clear objectives

A first reason of failures is the absence of clear regulatory objectives. Larouche (2002:142 and 143) argued that “the regulatory framework lacks of coherent vision about the economic specificities of the telecommunications sector, and by the same token about the responsibility of the State for telecommunications regulation” and “sees little role for the State beyond helping the transition from monopoly to competition”.

This critique is a bit too harsh as the 2003 framework has a general implicit vision of the role of regulation and the State in the sector. The basic thrust is that citizens’ interests are best served by competitive markets and that public intervention is only justified to guarantee competition on the markets or to ensure that needs not satisfied by market left alone would be fulfilled.⁹⁸¹ That leads to three types of regulation: market entry, social and economic. The first two types (market entry and the social regulations) have always been considered as permanent, whereas the role and the duration of the third type (economic regulation) are more controversial. The three main the European institutions⁹⁸² have argued that it should disappear over time to be replaced by the mere application of competition law. But a thorough analysis of the directives shows that economic regulation will apply when and until it can control market power more efficiently than antitrust, which is mainly the case when there are significant economies of scale and scope, or important externalities. As long as these effects are at play, economic regulation is justified and will be maintained.

However although there is a vision, the regulatory actors have an important discretion and their precise objectives are not always clear.⁹⁸³ I see at least two reasons to that. First, the evolution of the sector is fast and uncertain, hence the legislature and NRA are reluctant to choose and commit to a specific regulatory strategy. In the electronic communications sector, every regulatory strategy is a bet. As William Baxter, the US Antitrust Assistant Attorney

⁹⁸¹ Also in this sense, Bak (2003:323).

⁹⁸² Commission Communication on the 1999 Review, p. 49; Point A of the Resolution of the European Parliament of 13 June 2000 on the 1999 Communications Review of the Commission A5-0145/2000, OJ [2001] C 67/53; Para II.1 of the Statement of Reasons of the Council Common Position 38/2001 of 17 September 2001 on the Framework Directive, OJ [2001] C 337/51.

⁹⁸³ See *supra*, Section 4.1.2.A.

General at the time of the AT&T consent decree recognised ten years after the AT&T break-up.⁹⁸⁴

The [AT&T consent] decree implicitly made a wager that the regulatory distortions of those portions of the economy which would have been workably competitive, yielded social losses in excess of the magnitude of economies of scope that would be sacrificed by this approach. It was a wager, a guess. It would be absurd to pretend it was made on the basis of detailed econometric data. It was not; we did not have the data. Of course, all other courses from that point were also guesses. Clear proof was not about to become available any time soon. It was a judgement call, and I guess, in some senses, I do not yet know. Maybe we will never know whether it was right or wrong.

Second, the European Union is made of 25 Member States with different traditions on the role of the State in the economy. It may be argued that the successive regulatory models since the liberalisation goes away from the heavy industrial policy⁹⁸⁵ but it does not decide between the three other paradigms explained before (Schumpeter, neo-classic, soft industrial policy). This lack of clear objectives has several consequences. It impedes legal certainty, proportionality and harmonisation of regulatory practices.

The alignment of sector-specific regulation with antitrust methodologies

To escape the difficult issue of objectives, the legislature tried to hide it by aligning sector-specific regulation with antitrust methodologies. Indeed it was argued⁹⁸⁶ that such alignment would make sector-specific regulation more harmonised (because antitrust is strongly Europeanised), more flexible (because antitrust is based on economic principles),⁹⁸⁷ and more legally certain (because antitrust is based on more than forty years of case-law). In particular, the use antitrust principles would ensure the use of sound economic analysis by the NRAs.

⁹⁸⁴ Baxter (1991:30).

⁹⁸⁵ I can not elaborate here on the reasons why the model goes away from the heavy industrial policy paradigm, but that is due to the technological evolution and the decreasing presence of natural monopoly in the sector as well as the allocation of competences between the Union and its Member States (and the quasi non existent industrial policy at the European level). See also Thatcher (1999).

⁹⁸⁶ Buiges (2004), Cave (2004), Monti (2003). Such alignment was already broadly supported by the participants at the Third Workshop on European Competition Law held in Florence in 1998: see Ehlermann (2000:x1). Note however that antitrust methodologies are insufficient to detect market failures justifying sector-specific regulation. As already explained, antitrust principles are deemed to detect all cases of excessive market power (whatever its sources) justifying antitrust intervention, but they are not suited to isolate the subset of cases of excessive market power (like natural monopoly) justifying regulation. In fact even in the antitrust cases dealing with market failures justifying regulation like *Bronner*, antitrust methodologies are bypassed: see Chapter 3.

⁹⁸⁷ Monti (2000). In general, see Motta (2004).

However, such methodologies do not evacuate the fundamental regulatory questions and worse, they add difficulties, whose some are linked to the use of antitrust methodologies in dynamic market and others are linked to the transposition of antitrust methodologies in a regulatory context.

On the one hand, it is not appropriate to rely on standard antitrust principles⁹⁸⁸ which were developed for stable industries in dynamic markets without any adaptation (see Chapter 3). Such adaptation of the classic antitrust is difficult (especially because the underlying economic theories are very recent)⁹⁸⁹ but necessary to have a correct understanding of the forces at play in the markets. Unfortunately, the practice of some NRAs does not go in that direction leading some to argue that regulators are only paying lip service to antitrust principles, that the use of the SSNIP test as a 'thought experiment' may be manipulated by regulators (and in the worse cases becomes a self-fulfilling prophecy) and that NRAs tend to find market power where there is none and over-regulate.⁹⁹⁰

On the other hand, the transposition of antitrust methodologies in the regulatory context creates several distortions for the development of competition law as well as for the development of sector-specific regulation because the objectives and the procedures of both sets of rules are different (See Chapter 5, Section 5.1.1). Already before the directives were adopted, Larouche (2002:136-140) warned against the antitrust alignment and pointed to the risk that sector-specific regulation will pollute the development of competition law. Similarly Bavasso (2004:113-116) points to the risk that competition law would become extensive or formalized. Now, after a few years of experience, Temple Lang (2006:29-33) submits that the European legislature failed to understand the differences between competition law and sector-specific regulation, and that the alignment of methodologies leads to various unfortunate consequences, in particular inappropriate extension of the role of competition, confusion between legal instruments and complex litigations and multiple procedures. In addition and linked to institutional design, antitrust principles do not constrain much the NRAs in their actions (as many NRAs adapt them quite flexibly to their own purposes) but they do constrain

⁹⁸⁸ In exceptional cases, regulatory actors do not even apply the standard antitrust principles as the Dutch bitstream case: Case NL/2005/281.

⁹⁸⁹ Moreover, many of such economic theories have been influenced by their affect of the US and EU Microsoft cases.

⁹⁹⁰ Larouche (2005a), Dobbs and Richards (2004).

the Commission in its comment under the Article 7 procedure (as the Commission always looks at the impact of its comments on its pending and future stock of antitrust cases).

Thus contrary to what Katz (2004:244) argues and what I thought at the adoption of the directives,⁹⁹¹ I think now that antitrust principles are more than a rigorous economic way of looking at the market and decrypting the forces at play, they are intrinsically linked to the objectives and the procedures of antitrust law. Therefore, they can not be equally be used for sectoral regulation without creating several unfortunate distortions.⁹⁹²

B. Institutional design

The incentives of the NRAs

A second reason for the identified failures of the 2003 economic regulation is the institutional design which has not been sufficiently thought through by the European legislature. In general, regulatory authorities do not have incentive to de-regulate because of the well-established problems of state bureaucracy implying that authorities have a tendency to increase their activities.⁹⁹³ The most recent illustration of such problem is the European Regulators Group contribution to the 2006 Review which argues for more power and less check and balances. Regulators ask for the possibility to regulate oligopolies as well as the whole chain of product. They also suggest to reinforce the powers of the ERG and to weaken those of the Commission.⁹⁹⁴ In addition, the regulatory brakes put in place by the directives do not function efficiently.

More critically, NRAs do not have incentives to take into account dynamic side of competition (investment, innovation) but only the static side (level of price, number of competitors) because the indicators on which they are evaluated are mainly static.⁹⁹⁵ This 'static' approach was justified at the beginning of liberalisation when the regulation aimed to break down the power of the previous monopolists, but is not any more justified after 20 years

⁹⁹¹ de Stree (2003a:513).

⁹⁹² Note however, that several market participants are supporting antitrust hybridisation: Hogan & Hartson and Analysys (2006:81).

⁹⁹³ Stern (2004), Waverman (2003).

⁹⁹⁴ I/ERG Response to the call for input of the 2006 Review, respectively at p. 21, 22, 28.

⁹⁹⁵ See the yearly Commission implementation reports, available at http://europa.eu.int/information_society/policy/ecom/implementation_enforcement/index_en.htm

of market opening and rapid technological progress when 'it is not the big who beat the small but the fast who beat the slow'.⁹⁹⁶

To make things even worse, the NRAs do not have sufficient incentive to take into account the impact of their measures to the European or other Member States interest. To be sure, the 2003 regulation provide two mechanisms to stimulate a European regulatory culture (the European Regulators Group and the Commission Article 7 review). However, the goal of both mechanisms is merely to achieve a common regulatory approach across Member States and not that each NRA takes into account the externalities they create to other Member States.⁹⁹⁷ And both mechanisms have backfired. The ERG is becoming a place to exchange the best regulatory practices (but not the best deregulatory ones) putting the NRAs in a competition towards more regulation (race to biggest). The Commission review is sometimes more used to achieve a harmonisation of results between Members States rather than a harmonisation of methods. In some way, the current regulation leads to the worst possible result for the European citizens. They do not enjoy the benefit of subsidiarity (especially regulatory competition) because NRAs have no incentive to compete in the ERG and are sometimes impeded to do so by the Commission Article 7 review. They do not enjoy the benefit of centralisation either because there is no European regulator and NRAs have no incentive to take other countries' interests into account.

To summarise, NRAs are performing relatively well with regard to their incentives, but such incentives are not any more aligned with today long term welfare of the consumers and this explained several of the failures of the 2003 regulatory framework, i.e. lack of legal certainty, proportionality and harmonisation.

The check and balances – the Article 7 review

The first check and balance and regulatory brake against the NRAs is the Commission Article 7 review. After nearly three years of practice and more than half of workload done, the Commission submits that the system has on balance proved to be a success because it has led to an approximation of regulatory approaches, hence paved the way towards an internal market for electronic communications and has ensured that all regulators base their decisions

⁹⁹⁶ To take the expression of Niklas Zennström, co-founder and CEO of Skype Technologies: *The Economist, The World in 2006*, p. 115.

⁹⁹⁷ Similarly, the industry does not view the ERG as the appropriate body to take the leading role on policy making and harmonisation: Hogan & Hartson and Analysys (2006:135).

on sound economic principles.⁹⁹⁸ Without denying that the system has performed better than many expected at the beginning of its implementation (some argued that the Commission would not be able to cope with strict deadlines combined with numerous NRAs notifications, other claimed the Commission would never dare to veto an NRA), I would again be more critical in my assessment. I see two related problems with the current drafting of the Article 7 of the Framework Directive and its implementation by the Commission: first, un-clarity of the role of the Commission review and misapplication of the jurisdictional criterion, and second, un-clarity of the legal value of the Commission Decision and absence of review of such decision.

First regarding the role of the Commission review, it was meant to be a mechanism to safeguard the internal market had that is why solely the NRAs draft decisions affecting the internal market should be notified. However, the NRAs and the Commission have construed this condition broadly such that all market analysis have been reviewed by the Commission. This broad review, combined with an extensive standard of review that I believe the Commission enjoys, makes the Article 7 control close to a sort of first (European) appeal on the merits of the case.⁹⁹⁹ This corresponds neither to the ratio legis of the Article 7 review, nor to the practical possibilities of the Commission. Thus, I concur with Larouche and de Visser (2005:8)¹⁰⁰⁰ that jurisdictional criterion should be construed more strictly.¹⁰⁰¹

Second regarding the legal status of the Commission decisions and comments letters, it appears that only the Commission veto are decision in the sense of Article 249 EC and the comment letters are only recommendation. However, both aim to have legal effects, in particular before a national judge. The problem is that the comment and non-comments letters are not adopted following the rule of due process, and more critically, are not challengeable to the Community Courts. This may partly explain the politicization of the Article 7 review in

⁹⁹⁸ Commission Communication on Market Reviews, p. 10.

⁹⁹⁹ To make things even worse, the Commission has sometimes used the review to impose a harmonisation of method for the stake it. That may be the case of the veto against the draft decision of the German regulator which did not designate the small fixed operators as having SMP on their termination market: Case DE/2005/144.

¹⁰⁰⁰ Along that line, I also concur with Haucap (2006:164-165) giving several cases where the Commission has unnecessarily impeded regulatory experimentation and tries to impose a one-size fits all model like imposing Germany to adopt local call CPS.

¹⁰⁰¹ However, Hogan & Hartson and Analysys (2006:154) observe that the standard of "non-appreciability" cannot be easily applied in the context of the Article 7 notification process. Market share and turnover, the criteria typically used in antitrust and State Aid cases to distinguish *de minimis* cases from the rest, would not work here. For example, as noted above, in the Framework Mechanism even a 100% market share can lead to a difficult debate; market share alone cannot be an automatic filtering criterion between "notifiable" and "non-notifiable" NRA decisions.

some prominent cases. This also enables the Commission to use the Article 7 review to extend antitrust doctrine and/or safeguard its freedom to intervene in antitrust cases, without being sanctioned by the Courts.¹⁰⁰²

The other check and balances

The other checks and balances are the cooperation with the NCA and the review of NRAs' decisions by the national appeal body. However, as we have seen, the NCA can have an incentive to extend antitrust theories and the appeal process is not sufficiently clear and too slow in a fast moving sector.

C. Additional element: The insufficient application of the several provisions of the 2003 regulation

A last reason for the identified failures is the insufficient and inadequate application of the provisions of the 2003 regulation. The most striking example is the non-application by the Commission and the NRAs of the three criteria test because of the transition between the 1998 and the 2003 regulation.

Other provisions have not been applied properly. For instance, most regulators have not been very creative when imposing remedies.¹⁰⁰³ They did not limit themselves to impose the proportionate remedies to solve competitive problems, but instead choose the full suite as they were used to do during the previous 1998 regulation. Similarly, they did not try to find remedies which would ensure a true de-regulation, but instead remain in the standard list of remedies provided for in the Directives.¹⁰⁰⁴ More critically, regulators developed the ladder of investment which applied extensively led them to multiply the number of compulsory access points to the fixed incumbent network (full unbundling, shared access, and the different flavours of bitstream access). Thus, the policy aims not only to create a level playing field among all market players but also to actively support entrants.

¹⁰⁰² That may be the case of the comments against the draft decision of the Dutch regulator which included cable in the wholesale broadband access market: Case NL/2005/281.

¹⁰⁰³ Hogan & Hartson and Analysys (2006:146 and 181).

¹⁰⁰⁴ See Section 4.2.2.D.

3.4.3. Towards a pre-emptive competition law

With the 2003 framework, the European electronic communications regulation is one step closer to antitrust law and this is the end-point of twenty years historical process. Before liberalisation started in the eighties, sector-specific regulation was perceived as opposite to antitrust law because the former considered monopoly as desirable and was preventing entry on the market whereas the latter was considering competition as desirable as was protection effective competition.¹⁰⁰⁵ With the liberalisation, sector-specific regulation recognised that competition was desirable and was aimed to support the advent of effective competition, but with its own methodologies. Today, sector-specific regulation not only aims to develop competition, but also use the principles and methodologies of antitrust law. As Krüger and Di Mauro (2003:36) of DG Competition observed:

The perceived antagonism between competition and regulation is, therefore, only apparent, and it is destined to disappear. In fact, competition has already been shaping regulation: it is the latter which has been adapting itself to suit the philosophy and the approach of the former. Regulatory policy cannot be seen anymore as independent of competition policy: it must be seen as a part of a broader set of tools of intervention in the economy based on competition analysis principles. The Article 7 Task Forces are perhaps the best expression of how competition instruments and regulatory tools are complementary, rather than substitute, means. They deal with a common problem and try to achieve a common aim. The problem is always high levels of market power and the likelihood of it being abused, and the aim is putting the end user at the centre of any economic activity. Only through a combination of both tools can we ensure that market power does not distort and hamper the development of competition in the communications markets. This in turn allows end users to drive and steer such development, as well as to benefit the most of it.

However, differences remain between sector-specific regulation and antitrust law (in particular regarding the burden of proof to intervene and the institutions in charge) which calls for an optimal balance between both legal instruments as well as an efficient coordination between the institutions. Moreover, sector-specific regulation suffers from weaknesses that should be addressed in the forthcoming 2006 Review. I now turn to these questions.

¹⁰⁰⁵ Kahn (1988). Montero-Pascual J.J. (2001).

CHAPTER 4: TOWARDS AN IMPROVED REGULATORY MODEL

After having analysed the application of competition law and the sector-specific regulation, I join both perspectives together to make some proposals for a better regulatory model in the sector. In the first section, I start by focusing on substantive rules and make some suggestions for an optimal balance between competition law and sector-specific regulation, and then turn to institutional rules and make some suggestions for an optimal coordination between antitrust and regulatory authorities. In the second section, I translate those suggestions into legal rules and confront them with the preliminary proposals made by the Commission at the end of June 2006 in the context of the forthcoming review of the regulatory framework.

4.1. BALANCE BETWEEN RULES AND COORDINATION BETWEEN INSTITUTIONS

To better understand the relationship between competition law and sector-specific regulation, it is helpful to distinguish between two questions that are regrettably often confused in the literature: on the one hand the question of the scope of application of the legal instruments, and on the other hand, the question of the authority in charge of each legal instrument. I deal with both questions in turn.

4.1.1. Balance between competition law and sector-specific regulation

A. Possible models

In theory, there are four possible models to determine the respective scope of application of antitrust law and sector-specific regulation in the electronic communications sector, as illustrated in Figure 4.1.

Figure 4.1: Different models to define the scope of antitrust law and sector-specific regulation

	Model A	Model B	Model C	Model D
Scope of Competition law	Exclusively on all issues	All issues	Exclusively on remaining issues	--
Scope of sector-specific regulation	--	Concurrently on specific issues	Exclusively on specific issues	Exclusively on all issues
Examples	<i>Previously in New-Zealand</i>	<i>EU (Deutsche Telekom)</i>	<i>US (Trinko)</i>	

Model A is when competition law applies exclusively on all issues in the sector and there is no sector-specific regulation.¹⁰⁰⁶ Such model has been followed in New Zealand until 2001 but without much success because the structure of the market had too many historical and structural market failures to be efficiently dealt with by antitrust law.¹⁰⁰⁷ It has also been applied in some Eastern European countries as an interim measure until a viable sector-specific regulation could be developed.

In the context of the Review 2006, some European incumbents are advocating that the future directives should set a clear deadline (e.g., 2015) when the European system will move towards such model. Although, the Commission maintains that in the long run, competition law should suffice for economic intervention and that sector-specific regulation would be progressively removed,¹⁰⁰⁸ it refuses to set a specific and rigid deadline for such phasing out and prefer to maintain a more flexible market-by-market sunset clause.¹⁰⁰⁹

Model B is when competition law applies on all issues and sector-specific regulation applies concurrently on some specific issues. Such model is followed in all the Member States today. On the one hand, competition law applies to all issues because of its constitutional value enshrined in the EC Treaty and the Court of Justice has never allowed any industry, especially a regulated one, to claim a complete exception from Community competition law.¹⁰¹⁰ The application of antitrust law in addition of sector-specific regulation is best exemplified by the Commission decision in *Deutsche Telekom* condemning the German incumbent for violation

¹⁰⁰⁶ For the pros and cons of this approach, see ICN (2006:84).

¹⁰⁰⁷ Geradin and Kerf (2003:Chapter 5).

¹⁰⁰⁸ Draft Explanatory Memorandum of the second Recommendation, p. 5.

¹⁰⁰⁹ Impact assessment of the Review 2006, p. 12. In this sense also, Ehlermann (2000:xlvi).

¹⁰¹⁰ See Case 172/80, *Züchner v. Bayerische Vereinsbank* [1981] ECR 2021 (banking); Case 41/83, *Italy v. Commission* [1984] ECR 873 (telecommunications); Case 45/85, *Verband der Sachversicherer v. Commission* [1987] ECR 405 (insurance), cited by Larouche (2006b:10).

of Article 82 EC although it was already regulated by the national regulator. On the other hand, sector-specific regulation applies additionally to the issues that can not be dealt efficiently by competition law.¹⁰¹¹

Model C is when sector-specific regulation applies exclusively to specific problems of electronic communications, and antitrust law applies exclusively to the remaining problems (in other words, sector-specific regulation removes antitrust jurisdiction). Such model is followed by the US Supreme Court in *Trinko*.¹⁰¹² On the basis of a cost-benefit test, the Court held that, when sector-specific regulation has been applied, the benefit of the additional intervention of antitrust law is small (in particular because antitrust does not have the appropriate remedies to deal with what is mostly structural problems) and the cost (in particular cost of type I error, i.e. false condemnation) may be high.

It is interesting to compare the *Deutsche Telekom* and the *Trinko* decisions¹⁰¹³ and understand why Europe follows model B whereas the US follows model C. Geradin (2004:1548-1549) and Larouche (2006b:7-8) note that the radical position of the US Supreme Court may partly be explained by the specificities of US legal system as well as the peculiarities of the case at hand: first, the US telecommunications regulation was very pervasive at the time; second the US antitrust law provides for high private damages in cases of violation of antitrust law (possibility of class actions and treble damages) which increase the costs of type I error, and is administrated by judicial Courts which are not able to monitor behavioural remedies; third, Mr. Trinko was a customer of a new entrant that claimed to have suffered loss because its operator had faced refusal to deal from the incumbent (thus Mr. Trinko was more interested by the prospect of earning large financial compensation than by the protection of the competitive structure.)

But Larouche (2006b:10-11) sees a more fundamental explanation of the transatlantic difference in the fact that European competition law has a constitutional value (as enshrined

¹⁰¹¹ See Chapter 3. This was also the model of the more rigid 1998 framework where sector applies to specific issues determined in advance in the directives.

¹⁰¹² *Verizon v. Curtis V Trinko* 540 U.S. 682 (2004). The Supreme Court has recognised that, in the US antitrust law, there is no explicit or implied immunity for the telecommunications sector. Note that Katz (2004:note 18) criticised model C and submits that it is important to retain the application of the antitrust law because it allows private enforcement to supplement public enforcement and because different remedies may be available.

¹⁰¹³ Note however that the legal value of both decisions is different because *Deutsche Telekom* is not final as a decision of the Commission (currently under appeal at the Court of First Instance, with an additional possibility of review at the Court of Justice) whereas *Trinko* is final as a decision of the Supreme Court.

in the EC Treaty) whose application can not be removed by national sector-specific regulation whereas American antitrust has the same legal value than sector-specific regulation. Thus, Larouche concludes, "In the end, the different outcome in *Trinko* and *DT* regarding the relationship between competition law and sector-specific regulation is best explained by basic differences in the legal framework." To me, the main explanation between both approaches lies in the difference of the institutional design. The Commission decided to intervene for two reasons: first, it is an administrative authority that feels to have the same ability to analyse a case and intervene on the market than an NRA, and second, the Commission is the only European regulator that feels obliged to impose a common interpretation of the unbundling prices across Member States. I suspect that if the European institutional design was the same than in the US, i.e. antitrust cases are decided by a Court and there is a federal telecommunications regulator, the Commission would not have condemned Deutsche Telekom.

Going back to the typology, model D is when sector-specific regulation applies exclusively to the sector and antitrust law does not apply. This model is not applied in any Member State, and more generally, in any OECD country.¹⁰¹⁴

Of those four models, models A and D are the easiest to put in practice because there is only one set of rules applicable. Model C is an intermediate one because it implies the application of two sets of rules, hence the respective scope of each of them should be determined. However, there is no concurrent application, hence no risk of conflict of rules. Model B is the most complex because it implies the application of two sets of rules as well as their concurrent implementation on some issues, hence it requires mechanisms to resolve conflict of rules.

B. European model

The Community law provides for model B as competition law applies across the board and sector-specific regulation applies in addition to some specific issues. But the model is

¹⁰¹⁴ ICN (2006:22). Note however that before the British Telecom Decision of the Commission (10 December 1982, Case 29.877 OJ [1982] L 360/36, as confirmed by the Court of Justice in Case 41/83 *Italy v Commission* [1985] ECR 873), European competition law was not applied in practice in the electronic communication sector, as a result of a policy choice (although legally, the antitrust rules were applicable to the sector.)

rendered more complex because (1) European competition law has primacy over national sector-specific regulation and (2) competition law and sector-specific regulation have converged over time.

Competition law: applies across the board and has primacy over sector-specific regulation

A fundamental principle of Community law is that the rules of the EC Treaty (of which competition law is part) have primacy over the national rules and that all public authorities, including the national regulatory authorities, should abide to such primacy. Thus the NRAs should not undermine the application of European antitrust.¹⁰¹⁵ In *GIB/ATAB*,¹⁰¹⁶ the Court of Justice held that:

33. (...) while it is true that Article [82] is directed at undertakings, nonetheless it is also true that the Treaty imposes a duty on Member States not to adopt or maintain in force any measure which could deprive the provision of its effectiveness.

And in *Ahmed Saeed*,¹⁰¹⁷ the Court of Justice added:

48. [...] while it is true that the competition rules set out in Articles [81] and [82] concern the conduct of undertakings and not measures of the authorities in the Member States, Article [10] of the Treaty nevertheless imposes a duty on those authorities not to adopt or maintain in force any measure which could deprive those competition rules of their effectiveness. That would be the case, in particular, if a Member State were to require or favour the adoption of agreements, decisions or concerted practices contrary to Article [81] or reinforce their effects.

More generally in *Conorzio Industrie Fiammiferi*,¹⁰¹⁸ the Court held that:

48. (...) in accordance with settled case-law the primacy of Community law requires any provision of national law which contravenes a Community rule to be disapplied, regardless of whether it was adopted before or after that rule.

49. The duty to disapply national legislation which contravenes Community law applies not only to national courts but also to all organs of the State, including administrative authorities,

¹⁰¹⁵ Commission Access Notice, para 13. See Temple Lang (2006:36-42). According to Advocate General van Gerven cited by Temple Lang (1998:115), the kinds of measures which are prohibited fall into four categories: (1) encouraging or reinforcing unlawful agreements or practices; (2) giving companies power to regulate themselves; (3) requiring conduct incompatible with Articles 81-82; and (4) making violations of those Articles inevitable.

¹⁰¹⁶ Case 13/77 *GB-Inno-BM v ATAB* [1977] ECR 2115.

¹⁰¹⁷ Case 66/86 *Ahmed Saeed* [1989] ECR 838.

¹⁰¹⁸ Case C-198/01 *Conorzio Industrie Fiammiferi (CIF) v Autorità Garante della Concorrenza e del Mercato* [2003] ECR I-8055; Joined Cases C-295/04 to C-298/04, *Manfredi v Lloyd, Cannito v Fondiaria, Tricarico v Assitalia* [2006] ECR I-0000, para 39.

which entails, if the circumstances so require, the obligation to take all appropriate measures to enable Community law to be fully applied.

In other words, the sanction of the violation of Community law by national law is not that the NRAs should apply the national law and then the Member State should pay compensation on the basis of the State responsibility¹⁰¹⁹ (which would only be a second best), but that the NRAs should dis-apply their own (illegal) law.¹⁰²⁰ Thus if a national telecom law violates the (European) antitrust law, any national authorities (being the NCA or the NRA) should dis-apply the national law to the benefit of European antitrust. As noted by Larouche (2006b:13), “regulation serves a purpose when it either (i) serves the same objectives as competition law but fills gaps in enforcement or (ii) pursues valid policy objectives which are different from those of competition law, in a manner which is however as consistent as possible with the objectives of competition law.”

Sector-specific regulation: is modelled over competition law

Figure 4.2: Competition law and sector-specific regulation¹⁰²¹

	<i>Competition Law – Ex post</i>	<i>Competition Law – Ex ante</i>	<i>Sector-specific regulation/ SMP regime</i>
<i>Primary Objective</i>			
<i>Secondary Objective</i>	Maintain competition Increase competition → Market structure is broadly satisfactory		Increase competition Mimic competition → Market structure is not satisfactory
<i>Burden of proof to intervene</i>	1. Market definition 2. Dominance 3. Anti-competitive conduct, agreement or abuse of dominance (Article 101)	1a. Notified concentration 1b. Market definition Significant impediment to effective Competition (low) (3. Conduct presumed)	1a. Market selection (very high) 1b. Market definition 2. SMP=dominance (3. Conduct presumed) +EMERGING MARKET CLAUSE
<i>Remedies</i>	Mainly behavioural Fines, and damages	Mainly structural	Mainly behavioural

Note: The shadow area is the triggering factor for each legal instrument.

¹⁰¹⁹ Joined Cases C-6/90 and C-9/90 *Francovich* [1990] ECR I-5357 and Cases C-46/93 *Brasserie du Pêcheur v Germany* [1996] ECR I-1029.

¹⁰²⁰ Temple Lang (1998a:121).

¹⁰²¹ Adapted from a figure that Pierre Larouche presented at a ETNO workshop in October 2005.

As seen in Chapters 2 and 3, competition law and sector-specific regulation have converged towards each other in the electronic communications sector. Antitrust policy has evolved towards a regulatory policy and a sort of '*regulatory antitrust*' has emerged.¹⁰²² Conversely, regulatory policy has adopted the antitrust methodology and regulation is becoming a sort of '*pre-emptive antitrust*'.¹⁰²³ Hence, the frontier between each legal instrument is becoming less clear.

First, the overall primary objective of both legal instruments has converged and is now linked to the consumers' welfare. As the previous Competition Commissioner Monti (2003:4) observed, there is not any more an antagonism between on the one hand, antitrust law (that considers that competition is desirable and its enforcement practices protect competition), and on the other hand, regulation (that considered that monopoly was desirable and prevented entry on the market). On the contrary, both are now complementary instruments in the broader set of economic regulation trying to achieve a common aim, putting end-user at the centre of any economic activity.¹⁰²⁴ Second, the conditions for the public authorities to intervene have also converged over time. Now both deal with a common problem (high level of market power and the likelihood of it being abused), and to detect it, use the same economic methodologies (market definition and dominance). Third, the range of possible remedies has converged because behavioural and structural remedies as well as settlements may be imposed under both legal instruments.

However, divergences remain for each of the three elements examined above so that competition law and sector-specific regulation do not coincide and should not be confused with each other.¹⁰²⁵

¹⁰²² To adopt the expression of Cave and Crowther (2005), de Streel (2004a).

¹⁰²³ To adopt the expression of Buiges (2004).

¹⁰²⁴ Also, Ehlermann (2000:xlv), Krüger and Di Mauro (2003:36), Garzaniti (2003:539), Larouche (2006b:12). Similarly, Nihoul and Rodford (2004:486) argue that the new sector-specific regulation is part of general competition law, hence there should not be much divergences between sector-specific regulation and antitrust. Contrasts with the tendency in the US: Geradin and Sidak (2005).

¹⁰²⁵ On the difference between sector-specific regulation and antitrust, see Choné (2006), Doherty (2001b), Frison-Roche (2006), Grewlich (1999), Idot (2000), Katz (2004), Laffont and Tirole (2000: 276-280), Nihoul (1998), Perrot (2002), Slot and Skudder (2001), Temple Lang (2006:16). See also on the limits of antitrust: Easterbrook (1984). In this section, I only analyse the substantive differences between antitrust law and sector-specific regulation, leaving the institutional differences for the next section.

First,¹⁰²⁶ competition law has two (secondary) goals:¹⁰²⁷ maintaining the competitive structure of the market where such structure is *a priori* satisfactory (by alleviating any anti-competitive behaviour), and more controversially,¹⁰²⁸ increasing the level of competition when it is possible and efficient to do so (by supporting new entrants). In both cases, competition law follows a relatively short term view. On the other hand, the SMP regime has two (secondary) goals, whose one is similar and one is different than competition law: increasing the level of competition when it is possible and efficient to do so, and mimicking the result of competitive markets where competitive structure is not satisfactory and will remain so (because competition is not possible or desirable due to natural monopoly or oligopoly settings.)¹⁰²⁹ In both cases, sector-specific regulation adopts a long term view. Moreover, the alignment of sector-specific regulation on the methodologies and principles of antitrust does not imply an alignment of secondary objectives.¹⁰³⁰

Second, the conditions for the public authorities to intervene are different. On the one hand, competition law applies to all market segments and is triggered by a specific behaviour of the firms (abuse of dominant position, agreement or concerted practice, concentration) that should be proved to be anti-competitive. On the other hand, the SMP regime is limited to certain markets fulfilling the three selection criteria, and on those markets regulation applies in all cases of market power.

Third, the priority principle and the range of possible remedies are not the same.¹⁰³¹ Under ex post antitrust and sector-specific regulation, there is a priority for behavioural remedies. Under ex ante merger control, there is a priority for structural remedies. Moreover,

¹⁰²⁶ Cave et al. (2006:3) submit that the objectives of this sector-specific legislation almost by definition go beyond the goals of competition law.

¹⁰²⁷ I refer here to secondary goals, to distinguish with the overall primary goal explained above and related to consumers' welfare.

¹⁰²⁸ Many authors consider the main difference is that antitrust law aims at maintaining the level of competition whereas sector-specific regulation aims at increasing the level of competition. To me, this difference is not always verified in practice as some antitrust decisions (in particular merger decisions whose some have been endorsed by the Community Courts) have increased the level competition: Cave and Crowther (2005) and de Streeck (2004a).

¹⁰²⁹ It may also have other and wider aims: Commission Access Notice, para 13 and 14, Katz (2004:245), Temple Lang (2006:43).

¹⁰³⁰ Thus, the alignment of methodologies and terminology but not of objectives implies that a same legal terms may be used differently under antitrust law and sector-specific regulation according to the objective of the legal instrument for which it is used: First President of the French Supreme Court Canivet (2006:7). Also Guidelines on market analysis, para 25; Bak (2003).

¹⁰³¹ According to Temple Lang (2006:12), there is an additional differences between antitrust and sector-specific regulation remedies that is linked to the difference in objectives: Sector-specific regulation may create new legal obligation whereas antitrust have can not.

behavioural remedies under sector-specific regulation may go further than the ones available under antitrust,¹⁰³² but conversely fines and private damages are normally not available under sector-specific regulation.

Thus, the two main and related substantive differences are: (1) sector-specific regulation intervenes *ex-ante*, hence deals with unsatisfactory market structures whereas competition law intervenes *ex-post*, hence deals with unsatisfactory behaviours;¹⁰³³ and (2) the burden of proof for sector-specific regulation to intervene is in principle lower than antitrust law. This is indeed the case with the current regulatory framework where the burden of proof for sector-specific regulation to intervene *on the selected markets* is lower than antitrust law,¹⁰³⁴ but also with other regulatory framework across the world.¹⁰³⁵ As Temple Lang (1998b:299) put it, “a regulator may have wider powers than an antitrust authority and fewer preconditions for their use”.

C. An improved model

CI. An economic perspective

To find the appropriate balance between competition law and sector-specific regulation,¹⁰³⁶ regulators should confront the main differences between both instruments with the market failures to be dealt with and accordingly decide which instrument is the most efficient in solving the market failure.¹⁰³⁷

Because of the first difference (related to structure and behaviours), it is efficient that sector-specific regulation deals with structural market failures and competition law deals with behavioural ones. Because of the second difference (related to the burden of proof), it is efficient that the test used to select markets for regulation is set at a very high level because once a market area is selected, intervention is relatively easy. In other words, the selecting test

¹⁰³² Commission Access Notice, para 15.

¹⁰³³ This distinction may be nuanced when noting that merger control is *ex-ante* and some sectoral interventions are *ex-post*. Moreover and paradoxically, the sectoral remedies are mainly behavioural and not structural.

¹⁰³⁴ (i.e., the burden of proof for sector-specific regulation to intervene is high when all steps of Table 3.6 are considered -including market selection-, but is low when steps 1 and 2 are passed -excluding market selection-).

¹⁰³⁵ See Geradin and Kerf (2003).

¹⁰³⁶ This is partly built on de Stree (2006a:148-155) and de Stree (2006b).

¹⁰³⁷ As suggested by Katz (2004:248). Unfortunately, the economics literature on the optimal balance between competition law and sector-specific regulation is very poor on that subject: Laffont and Tirole (2000:272).

should ensure that regulation is limited to market where the risks of type I errors (false condemnation) are low and the risks of type II errors (false acquittal) are high.¹⁰³⁸ This all the more important that in dynamic markets, the costs of type I errors are important.¹⁰³⁹

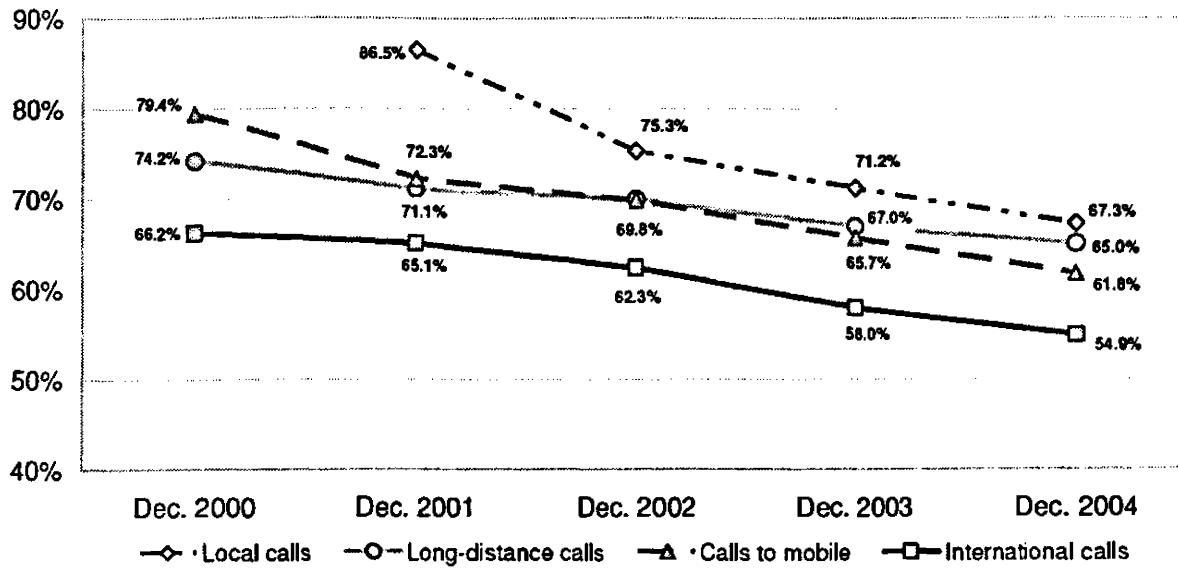
Taking both arguments together, any possible regulation should be limited to cells 1 and 3 of Figure 4.3 below.¹⁰⁴⁰ The first situation applies when the cost structure and the level of the demand are such that they create asymmetric conditions between market players, the topical situation being a natural monopoly case. That may be the case for local fixed infrastructure, in particular in rural areas where the level of fixed sunk cost may be such that only a single network provider could be profitable. Indeed in telecommunications, there may be important economies of scale at the local level -economies of density- because there are substantial fixed costs to set up the network (digging trenches or constructing poles, laying wire, and establishing exchanges) and low marginal cost to activate such network and run a communication. In addition, there may be non-local economies of scale derived from a single operator serving many local markets and spreading overhead costs (R&D, advertising, and billing systems) over more demand. Second, economies of scope exist where one firm can supply two products at a lower cost than two firms individually producing each product.

¹⁰³⁸ I link here the burden of proof to intervene with the risks and the costs of type I and type II errors, following Beckner and Salop (1999), Evans and Padilla (2004), Hylton and Salinger (2001). One of the first author to do that was: Posner (1973).

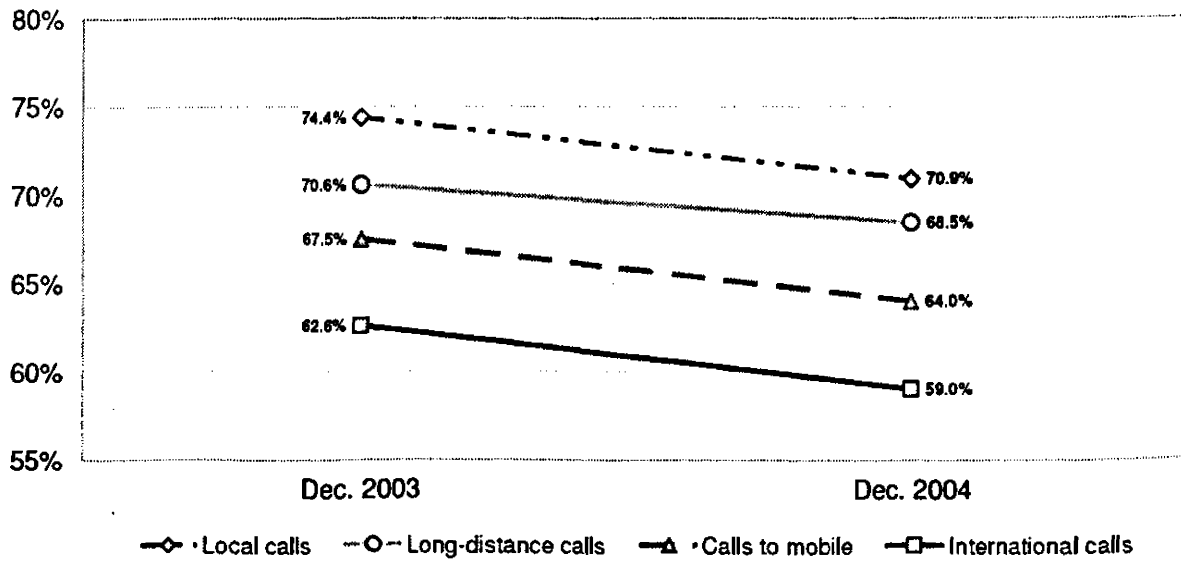
¹⁰³⁹ Hausman (1997) valued the delay of the introduction of voice messaging services from late 1970s until 1988 at US\$ 1.27 billion per year by 1994, and the delay of the introduction of mobile service at US\$ 100 billion, large compared with the 1995 US global telecoms revenues of \$180 billion/year. See also Haucap (2006) noting that the cost of type I error is always more important than the cost of type II error. Temple Lang (2006:14) noting that the risk of unforeseen and undesirable consequences of regulation is greater the more rapidly the industry is changing.

¹⁰⁴⁰ Bavasso (2004:1000) sees three justifications for regulation: (1) Existence of former monopolies which provides the majority of connections, (2) Bottlenecks (local access in telecom, CAS in digital TV), (3) Limited availability of spectrum (mobile). Knieps (2005:84) rejects the idea of regulation justified by network effects.

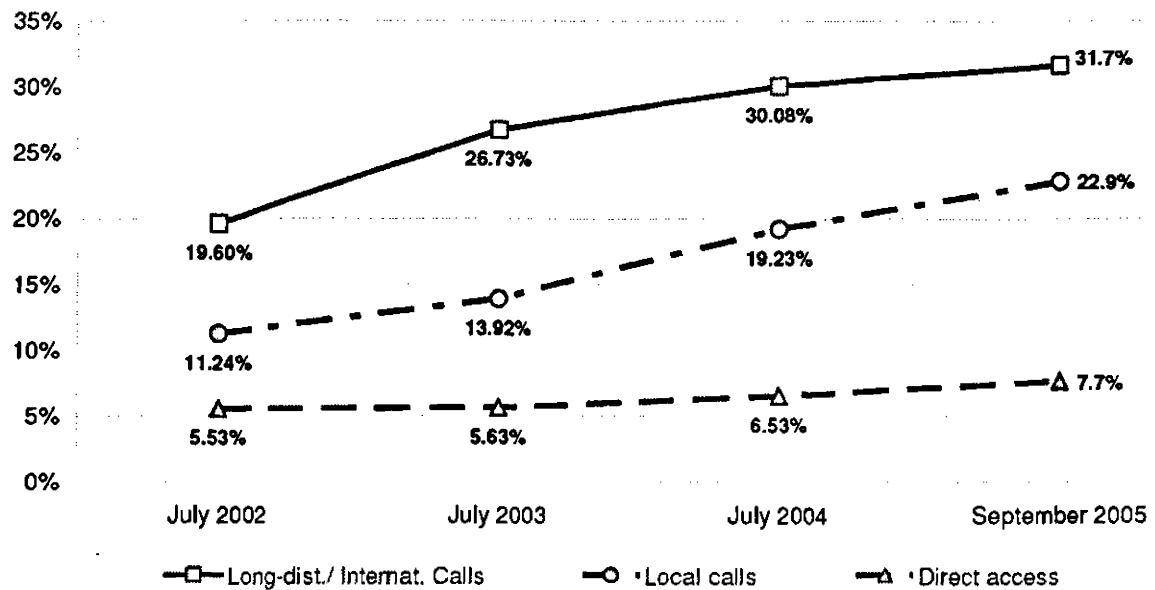
EU15 incumbents' average market share on the voice telephony market (based on market shares of revenues)



EU25 incumbents' average market share on the voice telephony market (based on market shares of revenues)



% of subscribers using an alternative provider, EU 15



Source: European Commission, 11th Implementation Report

The second situation is the presence of externalities (either due to network effects¹⁰⁴¹ or tariff principles) where one player may impose a cost or a benefit to others without having to pay/being rewarded accordingly. That may be the case for fixed and mobile call termination in Europe due to the externalities generated by the calling-party principle.¹⁰⁴²

¹⁰⁴¹ Such network effects are of two types. The first type is given by *physical* networks, where the consumer's utility increases *directly* with the number of other users of the same good. For instance, users would prefer to have many people connected to a phone network as they would be able to reach more people. Thus, telephone, fax, email belong to this category. The second type is given by *virtual* network, where the consumer's utility increase *indirectly* with the number of other users of the same good because of its effect on the availability of complementary products. In effect, indirect network effects are 'market mediated effects'. For instance, users would prefer to use a popular Operating System as they may expect to have much more application running on it than if they were using a less popular OS: Lemley and McGowan (1998), Liebowitz and Margolis (2002)

¹⁰⁴² Note that network effects are very difficult to test empirically. Although direct network effects are more obvious than indirect ones, it appears that often the network effects claim is insufficiently proven. After a survey of the empirical evidence, Liebowitz and Margolis (2002:87) conclude that 'with so little empirical support for these lock-in theories, it appears to us at best premature and at worst simply wrong to use them as the basis for antitrust decisions'.

Figure 4.3: Market failure susceptible to public intervention¹⁰⁴³

	Structural/non-strategic	Behavioural/strategic
Excessive market power	<p><i>Cell 1</i></p> <ul style="list-style-type: none"> - Bainain entry barriers: High and sunk fixed with uncertainty - Stiglerian entry barriers: Important absolute cost advantages (e.g. switching costs) - Legal barriers → <i>One way access (access model)</i> 	<p><i>Cell 2</i></p> <ul style="list-style-type: none"> - Reinforcement of dominance - Vertical leveraging - Horizontal leveraging
Externality	<p><i>Cell 3</i></p> <ul style="list-style-type: none"> - Network effects - Two-sided markets → <i>Two way access (interconnection model)</i> 	<p><i>Cell 4</i></p> <ul style="list-style-type: none"> - Strategic network effects (e.g. loyalty program or tariff mediated externality)
Information asymmetry	<i>Cell 5</i>	<i>Cell 6</i>

C2. A legal test for sector-specific regulation

The issue is to translate such economic principles into operational legal rules. There are several possible options: the three-criteria test (TCT), the essential facility, the non-replicable asset, and the bottleneck approaches.

Option 1: Three criteria test

The first option determines the scope of regulation on the basis of a combination of economic selection criteria and antitrust methodologies. It is currently followed in Europe and is sometimes referred as the market-based approach because it used the antitrust-based market definition methodology. In practice, it relies on three separated steps to circumscribe regulation: the three criteria test, the market delineation and the dominance assessment according to antitrust methodologies. This option has two main characteristics. First, it relies on three closely related steps, whose the most important one is the TCT.¹⁰⁴⁴ Second, it starts by analysing the retail markets and only in case of competitive problems at that level, move to the wholesale level to determine if regulation is necessary.

¹⁰⁴³ This figure is only a stylised and static view of the market reality that is more a starting point to raise the relevant questions than a check list to provide definitive answers on the scope of public intervention. Telecommunications markets are intrinsically dynamic and a rationale based on static view may lead to inappropriate and over-inclusive public intervention. For instance, a high level of market power does not always lead to long term inefficiencies justifying intervention.

¹⁰⁴⁴ See Section 3.2.1.A. The criteria are (1) high and non-transitory entry barriers, (2) no competitive dynamics behind the barriers, (3) insufficiency of competition law remedies to solve the problems.

The pros of this option are that (1) it relies on flexible economic criteria to identify the structural market failures justifying regulation; (2) it starts the analysis at the retail level, thereby ensuring that regulation focuses on the protection of the consumer welfare. However, the cons of the option are that (1) it is relatively complex, especially because it artificially divides one economic question into three legal steps. This complexity, particularly problematic for the smaller and less well-resourced NRAs,¹⁰⁴⁵ will increase in the future because of the declining market shares of the incumbents (hence the market analysis would be less clear cut and the SMP would shift from market shares to more qualitative factors) and the increased sophistication of technologies;¹⁰⁴⁶ (2) it relies on antitrust methodologies which I see as one of the causes of the failures of the 2003 regulation as it led to inappropriate extension of the role of competition, confusion between legal instruments and complex litigations and multiple procedures.

Option 2: The essential facility

The second option determines the scope of regulation on the basis of the existence of an essential facility doctrine.¹⁰⁴⁷ It is followed at the WTO level.¹⁰⁴⁸ An essential facility is indispensable in the sense that there is no existing or potential alternative, and covers mainly a natural monopoly situation. This option is easier to apply in practice than the first one because it relies solely on one step. Indeed once the facility is deemed to be essential, there is no more need to define the antitrust relevant market or to assess dominance because the scope of the possible access remedy has been properly delimited.¹⁰⁴⁹ Moreover like in the first option, the essential facility starts from the retail market and only in second step move up to the wholesale market.

¹⁰⁴⁵ Indepen and Ovum (2005b), Hogan & Hartson and Analysys (2006:146).

¹⁰⁴⁶ Hogan & Hartson and Analysys (2006: 124-125).

¹⁰⁴⁷ See Section 2.2.1.C.

¹⁰⁴⁸ Council Decision 97/838 of 28 November 1997 concerning the conclusion on behalf of the European Community of the results of the WTO negotiations on basic telecommunications services, O.J. [1997] L 347/45. Essential facilities are defined as '*facilities of a public telecommunications transport network and service that (a) are exclusively or predominantly provided by a single or limited number of suppliers; and (b) cannot feasibly be economically or technically substituted in order to provide a service*'. has been proposed Hausman and Sidak (1999) in the United States

¹⁰⁴⁹ This is also the case in antitrust law. In Case 7/97 *Bronner*, the Court of Justice bypassed (at para 34) the market definition by leaving to the Austrian Court to decide if the newspaper delivery scheme of the incumbent MediaPrint was in the same relevant market (i.e. sufficiently substitutable) to other means of delivery like post. At the same time, the Court decided (at para 43-44) that the delivery scheme was not an essential facility because other existing or potential means were substitutable.

The pros of this option are that (1) it is relatively simple to apply as it involves only one step; (2) it has specific meaning in European law, hence alleviates the risk of legal uncertainty. However, the cons of this options is that (1) the concept covers only one type of market failure justifying regulation (i.e. natural monopoly) but not all of them (i.e. network effects which in the long run may be the only rationale for regulation);¹⁰⁵⁰ (2) the concept is not yet fully settled in antitrust law (especially for the interoperability case until the *Microsoft* case is decided in 2007) and it may be inappropriate to link the evolution of sector-specific regulation to the solution of a specific and highly politicised antitrust case; (3) the uneasy relationship between essential facility and antitrust methodologies (in particular on market definition)¹⁰⁵¹ would be transposed in the sector-specific regulation sphere.¹⁰⁵²

Option 3: The non-replicable asset

The third option determines the scope of regulation on the basis of the existence of a non-replicable asset. Indepen and Ovum (2005b:26) define it with two conditions: first, the asset should not already have been replicated on a commercial basis in similar circumstances, and second there is no functionally equivalent asset which is commercially viable and which can deliver comparable services to end-users. In practice, they consider that this test would apply to the fixed local loop in all Member States and might also include backhaul facilities from the Main Distribution Frame to the core network in some Member States.¹⁰⁵³ The non-replicability test involves one step and does not rely on antitrust methodologies (hence there is less risks of errors and distortions). Yet, it needs an economic methodology to determine what an asset is and how to chook the chain of production, and this may raise similar problems than those of antitrust principles. Moreover, this approach focuses directly on wholesale network segments with high fixed and sunk costs that make them unlikely to be replicable, and does not pass via the analysis of the retail markets. However, to decide whether an asset may be replicated, regulators need to have a look at the retail market conditions.¹⁰⁵⁴ In fact, the non-

¹⁰⁵⁰ Thus, it does not cover the two-ways access (interconnection) issues. For instance, fixed or mobile termination are *not* essential facilities, hence could not be dealt with a sector-specific regulation based on essential facility.

¹⁰⁵¹ See the *Bronner* case and Larouche (2000a:204-207).

¹⁰⁵² In any case, the Commission appears to be extremely reluctant to use a concept with such narrow legal background. In the Access Notice drafted in 1998 (i.e. before the *Bronner* case), the Commission dealt extensively with the essential facilities doctrine (at para 87-98). Four years later in the Guidelines on market analysis of 2002, the Commission did not refer at all to essential facility preferring the more neutral concept of 'not easily duplicable infrastructure' (at para 78).

¹⁰⁵³ An alternative and more comprehensive list of non-replicable assets may include: dark fibre, local loop and in some cases backhaul service, spectrum and access to numbers.

¹⁰⁵⁴ Indeed, if the retail market demand is large, it is less likely that an asset will not be replicable.

replicable asset is more a bottom-up (i.e. wholesale/retail) vision whereas the TCT or the essential facility is more a top-down (i.e. retail/wholesale) vision of the same problem.

The pros of this option are that (1) it focuses the mind of the regulatory actors on one of the core problem justifying regulation (i.e. the non-replicability of the infrastructure); (2) it is relatively simple to apply and do not relies directly on antitrust principles, hence it would be more effective, decrease regulatory costs. However, the cons of the option are that (1) it does not cover the network effects issue; (2) it downplays the role of retail analysis; (3) it introduces new concepts whose legal meaning is untested and implies another reform of the regulation with a learning curve for the regulatory actors.

Option 4: The bottleneck

The fourth option determines the scope of regulation on the basis of the existence of a bottleneck and is favoured by a majority of authors.¹⁰⁵⁵ During the previous review of the telecommunications regulation, several experts suggested to base regulation on the concept of 'bottleneck'. The Commission consultants Squire-Sanders and Analysys (1999:147) did not define the concept but pragmatically identified interconnection (especially termination practices), access to networks or digital gateways, local loop, distribution and access to scarce resources. For the (then) future, they also identified intellectual property rights, directory services, programming guides, and control over interfaces/web navigators.

Similarly, Ehlermann (2000:xxxviii) proposes to base regulation on bottlenecks, defined as the final network connection or interface with the customer, i.e. the fixed 'local loop', the 'set-top box', the navigation software or browser which represents the essential interface between a single computer terminal and the private or public network linking it with other computers and networks services, radio frequencies, radio sites, rights of ways and undersea cable.

Knieps (2005:83-84) considers that sector-specific regulation is only justified when there is a monopolistic bottleneck defined with two cumulative conditions. (1) The facility is necessary for reaching customers, i.e. no second or third such facility exists, in other words there is no

¹⁰⁵⁵ See also Cave et al. (2006:5). Also Recital 13 of the Access Directive links regulation with the presence of bottlenecks. Note that Some argue that bottleneck is just the economic concept equivalent to the legal concept of essential facility.

active substitute. This is the case when due to economies of scale and economies of scope a natural monopoly exists and a single provider is able to make the facility available more cheaply than several providers (the natural monopoly). (2) At the same time the facility cannot reasonably be duplicated as a way of controlling the active provider, in other words there is no potential substitute. This is the case when the costs of the facility are irreversible (the irreversible costs). Knieps submits that regulation could not be justified by information problems (because markets tend to be efficient at endogenously developing institutions to overcome this problem), by switching costs (which occur in many areas of economy and are no explanation for monopolistic bottleneck), or by network externalities (because in the absence of network-specific market power, negotiations between network operators can prove effective as both sides stand to benefit from the agreements). On that basis, he submits that regulation should focus on ensuring access to the fixed local loop.

In his doctoral dissertation, Larouche (2000a:359-403) proposes to base regulation on the concepts of bottleneck because competition law could not deal with the bottleneck problems unless being stretched outside (and un-legitimately) its traditional boundaries with the essential facilities doctrine.¹⁰⁵⁶ The other justification of regulation are network effects because competition law could not deal properly with network effects as it may be necessary and efficient to impose compulsory access -supplier access, customer access and transactional access- even in cases where there is no single or joint dominance (like in case of national roaming).

Finally, the UK regulator Ofcom decided during its Strategic Review to base its equality of access regulation on enduring economic bottlenecks which are defined as “the parts of the network where there are little prospects for effective and sustainable competition in the medium term.”¹⁰⁵⁷ Currently Ofcom includes shared and full metallic path facility, wholesale line rental, backhaul extension services, Wireless Access Network extension services and IPstream.

¹⁰⁵⁶ As he put: “when competition law deserts its well-established framework of analysis under Article 82 EC Treaty – by moving from market definition to market structuring, by replacing dominance with the vague notion of ‘essentiality’ and by abandoning the requirement of abusive behaviour, then the proper limits of competition law, a case-bound general regulatory framework, has been exceeded”.

¹⁰⁵⁷ Ofcom Final statements of 22 September 2005 on the Strategic Review of the Telecommunications and undertakings in lieu of a reference under the Enterprise Act 2002, at para 4.6.

Ofcom argues that such approach is not contrary to European law but complementary helping its effective implementation.¹⁰⁵⁸ However, I submit that the enduring bottleneck is a radical departure from the current regulatory framework because it disconnects sector-specific regulation from antitrust methodologies. This approach is very similar to the non-replicable asset one, although it is broader: it relies on one single step (as once a bottleneck is identified, there is no additional need to define a market and assess dominant position) and it is directly focused on the wholesale level (and is bottom-up: retail/wholesale). Thus, the pros and cons of the basing regulation on bottlenecks are similar to those of the non-replicable asset, although the broader and more uncertain character of the former may be an additional drawback.

Choice of options

Figure 4.4 below summarises the four possible approaches and their similarities and divergences.

Figure 4.4: Different possible tests for economic regulation

	Option 1 Three Criteria Test	Option 2 Essential Facility	Option 3 Non-replicable Asset	Option 4 Bottleneck
Test	3 cumulative criteria - Non-strategic, non-transitory, high entry barriers - Dynamics elements - Inefficiencies of antitrust remedies + Market delineation according to antitrust methodologies	Variable conditions depending of the type of facility 1. Indispensability 2. New product 3. No objective justification to refuse	1. Asset has not already been replicated on a commercial basis in similar circumstances 2. No functionally equivalent asset which is commercially viable and which can deliver comparable services to end-users	Parts of the network where there is little prospects for effective and sustainable competition in the medium term
Comparison	- Rely on HMP/SSNIP - Start with retail: Top-down	- No use of SSNIP - Idem	- No use of SSNIP - Narrow notion - Start with wholesale: Top-down	- Idem - Broad notion - Idem

In the end, all approaches are less different than they may seem at a first sight because they pursue the same aim of identifying the 'parts of the infrastructure' that justify regulation because of their structural characteristics. I submit that the best and least disruptive approach would start from the first option and reform it. The regulators should start by analysing the retail markets and in case of structural competitive problems move up to the wholesale markets. They would intervene if markets would meet a reformed and clarified three criteria test covering natural monopoly and network effects.

¹⁰⁵⁸ *Ibidem*, at para 7.11.

4.1.2. Coordination between institutions

After having analysed the different scope of application between competition law and sector-specific regulation, I turn to the relationship between the different authorities in charge, namely the competition authorities and the sectoral authorities.

A. Possible models

In theory, there are several possible models to determine the respective role of the antitrust and sectoral authorities in the electronic communications sector, as illustrated in Figure 4.5.¹⁰⁵⁹

Figure 4.5: Different models to allocate competences between the NCA and the NRA

	Model 1		Model 2		Model 3		Model 4	
Application	NCA	NRA	NCA	NRA	NCA	NRA	NCA	NRA
CL	exclusive	--	Concurrent		exclusive		--	exclusive
SSR			--	exclusive		exclusive		
Examples	New-Zealand Australia		United-Kingdom Greece		Most member States			

In Model 1, the NCA is the only one in charge of the application of competition law and sector-specific regulation, or in other words there is no NRA (at least for economic regulation). This model is followed in New Zealand and Australia for several reasons: the predominance of the culture of antitrust, the possibilities of economies of scope and coordination of instruments and the advantages of a 'one-stop shop'.¹⁰⁶⁰ In Europe, the alignment of sector-specific regulation to antitrust methodologies would be an additional argument in favour of such model.¹⁰⁶¹ However on the basis of the Dutch experience in electricity markets, Larouche (2006a:104-105) submits that this model eliminates the risk of forum shopping between institutions but not the risk of incoherence between antitrust and regulatory decisions because the coordination between the departments in charge of the antitrust and sector-specific regulation is often weak. Moreover, there is a risk that the other

¹⁰⁵⁹ See ICN (2004), (2005), (2006), Nihoul and Rodford (2004:para 6.90), OECD (1999). Note that I'm not discussing the interesting question of the regulatory scope of the NRA: should it include merely electronic communications or also broadcasting (as in Austria, Italy, UK) or also other network industries (as in Germany).

¹⁰⁶⁰ Waters et al. (2000). Note that in the mid-nineties, the majority of the academic literature argued to follow this model in Germany: Immenga (2000:564).

¹⁰⁶¹ Garzaniti (2003:543)

non-economic objectives are forgotten in regulatory decisions, or conversely, that competition law is 'polluted' by such objectives.

In Model 2, the NRA applies sector-specific regulation, and concurrently with the NCA, competition law. This model is applied in the United-Kingdom¹⁰⁶² and in Greece. The advantages of this model are:¹⁰⁶³ (1) allowing for more flexible and cohesive regulation as the NRA may apply sector-specific regulation or the more flexible competition law; (2) efficiencies and a reduction in time delays; (3) facilitating the transition from sector-specific regulation to competition law; and (4) increasing the bargaining power of the NRA. The disadvantages may include: (1) risk of the development of a sector specific antitrust that would not be consistent with the rest of antitrust law; (3) risk of regulatory capture of the NRA; and (4) lack of expertise to apply antitrust law; (5) risk that either sector-specific rules should be applied instead of competition rules or *vice versa*.¹⁰⁶⁴

In Model 3, the NCA is exclusively in charge of antitrust law and the NRA is exclusively in charge of the sector-specific regulation. This model is applied in most of the Member States. The advantages of this approach are that:¹⁰⁶⁵ (1) each agency works within its area of expertise and competency and the provision of incentives within government agencies is often facilitated by focused missions; (2) each agency has certain powers, which may provide certain benefits depending on the case at hand (*e.g.* competition authorities tend to have broader powers to gather information than do sector-specific regulators); and (3) checks and balances as well as benchmarking between the two agencies may mitigate both the risks and costs of regulatory mistakes and regulatory capture. However, there may be disadvantages: the greater the number and specialization of regulatory agencies there are, the greater the potential for regulatory complexity, duplication of procedures, conflicting decisions, and encouragement of forum shopping, which would increase regulatory costs and delays.

¹⁰⁶² Ofcom notes that it will use competition law by priority: para 27 of the Ofcom Guidelines of July 2004 for handling of competition complaints, and complaints and disputes about breaches of conditions imposed under the EU Directives. See also the Office of Fair Trading Guidelines of December 2004 on Concurrent application to regulated industries. As mentioned by Temple Lang (1998b:303), the Commission has made clear that it has no objection to national regulators having competition responsibilities.

¹⁰⁶³ See ICN (2006:85).

¹⁰⁶⁴ A variant of this model is when the NCA is exclusively in charge of antitrust law, and the NRA and the NCA apply concurrently the sector-specific regulation. This model is followed in Belgium where part of the sector-specific regulation (the SMP regime) is applied by the Belgian Institute for Post and Telecommunications, whereas other part of the sector-specific regulation (dispute resolution) is applied by the Competition Council.

¹⁰⁶⁵ See ICN (2006:86), Laffont and Tirole (2000:274-275).

In Model 4, the NRA is in charge alone of the application of antitrust law in the sector and of sector-specific regulation.

In those five models, two of them (1 and 4) remove any overlap between authorities, and ultimately, the need for coordination. The other models require an appropriate transversal coordination between both authorities because unmanaged overlapping jurisdiction may lead to inter-agency power battles, regulatory duplication; inefficient use of resources and increased costs, additional requirements and complexities due to both multiple and different standards of review being imposed on firms, potential delay in closing the transaction, potential lack of transparency, the risk of inconsistent results when complying with the requirements of both authorities, the risk of regulatory gaming by market participants, and overall uncertainty in the market.¹⁰⁶⁶

In sum, as the ICN (2006:26) submits,¹⁰⁶⁷ there is no perfect model regarding the allocation of competences between authorities and there is no country where a model is settled. Each has advantages and drawbacks and the optimal choice depends on economic circumstances (e.g. the current levels of competition) and pre-existing legal framework within the respective countries. In practice, it is important that: the competences of the NRA and the NCA are clearly defined; a priority rule is established when there is overlapping competences (like a priority for the sectoral regulator); and a conflict between NCA and NRA should be directly resolved by an appeal Court (which should be the same for the NRA and the NCA);¹⁰⁶⁸ the regime is flexible enough to adapt to market evolutions.

¹⁰⁶⁶ ICN (2006:27). See also Choné (2006:50), Ehlermann (2000:xlvi), Larouche (2005b:169-170), Temple Lang (2006:17). However, Barros and Hoernig (2004) show that it is more efficient that both authorities decide a case independently than jointly for three reasons. First, with independent decisions, the probability that cases are solved is highest, even though each authority may give less attention to the case than it was alone. Second, independent decisions are less vulnerable to lobbying. Third, it is also less likely that no authority feels responsible for a given case.

¹⁰⁶⁷ Choné (2006:51) notes that the repartition of competences between antitrust and regulatory authorities is largely due to circumstances and Temple Lang (1998b:314) notes that the allocation of cases is essentially practical.

¹⁰⁶⁸ Immenga (2000:568).

B. European models

At the national level: Transversal coordination between National Competition Authorities and National Regulatory Authorities

At the national level, Community law leaves the Member States to decide between models 1 to 4 according to their procedural autonomy. As we have seen, most countries have chosen model 3 (exclusive repartition of competences), but the UK and Greece went for model 2.

However when a Member State decides to choose a model where a conflict of competence is possible (i.e. models 2 and 3) with the inherent risks of duplication of procedures, conflicting decisions, and forum shopping, the effectiveness (*effet utile*) and proportionality principles of Community law require an appropriate transversal coordination between the NCA and the NRA.¹⁰⁶⁹ This requirement is reinforced by the Framework Directive as the NRA applies sector-specific regulation that incorporates antitrust methodologies.¹⁰⁷⁰ In practice if the NRA does not act or acts too slowly, the situation is not so problematic because the NCA may open an antitrust case and then pass it to the NRA or adopt an (interim) antitrust decision. If the NRA has decided but not to a manner that is agreeable by the NCA, the situation problematic because there is a conflict between both authorities and this when a cooperation is necessary.

The transversal coordination may be achieved by agreement and protocols between both authorities, which are of three categories:¹⁰⁷¹ first, delimitation of jurisdiction mechanisms like case allocation (for instance in the UK, an antitrust case is normally dealt with by the NRA), or division of task (for instance the NCA deals with market definition and dominance assessment and the NRA deals with remedies);¹⁰⁷² second organized cooperation mechanisms like request of binding or non binding opinion by the authority in charge of the case to the other authority (as it is the case in France);¹⁰⁷³ third informal and soft techniques of cooperation like exchange of information. Since the implementation of the 2003 framework,

¹⁰⁶⁹ According to Temple Lang (1998b:313) and (2006:34), Article 10 EC creates an obligation of transversal coordination because national authorities have a duty under the principle of proportionality to avoid as far as possible multiple procedures on the same or similar facts which would be unnecessarily onerous for the companies involved.

¹⁰⁷⁰ Articles 3(4) and 16(1) of the Framework Directive.

¹⁰⁷¹ Those categories are taken from (ICN:2006:28). For practical examples, see Petit (2005:192) and the references cited.

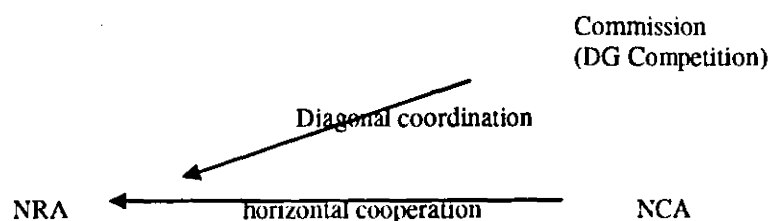
¹⁰⁷² As proposed by Larouche (2005b:176).

¹⁰⁷³ Lasserre (2000). See also OPTA/NMa Cooperation Protocol of 24 June 2004.

the NCAs are now systematically consulted on market analysis in most of the Member States (see Section 3.3.1.B).¹⁰⁷⁴

At the European level: Diagonal coordination between the Commission and the National Regulatory Authorities

At the European level, the model is unique as the EC Treaty and the implementing Regulation foresee the Commission as the European antitrust authority. Thus, there is a need of diagonal coordination between the Commission (DG Competition) and the NRAs.¹⁰⁷⁵



As explained in Section 3.3.2.C3, the diagonal cooperation that takes place in practice may be categorised in four cases, depending of the type of competition law applied (ex-post or ex-ante) and the competences of the NRA to intervene. Of these cases, the most difficult one is when the NRA has intervened, and yet the Commission wants to intervene as well under ex-post competition law. This was the hypothesis of the *Deutsche Telekom* decision which led to a double intervention.

This decision has been criticised by several authors as creating legal uncertainties for the operators, encouraging multiple complaints and leaving un-condemned the German regulator which was partly responsible for anti-competitive margin squeeze. Larouche (2005b) notes that DT has been put under the obligation to petition the NRA to change its regulated tariffs in order to remove any price squeeze which may arise and that the special responsibility of dominant players has been expanded quite far so as to include a duty to second-guess regulatory decisions. Echoing the *Trinko* solution, Petit (2005:194) suggests that the Commission should not have condemned DT. He submits that the Commission should have taken an infringement action against Germany under Article 86 and/or 226 EC or have waited

¹⁰⁷⁴ Commission Communication on Market Reviews, p. 4. Note that the opinion of the NCA would probably strongly influence the Commission when reviewing the NRA draft decision under Article 7, and the national court in case of an appeal against the NRA decision.

¹⁰⁷⁵ Forrester, Norall and Sutton (1995).

for an appeal against the NRA decision before a German Court (which might then refer a preliminary question to the Community Courts). Being more nuanced, Geradin (2004:1552) submits that the Commission should have launched parallel actions under Article 82 EC against DT and 86(1) combined with 82 EC against Germany.¹⁰⁷⁶ More generally, Temple Lang (2006:35) observes that where regulation has been applied, there should be a presumption that antitrust should not be applied and that, if the regulation has been incorrectly applied, the case should be dealt under a national appeal procedure. He noted that parallel procedures should be avoided unless there are strong and clear reasons, and should not be commenced merely because the remedy in the national administrative courts is said to be slow or unsatisfactory.

The question of the attitude of the Commission in case of diagonal conflict should be addressed in two steps: first, what is legally possible given the primacy of the Treaty antitrust rules, and second what is politically appropriate. First legally, European antitrust has a constitutional value and supersedes national laws but the Commission enjoys a wide discretion to decide to intervene in case of a complaint for anti-competitive practice lodged under Articles 81 or 82 EC¹⁰⁷⁷ and a full discretion under Article 86 EC.¹⁰⁷⁸ Thus, it may refrain to take a case if the national authorities have not yet intervened or have intervened satisfactorily. The Commission might also refrain if the national authority has intervened unsatisfactorily and the competition problem remains by arguing that the case does not show a sufficient Community interest.

Second in opportunity, an additional intervention of the Commission leads to the same drawbacks as an additional intervention of the NCA after the NRA: duplication of procedures, risk of conflicting decisions, and encouragement of forum shopping. But there is an additional

¹⁰⁷⁶ The Commission has thought to take an Article 86 decision against Germany (para 2 of the Decision), but declined to do so because the NRA had followed the costing methodology proposed by the Commission in its Communication of 26 April 2000 on the Unbundled access to the local loop. Thus the NRA did not directly infringe EC law, unless considering that the Communication of the Commission was itself infringing antitrust rules.

¹⁰⁷⁷ On the possibility for the Commission to reject a complain, see the Commission Notice of 30 March 2004 on the handling of complaints by the Commission under Articles 81 and 82 of the EC Treaty, OJ [2004] C 101/65, para 41-45, and the cases cited therein in particular Case T-24/90 *Automec II v Commission* [1990] ECR II-2223, para 87-96.

¹⁰⁷⁸ Case C-141/02P *max.mobil v Commission* [2005] ECR I-0000, para 69 where the Court of Justice did not, contrary to the Court of First Instance, extend to Article 86 EC complaint the obligation of diligent and impartial examination applicable in Articles 81 and 82 EC as well as Articles 87 and 88 EC. It decided that the Commission is not obliged to bring proceeding within the term of Article 86 EC and that individuals cannot require the Commission to take a position in a specific sense. Also: Case T-443/03 *Retecal and others v Commission* [2005] ECR II-0000, para 32.

consideration here which favours antitrust intervention. It is related the protection of the internal market because, to some extent, the Commission may use an antitrust case to condemn an NRA that does not follow a regulatory approach that should be harmonised at the Community level. So the arguments are finely balanced and should be decided on case-by-case answering two questions: what are the objectives to be achieved (legal certainty, simplicity, internal market, consistency of antitrust law) and what are the best means to achieve them (infringement procedure, Article 86 EC decision if possible, Article 7 review, or antitrust case). Thus in case of inappropriate intervention of the NRAs, I suggest that the Commission signals the infringement of Community law during the Article 7 review decision and veto the draft decision when it may be. If it can not veto the draft decision (because the infringement relates to a remedy) and the decision is nevertheless adopted, the Commission should decide on a case-by-case and possibly take parallel actions against the regulated operator and the infringing Member State. Both actions would not happen at the expense of legal certainty as all actors would be informed of the serious doubts of the Commission reading the Article 7 decision. Another way forward would be to give the possibility for the Commission to appeal the regulatory decision before the appropriate national court, and if necessary the issue could then be dealt by a preliminary ruling under Article 234 EC.¹⁰⁷⁹

4.1.3. Conclusion

To conclude when organising the relationship between antitrust and sectoral law and authorities, each country should answer two separate questions. The first question relates to the scope of jurisdiction of antitrust law and of sector-specific regulation. There, countries have a choice between four models. If they choose models A or D (exclusive application of legal instruments) there is no further question of criteria to determine the respective scope of each legal instrument or of coordination between different authorities. If they choose models B and C (application of both legal instruments), there are additional issues to be solved, in particular a criteria to decide the scope of application of each law. When they have chosen models B or C, the countries should address the second question related to the competences and coordination between the NCA and the NRA. They have a choice between five models. If they chose models that lead to overlapping jurisdictions (models 2 to 4), they should ensure optimal coordination between authorities to alleviate forum shopping and risk of contradicting

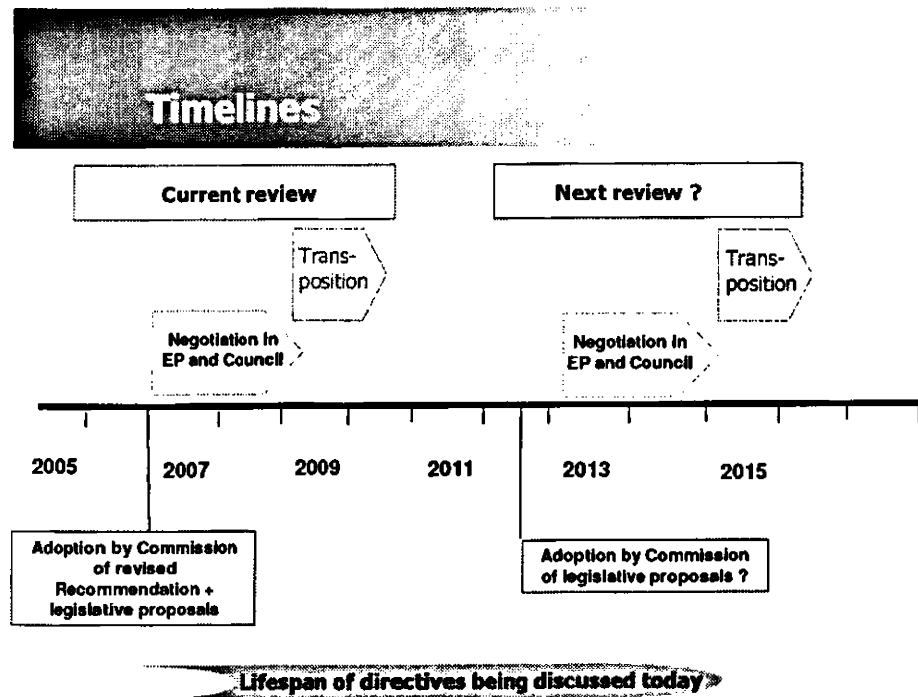
¹⁰⁷⁹ Temple Lang (1998b:333).

decisions. Having analysed the different possible models, I now turn on the way to improve such European models.

4.2. THE WAY FORWARD AND THE 2006 REVIEW

In June 2006, the Commission kicked off the review the regulatory framework that it intends to do in two steps. First, the Commission will revise its own Recommendation on relevant markets at the beginning of 2007. That will be applicable immediately and kick off the second round of market analysis in the Member States.¹⁰⁸⁰ Second, it will make some proposals to the Council and the European Parliament to amend the Directives. The proposals will then be discussed by both branches of the European legislature and possibly agreed in 2009 to enter into force in 2010, according to the roadmap of the Commission.¹⁰⁸¹

Figure 4.6: The roadmap for the review 2006



Source: European Commission presentation

Such proposals should thus be based on an ex-post assessment of the current directives (as I did in Section 3.4)¹⁰⁸² and on forecasting the evolution of the sector in 2010 and beyond (i.e.

¹⁰⁸⁰ Such review is made according to the Recital 21 of the First Recommendation on relevant markets.

¹⁰⁸¹ Such review is made according to the Directives: Article 25 of the Framework Directive, Article 16 of the Authorisation Directive, Article 17 of the Access Directive, Article 36(3) of the Universal Service Directive. Also to fulfil the commitment to better regulation, which implies an adaptation of the regulatory framework to the evolution of the sector.

¹⁰⁸² Thus it is regrettable that, in its Impact assessment, the Commission only evaluate ex-ante (thus necessarily very imperfectly, especially given the rapid and unpredictable pace of market developments) possible legislative reform, but it does not evaluate ex-post the functioning of the current legislation.

post-Lisbon). In the following section, I focus on the short term reforms (i.e. the Recommendation on relevant markets and related issues) and then the longer term reforms (i.e. the Directives). For each issue, I first make my own suggestion for improvements and then confront them with the preliminary proposals tabled by the Commission in June 2006.

4.2.1. Short term reforms

In the instruments that may be modified by the Commission alone and that may take effect at the beginning of 2007, I deal with the regulatory threshold for SMP obligations, the case of emerging markets and the Recommendation on relevant markets.

A. Regulatory threshold

Suggestions for improvements

I explained in Section 3.4.2.A that one of the reasons of the failure of the current rules is its alignment with competition methodologies as regulatory actors lost track of the main question to be dealt with (i.e. when sector-specific regulation has an added value compared to antitrust law). To answer such question, I show in Section 4.1.1.C2 that several proposals have been made for a regulatory threshold and the best way forward is to rely on the existing three criteria test, but to improve its utilization.¹⁰⁸³ Thus, I suggest two main reforms.

The first reform would clarify the sequence of analysis to be undertaken by the NRAs, as illustrated in Figure 4.7. The NRAs should adopt an overall approach of the markets and the welfare problem, possibly by analysing markets in cluster.¹⁰⁸⁴ The sequence of analysis should then be as follows: (1) First, NRAs start their analysis at the retail level and examine whether there is a competitive problem at that level, in the sense of the existence of a dominant position.¹⁰⁸⁵ (2) If there is none, the authority stops there. Conversely, if there is a competitive problem, authorities should continue their analysis at the wholesale level and identify with the TCT the hard-core market power that justifies regulation. At that level, they should start by analysing the least replicable asset and assess whether the imposition of

¹⁰⁸³ Also in this sense, Renda (2006:71).

¹⁰⁸⁴ Hogan & Hartson and Analysys (2006:151). Also de Bijl et al. (2005) calling for a more holistic approach.

¹⁰⁸⁵ Thus, I favour the double dominance test because it is the only one that place end-users at the centre of the analysis and protect competition instead of competitors.

remedies at that point of the value chain would suffice. (3) If it is not the case, the authority should move up the value chain towards easier replicable asset.¹⁰⁸⁶

Figure 4.7: Sequence of the analysis

Retail Markets	1
Wholesale markets	
Easiest replicable/most inclusive asset	3
↑ ↓	
Most difficult replicable/least inclusive asset	2

The second reform would clarify and give additional importance of the three criteria test. The clarification of the TCT should be done to ensure that it will identify structural market failures that can not efficiently be dealt with by competition law (i.e., that are due to excessive market power and externalities.)

(1) The first criterion would have two branches. The first branch would be related to the presence of entry barriers on the supply side. As we have already seen, there are different conceptions of entry barriers and Schmalensee (2004:471) argues that the appropriate notion of entry barriers depends on the objectives of the legal instrument for which it is used. Thus, the notion of entry barriers should be qualified.

First, the *barriers should be structural* as strategic entry barriers are behavioural issues efficiently dealt with by competition law.¹⁰⁸⁷ Second, the *barriers should be non-transitory* because transient barriers do not justify the heavy intervention of sector-specific regulation. The timeframe of what is 'transitory' is difficult to decide, but should be at least the period until the next market review (a minimum of 2 to 3 years) and possibly beyond that period.¹⁰⁸⁸ Third, the *barriers should principally be of an economic nature*, i.e. covering fixed costs that are sunk¹⁰⁸⁹ (otherwise, there is no need to intervene because the market is contestable). If the barrier is of a legal nature (like limitation of spectrum that can not be traded), the best remedy consists in removing the barrier and not to regulate the artificially made uncompetitive

¹⁰⁸⁶ For example, in the supply of broadband, unbundled local loops are in functional terms a less comprehensive product than bitstream, as they provide service over a smaller part of the value chain. Unbundled loops would thus be analysed first: On this sequence of analysis, see Cave et al. (2006:4 and 75).

¹⁰⁸⁷ Cave (2004a:35).

¹⁰⁸⁸ ERG Revised Common Position on remedies, p. 59.

¹⁰⁸⁹ The ERG defines the sunk costs as '*costs which, once incurred, cannot be recouped, e.g. when exiting the market. Examples for sunk costs are transaction costs, advertising expenses or investment in infrastructure for which there is no or little alternative use*': ERG Revised Common Position on remedies, p. 127.

market. In this case, the regulator would be more efficient in lobbying the public authorities (legislature, government ...) to remove the legal barriers instead of regulating the market.¹⁰⁹⁰ Thus it is only if, and for the period when, there is no way to remove such legal barriers that the market may be selected for regulation.

Fourth and more importantly, the *barriers should be high* such that no effective competition may be expected. The difficult question is how 'high' is high and the issue is whether a 'natural' tight oligopoly should be regulated.¹⁰⁹¹ As Cave et al. (2006:5) observe, it is easy to enumerate the factors that make entry into a market particularly difficult, but it is much more difficult to develop hard and fast quantitative thresholds that will enable regulators to make determinations based on actual data (because it is a multi-dimensional issue and it is not easy to decide how to weight the various factors, and because once such a rule were published it would be subject to gaming from operators and regulators). Thus, these authors propose a straightforward rule: entry barriers cannot be considered high enough if it can be shown that a firm as efficient as the incumbent can enter one or several markets with an acceptable level of risk on the basis of just entering this market alone. In practice lack of evidence of entry (both in the EU and elsewhere) may give support to the fact that entry barriers are high, provided account is taken both of the possibility of exclusionary behaviour by the incumbent (such as predation) and of the entry deterring effects of regulation. However, as the authors submit, such rule still leaves room for false positives. Thus to diminish the risks of type I error which are very costly in the sector, I suggest to tighten the criterion and that the entry barriers should be so important that only one operator, save exceptional circumstances, can profitably survive in the market. I do not think that oligopoly should be regulated because the authorities do not have sufficient information to discriminate between efficient and inefficient oligopolies and do not have efficient remedies to deal with them under the SMP regime.¹⁰⁹²

Thus, the first branch of the first criterion would cover non-transitory and non-strategic entry barriers that are mainly of economic nature and that should be so high that only one operator (save exceptional circumstances) is viable on the market. To make the criterion operational,

¹⁰⁹⁰ Similarly, Cave et al. (2006:6) note that: "In essence, the Commission should expect that NRAs to demonstrate that they have used their current powers to set the regulatory barriers to entry at the lowest level possible for that particular market". At the European level, the impact on competition of the legislative proposals have to be screened: Section 9.2 of the Commission Impact Assessment Guidelines of June 2005, SEC (2005) 791.

¹⁰⁹¹ As suggested by the E/IRG response to the 2006 Review, p. 22, Hogan & Hartson and Analysys (2006:163-166), Larouche and de Visser (2005:5).

¹⁰⁹² In addition, most of the oligopolies situations could be solved by removing legal entry barriers.

the regulatory actors could opt for a two-stage approach.¹⁰⁹³ They start with an empirical analysis and look at the degree to which operators in Europe or worldwide have built out competitive networks in similar circumstances and with viable economic conditions. Then they complement this finding with cost analysis based on engineering models that estimate the cost curve or econometric cost functions.¹⁰⁹⁴ That may be the case of the fixed local loop.

The second branch of the first criterion would be linked to the presence of externalities and network effects¹⁰⁹⁵ (either due to network effects or tariff principles) where one player may impose a cost or a benefit to others without having to pay/being rewarded accordingly. That may be the case for fixed and mobile call termination in Europe due to the externalities generated by the calling-party-pays principle.

(2) The second criterion would ensure that a dynamic view is adopted and correct the possible static bias that the first criterion may carry.¹⁰⁹⁶ Thus regulators should assess whether the market would deliver the results of dynamic competition (i.e., innovation) despite high entry barriers, or in other words, whether the market would deliver the benefits of the Schumpeterian creative destruction. For instance, this may sometimes be the case if there is an *ex-ante* competition *for* the market, although there is no more *ex-post* competition *in* the market.¹⁰⁹⁷

(3) The third criterion would ensure that a market is selected for regulation solely when antitrust remedies would be less efficient than sector-specific regulation to solve the identified dynamic competitive problem and recall that sector-specific regulation is subsidiary to competition law. This criterion should be based on the same structural elements than the two first ones and be fulfilled when the two first criteria are met (i.e. when there are high entry barriers that do not deliver the dynamic benefit of competition) serving solely as a cross-check. I do not think that such third criterion should be based on additional institutional

¹⁰⁹³ As proposed by Cave (2006:231-232) as explained in Section 3.2.1.D3.

¹⁰⁹⁴ Gasmi et al. (2002) and Fuss and Waverman (2002).

¹⁰⁹⁵ Cave et al. (2006:6).

¹⁰⁹⁶ Similarly, Cave et al. (2006:7) note that "the second criterion must take into account a longer-run dynamic. In particular, the criterion should be a warning against allowing regulation to act as a deterrent to competitive investment – for example, excessive regulation of DSL discouraging upgrading of cable systems".

¹⁰⁹⁷ One of the first economists to argue this was Demsetz (1968). However, other economists are more nuanced, arguing that if monopoly is due to legal monopoly, scale economies or pure network externalities, intervention is justified whereas if monopoly is due to genuine investment and innovation, regulators should forbear: Tirole (2004:262).

elements (like the respective powers of the national competition authority relative to the national sector regulator) because they vary across Member States, hence they would undermine the consistency of regulation in the single market.¹⁰⁹⁸

In practice, the TCT should be applied by the Commission and the NRAs.¹⁰⁹⁹ Thus, market definition and the dominance assessment would be marginalised in order to focus directly the regulators' minds on the relevant question and alleviate that antitrust methodologies would be used in a distortive way.

Commission proposals and assessment

The proposals of the Commission go in the right direction but are sometimes confusing, and sometimes do not go far enough. Regarding the sequence of analysis, the Commission follows the suggestion made above but expresses it in a confusing way. Indeed, it states that when defining and selecting the market, the starting point of the analysis is a characterisation of the retail market.¹¹⁰⁰ Then it adds that, when analysing the identified markets, regulators should go to the most upstream markets in the vertical supply chain.¹¹⁰¹ Both statements are not incompatible with the sequence proposed above, but read separately, they may be misleading and orient the NRA to analyse the wholesale market independently of the situation on the retail market.

Regarding the clarification of the TCT, the Commission makes a small step forward. (1) For the first criterion,¹¹⁰² it clarifies that barriers to entry cover on the one hand the standard natural monopoly case (with a link to the minimum efficient scale of production), and on the other hand, the externalities created by the Calling-Party-Pays principle. Unfortunately, the Commission does not precise how high the barriers should be (in other words, what should be the number of firms viable according to the minimum efficient scale necessary to justify regulation). Similarly, it maintains the legal and regulatory barriers without qualifications on the advocacy role to be played by the NRAs. (2) For the second criterion,¹¹⁰³ the Commission clarifies that it will be met when effective competition will be attained in the longer run

¹⁰⁹⁸ See Section 3.2.1.A.

¹⁰⁹⁹ Moreover, such clarified TCT should get a higher legal status and be included in the Framework Directive. Also in this sense, Renda (2006:72).

¹¹⁰⁰ Commission Draft Second Recommendation on relevant markets, p. 6.

¹¹⁰¹ *Ibidem*, p. 13.

¹¹⁰² *Ibidem*, p. 9-10.

¹¹⁰³ *Ibidem*, p. 10-11.

without ex-ante regulation. Unfortunately, the dynamics aspects are not treated at a more generic level. (3) For the third criterion,¹¹⁰⁴ the Commission proposes to maintain it as a stand-alone criterion independently of the two others.¹¹⁰⁵

Regarding the importance of the TCT relative to the other steps of the SMP regime, the Commission proposes to elevate a bit the legal status of the three criteria test by including them in the Article 2 of the proposed Recommendation.¹¹⁰⁶ However, the Commission proposes to maintain the three different steps (TCT, market definition, and SMP) and observes that¹¹⁰⁷

Whereas the three criteria test focuses on the general structure and characteristics of a market in order to identify those markets the characteristics of which are such that they need to be analysed in more detail on a national basis by NRAs, the SMP assessment focuses on the market power of a specific operator in a given market with a view to determining whether that operator should or should not be made subject to ex ante regulation in that particular market.

Thus, the Commission continues to insist on the artificial different roles between the TCT and the SMP assessment without noting that both aim to answer the same overall question, rely on similar indicators and that one (the TCT) is just stricter than the other (the SMP assessment). More critically, the Commission maintains the presumption that the NRA should not carry the TCT for the markets selected in the Recommendation on relevant markets.¹¹⁰⁸ This presumption is either illegal if the NRAs should do the TCT in their countries (which I believe) because the Commission is not able to do this test for the NRAs, or not necessary if the NRAs should not do the test.

To conclude, I think that the proposals of the Commission go in the right direction (higher legal status for the three criteria test, helpful clarifications on the first and the second criteria) but do not go far enough. It is just fine tuning and would not solve some of the causes of the failures of the 2003 framework, in particular the abuses of antitrust principles.

¹¹⁰⁴ *Ibidem*, p. 11-12.

¹¹⁰⁵ More worryingly in discussing the possible inclusion of the broadcasting transmission markets, the Commission seems to suggest that it is possible that the second criterion would not be met and yet the third criterion would be fulfilled, implying that the third criterion is more than a cross-check of the two first ones: Draft Explanatory Memorandum of the second Recommendation on relevant markets, p. 46.

¹¹⁰⁶ Unfortunately, it falls short to propose to include them directly in the Framework Directive, probably reluctant to open a political negotiation on such difficult issue.

¹¹⁰⁷ Draft Explanatory Memorandum of the second Recommendation on relevant markets, p. 12.

¹¹⁰⁸ Recital 16 of the draft second Recommendation on relevant markets.

B. Complemented emerging market clause

*Suggestions for improvements*¹¹⁰⁹

To deal with the difficult issue of the emerging markets, it is useful to distinguish between the retail services provided to end-users and the wholesale underlying infrastructures relied on to provide services. Regarding retail markets, a new service is not emerging/existing when it can be included in a relevant existing market according to the hypothetical monopolist test.¹¹¹⁰ This is the case when end-users consider that the new service is substitutable to the existing ones, hence the provider of the new service is constrained in its prices (cf. Box 1 of Figure 4.8 below).¹¹¹¹ For instance, this is the case of Voice over IP now that it permits nearly the same functionalities than voice over PSTN.¹¹¹² Conversely, a new service is emerging when it can not be included in a relevant existing market because end-users do not consider that such new service is substitutable to the existing ones (cf. Box 2). For instance, this may be the case of the next generation mobile broadband data services¹¹¹³ or some sort of new 3D broadcasting services.

Regarding the wholesale inputs or technical platforms, there are three possibilities. An infrastructure may exist (and possibly have been deployed under legal monopoly) and be used to provide existing retail services (cf. Box 3). This is the case of the PSTN network. Alternatively, an upgraded infrastructure or a new infrastructure may be used to provide existing and, at the same time, new retail services (cf. Box 4). This is the case of the VDSL or even the Fibre-To-The-Curb or To-The-Home network (FTTx). Finally, a new infrastructure may be used to provide solely emerging retail services (cf. Box 5). This was the case of the 2G network when digital mobile voice was launched at the beginning of the nineties.

¹¹⁰⁹ This is partly built on de Streef (2006a:158-163).

¹¹¹⁰ As noted by many like Richards (2006b), the application of the SSNIP test to emerging markets is complex because few information are available.

¹¹¹¹ One way to test that would be to forecast if the new product would create an expansion on the market: Ahlborn et al. (2005:1146).

¹¹¹² ERG Revised Common Position on remedies, p. 116.

¹¹¹³ ERG Revised Common Position on remedies, p. 20.

Figure 4.8: Different cases of emerging markets¹¹¹⁴

R E T A I L		Existing services	Emerging services
		<i>Box 1 (incl. VoIP)</i> No regulation in principle	<i>Box 2</i> No regulation
W H O L E S A L E	Existing transmission inputs	<i>Box 3</i> Apply standard SMP regime (market-based or asset-based approach)	-----
	Mixed new transmission inputs	<i>Box 4 (incl. VDSL, FTTx)</i> Market-based approach: as in Box 3 for existing services Asset-based approach: as in Box 5 for existing and emerging services	
	Totally new transmission inputs	-----	<i>Box 5</i> No regulation OR Access holidays, depending of the characteristics of the new infrastructure

Once the emerging markets have been defined, the second step is to decide the optimal regulation in order to preserve investment incentives.¹¹¹⁵ With regard to the regulation of the retail markets, existing services (Box 1) should in principle be left to competition and sector-specific regulation be phased out progressively, possibly accompanied with a safeguard period to ensure the regulation at the wholesale level is efficient in removing barriers for retail entry. Emerging services (Box 2) that entails a much higher risk should be left to antitrust law alone.¹¹¹⁶

With regard to regulation of the wholesale inputs, the case of existing transmission infrastructures (Box 3) is not controversial. They should be subject to the standard three criteria test. If passed, the NRAs may analyse further and possibly regulate the existing transmission inputs.

The case of new transmission inputs is not very controversial either, although it will rarely happen in practice. There are two hypotheses (Box 5).¹¹¹⁷ The totally new transmission input does not and will not in the future meet the conditions of the screening test. In such

¹¹¹⁴ This figure, in distinguishing between existing and new retail markets and between existing and new wholesale inputs, is adapted from Cawley (2005). For an alternative view, see Ovum and Indepen (2005b).

¹¹¹⁵ See also the Ofcom Consultation of 30 June 2005 on New Generation Networks.

¹¹¹⁶ This was the case of the ADSL tariffs in the decision *Wanadoo*.

¹¹¹⁷ Another sub-category may also be done between new infrastructures put in place by incumbents and by new entrants. I'm not sure such distinction would be relevant.

circumstances, there is no need to intervene because the market is emerging, and more importantly, because there is no hard-core market power that justifies regulation.

Alternatively, the totally new transmission input may in the future meet the conditions of the screening test. This situation is trickier because on the one hand there is hard-core market power that may justify regulation, but on the other hand, investment incentives should be preserved.¹¹¹⁸ Regulators may adopt a radical approach and guarantee ‘access holidays’ for a certain period of time,¹¹¹⁹ like an intellectual property right. The optimal length of the access holidays is difficult to determine. Indepen and Ovum (2005b) propose one third of the life of the asset¹¹²⁰ whereas Baake et al. (2005) propose a multiple stages approach where the situation is assessed every two to four years. Regulators may also be more interventionist and impose ‘open access regulatory compacts’ that leave operator the freedom to set the level of prices but set a structure of prices such that the operator can not foreclose its competitors on related markets.¹¹²¹

The most controversial case is the mixed new transmission inputs (Box 4). Some¹¹²² start at the retail level (i.e. at the top of figure 1) and adopt a ‘vertical approach’. They argue that Box 4 should be treated in the same way than Box 3 for existing services. This is the view of the Commission and the ERG.¹¹²³ Thus, the regulator should deal equally with an old and mixed new transmission inputs when they provide the same existing retail services. That may lead to further analysis and possibly an imposition of remedies on the mixed new infrastructure if the conditions of the three criteria test are met. For instance, if a VDSL line or a FTTH line replaces copper pairs, access regulation may continue to be imposed for the provision existing

¹¹¹⁸ It may be argued that regulation will not impede the recoupment of investment risk (hence will not undermine future investment incentive) as any access regulation (and access price) should provide a premium for investment risk. However, the calculation of this premium is far from easy as regulators face difficulty in distinguishing the ex post rewards for risky investment from monopoly rents, hence there is a possibility that the premium will be set too low. On this point, see Australian Productivity Commission (2001:268).

¹¹¹⁹ This has been suggested by Cave (2004b) in case of some fixed broadband services.

¹¹²⁰ Based on Gans and King (2004)

¹¹²¹ This is the approach followed in the Microsoft case as the company is free to determine its price on the Operating System market, but it may not extend its monopoly from the OS market to related markets: Commission Decision of 24 March 2004, case 37.792 *Microsoft*.

¹¹²² Larouche (2006b).

¹¹²³ Case DE/2005/262. See also the ERG Revised Common Position on remedies, p. 116-117 and the E/ERG response to the 2006 Review, p. 20. Note that Commissioner Reding appears to have changed her mind about regulatory holidays. At the beginning, she seems to be in favour of such approach to stimulate investment in new broadband infrastructure (Reding, 2005). Now on the basis of the data gathered in the 11th Implementation Report, she seems much more reluctant to accept regulatory holidays (Reding, 2006: 4).

retail services (like voice) although not necessarily to provide emerging services.¹¹²⁴ However, NRAs should be cautious not to extend existing regulation to new inputs without an articulated economic analysis. Indeed, the fact that a mixed new infrastructure has been deployed may be an indication that there is no structural market failure justifying regulation altogether.

Conversely others¹¹²⁵ start at the wholesale level (i.e. at the bottom of figure 1) and adopt a 'horizontal' approach. They argue that Box 4 should be treated in the same way than Box 5. This is the view of the US Federal Communications Commission.¹¹²⁶ Thus the regulator should deal equally all new infrastructure *independently of the services for which they are used*. For instance, if a VDSL line or a FTTH line replaces copper, access regulation will be lifted even to provide existing retail services (like voice).

I suggest following a market-based approach and treating similarly every retail service independently of the infrastructure on which it is provided.¹¹²⁷ Moreover, it is justified to treat differently a mixed new infrastructure and a totally new infrastructure because the former bears less financial risk than the latter. Indeed, a totally new infrastructure is entirely dependent of the success of the new retail service whereas some return on the mixed new infrastructure can be secured with the existing retail services.

Commission proposals and assessment

Regarding the definition of emerging markets, the Commission states that the emerging markets are those which are so new and volatile that it is not possible to determine whether or not the three criteria test is met.¹¹²⁸ Thus, if a market is emerging, it will not be susceptible to ex-ante regulation because the TCT can not be done. When a market is not any more emerging, it will be susceptible to regulation if it fulfils the TCT. Thus, the reasoning of the Commission is tautological and does not add any legal certainty to the complex issue of emerging markets.

¹¹²⁴ To ensure that investment in new infrastructure is not impeded, regulator may decide to regulate the access price of the mixed new infrastructure at retail minus (instead of cost plus based).

¹¹²⁵ Indepen and Ovum (2005b).

¹¹²⁶ Note however that the position of the FCC is mainly due to the important cable penetration in the US, which has no equivalent in most of the EU Member States.

¹¹²⁷ Also in favour of such approach, Cave et al. (2006:31), Larouche (2006b:19). Also against access holidays, Knieps (2005:88-90), Hogan and Hartson and Analysys (2006:190).

¹¹²⁸ Recital 5 of the Draft second Recommendation on relevant markets, as explained by pp. 16-17 of the Explanatory Memorandum; Communication on the Review 2006, p. 5.

Regarding the regulation of emerging markets, the Commission proposes to follow the market based approach, rejects the regulatory holidays,¹¹²⁹ and states that any price regulation should properly take the risk of the investment into account.

C. Commission Recommendation on relevant markets susceptible to ex-ante regulation

Suggestions for improvements

The easiest way to draft the second list of market susceptible to ex-ante regulation is to start from the results of the first round of market analysis (as summarised in Table 3.2). But as noted by Cave et al. (2006:8 and 34), it is inappropriate to treat a high proportion of SMP findings as creating a presumption of the need to continue to include the market in question in the second Recommendation on relevant markets because on the one hand, the NRAs did not check if the TCT was met and on the other hand, technical development may, and deregulatory strategies pursued by NRAs should, reduce the number over time. That said, a widespread finding of effective competition must cast doubt on the need to resort to *ex ante* regulation.

Cave et al. (2006:39-41) submit that the *summa divisio* between fixed and mobile is still justified as there is a willingness to pay a premium for full mobility¹¹³⁰ and most end-users regard a mobile phone as a complement to the fixed telephone rather than as a substitute at home/in office. This is because (1) many residential customers and most non-residential customers do not want to give up their fixed narrowband line as they use it for Internet access; (2) multi-person households usually prefer to have a generally available fixed connection at home for all family members; (3) multi-person households and firms also take into account the cost imposed on family members or employees calling home or the office and mobile termination rates are higher than fixed termination rates; (4) when it comes to price, for customers with higher usage intensity, a mobile service bundle is usually more expensive than

¹¹²⁹ Draft Explanatory Memorandum of the second Recommendation on relevant markets, p. 16.

¹¹³⁰ Cave et al. (2006:81) report US data showing a cross-price elasticity of fixed access price on mobile access demand between 0.13 and 0.18 and a cross-price elasticity of mobile prices on fixed line usage from 0.13 to 0.33, and conclude that: "While mobile has displaced fixed service for a select subset of the population, the two services appear to have achieved coexistence in the market place as well as in household budgeting, each providing consumers with particular advantages".

the fixed service bundle (as the LRIC of providing a mobile call minute is higher than the LRIC of providing a fixed narrowband call minute).

For the future, the issue is how the new integrated fixed and mobile offers would affect this *summa divisio* and change market definition. On the one hand if the operators merely bundle fixed and mobile services that continue to be offered separately, there is no case to change market definition but only to take into account the increased competition pressure of the bundled offers at the stage of the SMP assessment. On the other hand if the operators integrate technically both services, there may be a case to define a new retail market (i.e. of integrated offers). However, this new retail market would not be susceptible for ex-ante regulation as, being too nascent, it would not pass the TCT.¹¹³¹

Cave et al. (2006:41-42) also argue to maintain the other *summa divisio* between narrowband and broadband because first for fixed narrowband customers, a broadband only connection is unlikely to be a demand substitute to which they would switch in sufficient numbers in case of a 5 – 10 % price increase of their telephone line, and second supply substitution does not appear to be relevant.

If the test for regulation proposed above were followed, the Commission Recommendation on relevant markets susceptible to ex-ante regulation would be substantially slimmed down.¹¹³² At the outset, it should be recalled that a removal of a market from the Recommendation does not mean that a NRA could not intervene on this market, but only that its hurdle to intervene would increase as it would have to do the TCT and may face a veto from the Commission.¹¹³³

Regarding the *fixed market segment*, the Commission should remove all retail markets.¹¹³⁴ It should remove the two retail access markets because the existing wholesale obligations (carrier selection and pre-selection, wholesale line rental, unbundling of the local loop) are

¹¹³¹ This does not imply that the wholesale infrastructures required to provide this new services should not be regulated.

¹¹³² See also my previous analysis in de Streeck (2004b).

¹¹³³ Given the interpretation of the Commission and the ERG that a selection of the market in the Recommendation implies that the NRAs should not do the TCT, a removal from such Recommendation increases substantially the regulatory threshold as NRA should then prove the TCT and the Commission may veto such analysis. Given my interpretation that NRAs should do the TCT in all circumstances independently of the Commission selection, a removal from the Recommendation has less substantial impact as it only implies that the TCT analysis could be vetoed by the Commission.

¹¹³⁴ Also in this sense, Defraigne (2005:599), Knieps (2005:86).

sufficient to remove retail entry barriers.¹¹³⁵ The Commission should also remove the four telephone services markets because they are increasingly competitive with the development of VoIP and the new fixed and mobile bundled or integrated offers, and in any case, show low entry barriers when the extensive wholesale remedies are in place (unbundling of the local loop, wholesale broadband access). However such removal should be accompanied by 'phasing-out' measures to ensure that re-monopolisation by the previous incumbents will not take place. Thus, the NRAs should continue to monitor the evolution of the retail markets during two years after the removal of obligation and keep the possibility to intervene ex-post if it observes violation of competition law and in particular price squeeze.¹¹³⁶

The Commission could also remove the wholesale core network markets (transit and trunk segment of leased lines)¹¹³⁷ because when traffic is important, the economies of scale and scope decrease and the entry barriers are not so high.

Thus in the fixed market segment, the Commission should maintain the call origination and call termination markets because they continue to meet the TCT. The Commission should also maintain the unbundling of the local loop and the wholesale broadband access, possibly merging them into one market (the question of the access point in the network being more a remedy issue than a market definition issue.) In addition, the Commission should clarify that the wholesale broadband access should be defined according to wholesale substitution (demand and supply) but also the indirect retail constrain (according to the estimate of the three elements of the reformulated Marshall-Hicks formula for elasticity of the derived demand.)¹¹³⁸ It should then modify the current formula¹¹³⁹ that provided that "the wholesale broadband access market covers 'bit-stream' access and other wholesale access provided over other infrastructures, if and when they offer facilities equivalent to bit-stream access", which

¹¹³⁵ Thus I suppose that CS/CPS and WLR are imposed with a SMP designation on the wholesale market of access and call origination, hence does not necessitate the identification on retail access markets. As I show in Chapter, it is possible and indeed better policy to impose WLR as a remedy on the wholesale market as done in Denmark or France. In addition, the retail access markets are subject to extensive universal service obligation ensuring that the price of access line is affordable: Article 4 of the Universal Service Directive. Note that Cave et al. (2006:64) submit that the retail access market should continue to be selected because they only consider unbundling as a wholesale remedy and find it insufficient to remove retail entry barriers.

¹¹³⁶ I'm less confident than the Commission and some observers that competition law alone will be able to deal with such type of price squeeze. See also the submission by Wind at the 2006 Review.

¹¹³⁷ Also of this opinion, Knieps (2005:86).

¹¹³⁸ See Section 3.1.1.A: the three elements are (i) the elasticity of demand at the retail level; (ii) the change of the retail price due to a change in the wholesale price (the pass-through), and (iii) the ratio of wholesale to retail price.

¹¹³⁹ See the description of market 12 in the Recommendation on relevant markets.

implies that only wholesale substitution should be taken account when defining the market.¹¹⁴⁰

Regarding the *mobile market segment*, the Commission should remove mobile access and call origination because often the legal entry barriers may be softened (for instance with spectrum trading), and the market is usually competitive behind the barriers.¹¹⁴¹ It should also remove the international roaming market whose market failure, if any, is not related to the presence of market power. Thus, the Commission should only maintain the mobile termination market, possibly distinguishing between on-net calls where there is a true possibility of reciprocal deals in the interests of consumers and off-net calls (especially coming from fixed network) where such bargaining possibility does not exist.¹¹⁴²

Commission proposals and assessment

In its draft Second Recommendation published in June 2006 and to be finalised in January 2007,¹¹⁴³ the Commission proposed to select 10 markets, and have put 2 additional ones in balance as shown in Figure 4.9.

Figure 4.9: Proposed second list of markets susceptible to sector-specific regulation

	FIXED				MOBILE	BROADCAST
	voice	Narrowband data	Broadband data	Dedicated access	Voice and SMS	
R E T A I L	1. Access residential and non-residential					
W H O L E S A L E	2. Call termination 3. Call origination 4. Transit	3. Call origination	5. Unbundling local loop (or equivalent) 6. Wholesale broadband access	7. Terminating segments 8. Trunk segments	9. Voice call and SMS termination 10. Access and call origination* 11. International roaming	12. Broadcasting transmission services*

* Markets whose status is not yet decided

¹¹⁴⁰ Also in this sense, Schwartz (2006:24).

¹¹⁴¹ Also in this sense, Cave et al. (2006:98), Defraigne (2005:600).

¹¹⁴² Cave et al. (2006:98-99).

¹¹⁴³ Draft Second Commission Recommendation of 28 June 2006 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation, SEC(2006) 837.

Thus, as suggested by its consultants, the Commission maintain the divisions between fixed and mobile service, as well as between narrowband and broadband services because they are more complements than substitutes and because the substitution would only be asymmetric.

Regarding the *fixed market segment*, the Commission proposes to merge the retail access markets for residential and non-residential customers because the contractual terms of access do not significantly and systematically differ (market 1). It maintains such market in the Recommendation because it meets the TCT as the local loop unbundling (the sole wholesale regulation that may impact the retail access market) requires time and high investment. On the other hand, the Commission proposes to remove all the four telephone calls markets because of the increasing competition of VoIP and because wholesale regulation (CS/CPS) is sufficient to remove entry barriers as evidenced by large scale market entry of alternative operators across Europe and any remaining problems (in particular price squeeze) could be efficiently dealt by competition law.¹¹⁴⁴

At the wholesale level, the Commission maintain the call termination (market 2) mainly because of the externalities created by the calling-party-pays principle, recalling, as it did in the first Recommendation, that the single network market definition does not automatically mean that every network operator has SMP as this depends on the degree of any countervailing buyer power.¹¹⁴⁵ It maintains also the call origination market (market 3) because of the important fixed sunk costs. The Commission selects the transit (market 4) as well because there is no tendency of effective competition on a European scale as economies of scale are still important on thin routes (meaning that the ability to provide geographically ubiquitous transit services still normally depends on incumbent provided transit services).

The Commission maintains the unbundling of the local loop (market 5) because of the important fixed and common costs, but remain unclear whether such definition is limited to the copper pair (in which case, it would violate the principle of technological neutrality) or covers also equivalent access. It also selects the wholesale broadband access. Unfortunately, it

¹¹⁴⁴ At p. 26 of the Explanatory Memorandum, the Commission recognises that NRA may select the retail service markets if they pass the TCT, and that may be the case in Member States where Carrier Select and Carrier Pre-Select obligations have only recently been introduced or so far remain ineffective (e.g. because of particular consumer habits) and where broadband penetration is low and VoB offerings insignificant.

¹¹⁴⁵ Explanatory memorandum of the draft Second Recommendation on relevant markets, p. 23. However, this contradict the rather dogmatic stance of the Commission when analysing the NRAs draft decisions under Article 7, where it was reluctant to admit any countervailing buyer power argument: See in particular, Case DE/2005/144 (Decision of 17 May 2005: Veto).

keeps the misleading sentence that the market “covers ‘bit-stream’ access and other wholesale access provided over other infrastructures, if and when they offer facilities equivalent to bit-stream access”,¹¹⁴⁶ which seems to imply that only wholesale substitution (and not the indirect retail constrain) should be taken account when defining the market.

Regarding the *leased lines segment*, the Commission proposes to remove the retail market for the minimum set because wholesale regulation should suffice to remove entry barriers.¹¹⁴⁷ Thus, the Commission proposes to maintain wholesale terminating segments of leased lines (market 7) because of the high fixed sunk costs. It also maintains the trunk segments of leased lines (market 8) because there is no tendency towards effective competition across the EU.

Regarding the *mobile segment*, the Commission proposes not to include any retail market. At the wholesale level, the Commission proposes to include a termination market comprising voice as previously but adding SMS (market 9) because of the externality created by the calling-party-pays principle. It has not yet decided on the inclusion of the market of access and call origination (market 10) and insists on the necessary flexibility of the Member States because on the one hand, the market is effectively competitive in many countries (as MVNO agreements are concluded on commercial terms), but on the other hand, other Member States have observed that firms have incentive to tacitly collude. Finally, the fate of the international roaming (market 11) will depend on the outcome of the legislative process regarding the Regulation proposed by the Commission in July 2006.

Regarding *broadcasting segment*, the Commission confirms that such market covers the transmission network and ancillary technical services.¹¹⁴⁸ It does not propose to identify any retail broadcasting transmission market because the majority of the European households have normally up to three potential means (terrestrial, cable, satellite) to receive broadcast content, and that will increase in the future with the development of IPTV and mobile TV. At the wholesale level, the Commission recognises that the three main platforms are more complements than substitute for the broadcasters, but it has not decided if they should be

¹¹⁴⁶ Description of market 6 in the draft Commission second Recommendation on relevant markets.

¹¹⁴⁷ In the context of the Review, the Commission proposes to delete Article 18 and Annex VII of the Universal Service Directive dealing with the minimum set of leased lines: Commission on the Review 2006, p. 31.

¹¹⁴⁸ Explanatory Memorandum, p. 43-44: “Whereas the transmission services a pay platform purchases (captively or on the merchant market) are electronic communications services and fall under the regulatory framework, the relationship between the individual broadcasters and the pay platform concerns a content aggregating service and does not fall under the regulatory framework.”

included in the Recommendation because the competitive dynamic behind the entry barriers is complex and varies a lot across Member States.¹¹⁴⁹

In sum, the Commission is fairly conservative with its draft proposal and just proposes to remove the four retail service markets and to add the wholesale SMS termination market. To me, it could also have proposed to remove the two retail access markets (as the Wholesale Line Rental may be seen as a wholesale remedy), the transit and trunk segments of leased lines (and if an NRA wants to regulate, it has to pass the additional hurdle of a possible Commission veto on its TCT assessment), and the access and mobile origination. Thus, the Commission missed a good opportunity to send a strong deregulatory signal that could have oriented the NRAs towards the path of deregulation.

4.2.2. Longer term reforms

For the reforms that need to amend the current directives and that will only be applicable in 2010 at the earliest, I deal with the objectives of economic regulation, the choice of remedies and the institutional design at the national and the European levels.

A. Objectives of the economic sector-specific regulation

Suggestions for improvements

A first change would be a clarification of the objectives. The new directives should state unambiguously what is the primary goal of the regulatory actors and, to the extent feasible, decide between a hands-off approach based on confidence in market mechanisms and a more pro-active approach based on an industrial policy view (as embodied in the i2010 initiative). To me, the overall objective should be to maximise long term consumer welfare and an amended Framework directive could follow the Australian law which provides that:¹¹⁵⁰

¹¹⁴⁹ In particular when taking into account the existing regulation not related to SMP: include must carry rules (Article 31 of the Universal Service Directive), access under Article 5 of the Access Directive and compulsory network sharing (Article 12 of the Framework Directive).

¹¹⁵⁰ Section 152 AB (1) of the Australian Trade Practice Act 1974. Along that line, see also the clarification of the objectives of competition law brought by the DG Competition Discussion paper on exclusionary abuses, para 4. Alternatively, Larouche and de Visser (2005:3) suggest that the ultimate guide for NRAs action should be the Lisbon objective of making Europe the most competitive and dynamic knowledge-based economy in the world by 2010, as enshrined *inter alia* in the Communication from the Commission of 1 June 2005, i2010 – A European Information Society for growth and employment, COM(2005) 229.

The object [...] is to promote the long-term interests of end-users of carriage services or of services provided by means of carriage services.

In addition, the directives may give indications on secondary objectives to help NRAs making operational the primary objective.¹¹⁵¹ For instance, the amended Directives should clarify that regulators have to encourage investment and make dynamic efficiencies prevail over static efficiencies. They should also clarify that compulsory access might be imposed solely if infrastructure competition is not possible or desirable *or* as a means to accelerate infrastructure competition. In both cases, access obligations should be duly justified with a balance of costs and benefits and be limited in time.

On that basis, each of the 25 NRA should set their operational objectives and the means to attain them. If they plan to manage competition on the market, they should explain why their intervention is needed, how they will achieve their objectives, at what conditions and under which timeframe they expect to remove their intervention. That will give more legal certainty and at the same time, provide a benchmark to assess whether a regulator has fulfilled its own goals.

Commission proposals and assessment

Unfortunately, the Commission does not touch this fundamental issue of objectives in its proposal for change. As one of its senior official explained during the public presentation of these changes, the Commission felt that on balance, a clarification or a prioritization of objectives was not necessary.

¹¹⁵¹ See Section 152 AB (2) of the Australian Trade Practice Act 1974: "For the purposes of this Part, in determining whether a particular thing promotes the long-term interests of end-users (...) regard must be had to the extent to which the thing is likely to result in the achievement of the following objectives: (c) the objective of promoting competition in markets for listed services; (d) the objective of achieving any-to-any connectivity in relation to carriage services that involve communication between end-users; (e) the objective of encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which listed services are supplied and any other infrastructure by which listed services are, or are likely to become, capable of being supplied".

B. Substantive law: Remedies

Suggestions for improvements

Currently, most of the remedies are behavioural whereas the market problems to be addressed by sector-specific regulation are structural (otherwise, a competition law intervention would be efficient). There are several reasons for this apparent paradox. First and foremost, when the sector was liberalised in the nineties, the political compromise among the three main European institutions (Commission, Council, and Parliament) was to open the markets but not to break up the existing monopolists.¹¹⁵² This was partly due to political lobbying of the incumbents and partly due to economic analysis showing that the costs of a break-up might outweigh its benefits. Second, the tools relied upon in the previous regulatory paradigm (i.e. regulating monopolists and mimicking the result competition) were all behavioural and there is a tendency to follow the same remedies in the new regulatory paradigm (path dependency of remedies). Third, with the recent competition law alignment, the behavioural remedies of Article 82 are naturally carried forward in the regulatory realm.

However, this situation is not satisfactory and I submit that regulators should be able to impose all types of remedies, being behavioural, structural,¹¹⁵³ or technological¹¹⁵⁴ provided they would ensure a route towards de-regulation. Obviously, it may be dangerous to increase the power of the NRAs and provide them with the structural separation 'atomic bomb' as they may abuse it. Indeed, there is a high risk of type I error whose cost can be tremendous. Thus as a *quid pro quo*, I think that when an NRA wants to impose a structural or technological remedies, they should pass a strict cost-benefit analysis and face a possible veto of the Commission.

More generally for all remedies, regulators should advance compelling argumentation that the benefit of their intervention outweighs its costs. The benefit is the correction of the market failure and the consequent increase in welfare. The costs are the direct costs of designing and implementing the rules by the regulators and the regulatees and the indirect costs due to type I errors (false condemnation), both of which being substantial in the electronic communications

¹¹⁵² Larouche (200a: Chapter1).

¹¹⁵³ Similarly, Hogan & Hartson and Analysys (2006:194) argue that structural or (quasi-)structural should be a possibility to increase the bargaining power of the regulator. That should be under the control of the Commission that would need to describe in advance those situations in which it would not exercise its veto power.

¹¹⁵⁴ For instance to solve mobile termination problems, some have argued for the imposition of Receiving Party Principle or Bill and Keep, instead of a perpetual price control: de Bijl et al. (2005), Littlechild (2006).

sector.¹¹⁵⁵ As cost/benefit analyses are extremely difficult to perform, especially as they involve predictions of future market developments, a qualitative argumentation should suffice when quantitative analysis is not possible or too burdensome.¹¹⁵⁶

Finally, the mode of choosing remedies should change. Instead of imposing remedies, NRAs should try, to the extent possible, to reach settlements with the operators to guarantee incentive compatibility.¹¹⁵⁷ In turn, this requires important power of the regulatory authorities to increase their bargaining power.

Commission proposals and assessment

In its main Communication on the 2006 Review, the Commission does not propose any change regarding the remedies to be imposed.¹¹⁵⁸ In the associated impact assessment, the Commission discusses the possibility of imposing structural separation¹¹⁵⁹ but rejects this option because it represents a major intervention in the property rights of infrastructure owners, would not necessarily lead to more investment as it denies the infrastructure owner the revenue streams that are available to a vertically integrated operator and implies a never-ending regulation of the infrastructure provider.¹¹⁶⁰ Surprisingly, Commissioner Reding (2006:10) seems more enthusiastic with structural separation than its services, when she notes that “the policy option of structural separation could answer many competition problems that Europe’s telecom markets are still facing today.”

C. Institutional design

Finally, I think that substantive (or first-generation) harmonisation should be followed by procedural (or second-generation) harmonisation. Already eight years ago, Temple Lang

¹¹⁵⁵ Similarly, Australian Productivity Commission (2001) notes that the Australian incumbent is the biggest consumer of legal service in the country. For the indirect costs, see Hausman (1997). For an overall cost-benefit of the telecommunications regulation in New Zealand, see CRNED (2000).

¹¹⁵⁶ In particular when choosing remedies, the NRAs should carry a regulatory impact assessment showing that the anticipated benefits of the option selected outweigh its potential costs: ERG Revised Common Position on remedies, p. 56.

¹¹⁵⁷ Ofcom Strategic Review; Article 9 of Regulation 1/2003; Clearing and settlement of securities in the EU: IP/06/273 of 7 March 2006

¹¹⁵⁸ I discuss the proposed Commission veto on remedies in the institutional section.

¹¹⁵⁹ As I explained in Chapter 4, I think, contrary to the Commission, that structural separation may already be imposed under Article 8(3) of the Access Directive of the current regulatory framework.

¹¹⁶⁰ Impact assessment on the Review 2006, p. 12 referring to the work of the OECD: DAFNE/COMP/WP2 “The benefits and costs of structural separation” – Note by TISP, of 10.01.2003 and DSTI/ICCP/TISP(2005)10 “Draft Report to Council on experiences with structural separation” of 28.10.2005.

(1998b:334) was advocating for increased harmonisation of the procedures followed by the national authorities, at least to the extent necessary to give affected parties similar rights to defend their interests because the general Community principles of due process are not well enough known and often not sufficiently precise.¹¹⁶¹

CI. National Regulatory Authorities

Suggestions for improvements

At the national level, regulators should adopt a more dynamic conception of competition focussed on investment and innovation as well as understand that only the agile, and not the strongest, will survive in the telecommunications sector. To achieve this, several means should be combined. (1) First, regulators (in particular those from some small member States) should be more intensively and better trained, possibly within a European school to develop a Community spirit.¹¹⁶² (2) Second, regulators should not only focus and report on static indicators (the level of the price or the number of competitors in the market), but also on more dynamic indicators (the level of investment or the number of new products and offers made).¹¹⁶³ It is equally important that politicians, to which authorities are accountable, also adopt this dynamic conception of competition and evaluate their authorities accordingly. (3) Third, regulators should be assessed independently against specific objectives and involving all stakeholders (consumers, competitors, experts,...).¹¹⁶⁴ In fairness, the Commission's yearly reports on the implementation of the regulatory framework generally assess the performance of the NRAs. However, this is limited to compliance with the existing substantive obligations laid down in the directives and do not raise more general questions like whether NRAs have a sufficiently dynamic view of the market or whether the very existence of an NRA is still justified.¹¹⁶⁵

Moreover, the transversal and diagonal coordination between the NRAs and the competition authorities (being the NCAs or the Commission) should be clarified, and in some countries

¹¹⁶¹ Also in favour of more procedural harmonization: Hogan & Hartson and Analysys (2006:172). There is equivalent need of second generation harmonisation in antitrust: Paulis (2000).

¹¹⁶² Like the electricity regulators with the Florence School of Regulation, at <http://www.iue.it/RSCAS/ProfessionalDevelopment/FSR/>.

¹¹⁶³ Like some indicators on investment in the OECD Communications Outlook or some indicators of the TrendChart Innovation Policy in Europe, available at <http://trendchart.cordis.lu/scoreboards/scoreboard2005/index.cfm>

¹¹⁶⁴ Like what is done in the Netherlands for instance: See Ecorys, Berenschot and TNO, *Een Tergugblik om van te leren: Syntheserapport Onderzoek Evaluatie OPTA*, 17 januari 2005, available at: www.minez.nl.

¹¹⁶⁵ Geradin and Petit (2004:26).

improved, to alleviate duplication of procedure, conflicting decisions and forum shopping between authorities. At the minimum, an efficient division of task should take place between authorities.¹¹⁶⁶ Often, that would be insufficient in many cases and clear coordination mechanisms should be set up.¹¹⁶⁷

Commission proposals and assessment

The Commission does not propose major changes compared with the existing provisions on the organisation of the NRAs, probably judging that going further would violate the procedural autonomy of the Member States and would not be politically acceptable for the Council. It only proposes to reinforce enforcement mechanisms by empowering NRAs to impose significant and dissuasive penalties (e.g., in proportion to turnover, retroactivity) on undertakings found to have acted in breach of the authorisation conditions, even when the undertakings rectify the breach afterwards.¹¹⁶⁸

C2. National Courts

Suggestions for improvements

At the national level, appeal bodies should ensure proper checks and balances on NRAs decisions, but several problems need to be solved: length of appeal procedures, practice of systematic appeals, suspension on a regulator basis, and denial of third parties' right of appeal.¹¹⁶⁹ I think it would be neither appropriate nor politically feasible to entirely by-pass the national appeal systems and replace them by a single European appeal system (whatever it may be).¹¹⁷⁰ Indeed, the problems with the national appeal systems and the characteristics of the electronic communications sector do not justify a completely different judicial system compared to the rest of the economy. Moreover, by-passing judicial national systems would go right at the heart of the constitutional value of the Member States and be unacceptable for many Supreme Courts of the Member States. Instead, I suggest an improvement of the national appeal systems.

¹¹⁶⁶ Larouche (2005:175-176)

¹¹⁶⁷ Nihoul and Rodford (2004:680) are calling for European Guidelines in that regard.

¹¹⁶⁸ Proposed Changes for the Review 2006, p. 23.

¹¹⁶⁹ See section 3.3.1.C. and Annex to the 11th Implementation Report, p. 52-53.

¹¹⁷⁰ Also in this sense, Hogan & Hartson and Analysys (2006:175).

Thus, Article 4 of the Framework Directive, and possibly new accompanying Commission Guidelines on national procedures in the electronic communications sector, may provide for limited harmonisation of national appeal rules and best practices. As a comparative study has already shown,¹¹⁷¹ good practices are that: (i) an internal appeal at the NRA should be excluded, (ii) the number of levels of possible appeal on the merits should be limited to one, (iii) the control of the appeal body on the NRAs should be of an administrative nature similar to the one done by the Court of First Instance on the Commission antitrust decisions,¹¹⁷² (iv) the appeal should be prompt,¹¹⁷³ and (v) the rules for *locus standi* should be sufficiently clear.¹¹⁷⁴ The implementation of such best practices is especially important as litigation is expected to increase in the future because incumbents are likely to intensify their policy of appealing the NRAs' decisions as their market shares decline and their core revenues are under increasing threat from new entrants and new platforms (e.g., VoIP.)¹¹⁷⁵

In addition to ensure that national judges work in a European spirit, they may set up informal devices to exchange information and best practices¹¹⁷⁶ and rely on mechanisms similar than those established with antitrust decentralisation (like the possibility of the Commission to intervene as *amicus curiae* in the national court proceedings.)¹¹⁷⁷ They may also be actively trained with the support of the European Commission.¹¹⁷⁸ In addition when a national court has to apply the telecom law in a private dispute, it may be useful that the Courts have the right to ask for the NRA's opinion.¹¹⁷⁹

¹¹⁷¹ Andenas and Zleptnig (2004). See also the indications in Cullen International (2006), Jones Day and SPC Network (2006), Ottow (2006).

¹¹⁷² Lasok (2005) suggests also a similar proposal. DC Court of Appeals Chief Justice Ginsburg noted at a Conference in Paris in January 2006 that Courts should limit their control to procedural rules and the existing of sound justifications for the regulatory actions because judicial courts have no ability and expertise to do a more detailed review.

¹¹⁷³ The Framework Directive should ensure that the appeal procedure allows for rapid adoption of a decision, as it is provided by Article 18(1) of the Directive 2000/31/EC on electronic commerce providing that: "Member States shall ensure that court actions available under national law concerning information society services' activities allow for the rapid adoption of measures, including interim measures, designed to terminate any alleged infringement and to prevent any further impairment of the interests involved."

¹¹⁷⁴ This question will be partially clarified with the Court of Justice answer in the pending Case C-426/05 *Tele2 UTA Telecommunication v Telekom-Control-Kommission*.

¹¹⁷⁵ Hogan & Hartson and Analysys (2006:128).

¹¹⁷⁶ Possibly inside the European Judicial Network although this forum is mainly suited for cross-border disputes and not so much to ensure consistency of decisions concerning purely internal disputes: Council Decision of 28 May 2001 establishing a European Judicial Network in civil and commercial matters, O.J. [2001] L 174/25; see also: http://europa.eu.int/comm/justice_home/ejn/index.htm.

¹¹⁷⁷ Article 15 of the Council Regulation 1/2003 analysed *supra* Section 2.3.1.B. This was already proposed during the adoption of the 2003 regulatory framework by Cave and Larouche (2001:25) and proposed again by Larouche and de Visser (2005:22) and by Hogan & Hartson and Analysys (2006:174).

¹¹⁷⁸ See http://europa.eu.int/information_society/policy/ecom/article_7/events/index_en.htm

¹¹⁷⁹ Similarly to what is provided under antitrust decentralisation: Article 15(3) of Regulation 1.

Commission proposals and assessment

The Commission has not made ambitious proposals to make the national appeals mechanism more effective because it considers that such issue is mainly related to judicial cooperation and not to the internal market as such.¹¹⁸⁰ It just proposed three modest reforms.¹¹⁸¹ First, the Commission proposes to amend the provisions of Article 4 of the Framework Directive so as to lay down legal criteria that national courts must use in deciding whether to suspend NRA decisions on appeal in order to tackle the problem of routine suspension of regulatory decisions. Such criteria would be based on those used by the Community Courts to suspend contested legal act on the basis of Article 242 EC. They are three:¹¹⁸² (i) the applicant must establish a *prima facie* case, which means that the applicant in the associated main proceedings must have a reasonable chance in succeeding (*fumus boni juris*); (ii) the application must be urgent, which means that the absence of the judgement in the main proceedings threatens to cause the applicant serious and irreparable harm in effect, the Court examines whether the ultimate annulment of the administrative decision under challenge would make it possible to reverse the situation that would be brought about by the implementation of that decision); (iii) the applicant's interest in the imposition of interim measures must outweigh the other interests at stake in the proceedings (balance of interests).

Second, the Commission proposes to introduce a mechanism for Member States to report on the timing and the number of appeals and suspended opinions to allow the situation across the EU to be monitored. Finally, the Commission proposes to use other information and cooperation mechanisms to enhance the degree of consistency between national court decisions.

¹¹⁸⁰ Article 65 EC, and not Article 95 EC.

¹¹⁸¹ Annex to the Communication on the 2006 Review, p. 19.

¹¹⁸² Article 104 of the Court of First Instance Rules of Procedure; Case C-364/98P R *Emesa Suga v Commission* [1998] ECR I-8815, para 47. On those criteria, see Lenaerts et al. (2006:433-442). Van Bael and Bellis (2005:1158-1160) note that in competition cases, about 35% of the applications for interim relief have been granted. They give as examples: changes or developments in the market structure, changes to an extensive and complex marketing system, financial damages that would jeopardise the existence of the applicant, financial damages that would be unquantifiable or irrecoverable, disclosure of documents containing business secrets, and harm to the reputation of an undertaking.

C3. European Commission

Suggestions for improvements

At the European level, the Commission should orient all its interventions (Recommendation of relevant markets, review of the NRAs' draft decisions, infringement procedures against Member States, antitrust cases) towards the long term welfare of the citizens and not any other considerations (like harmonisation for the sake of it, preservation freedom of action in antitrust cases, or political bargaining). To ensure this, the Commission should report on its own activities, goals and achievement in its annual implementation reports. More creatively, a panel of high level experts directly reporting to the European Parliament could evaluate the performance of the sector, the functioning of the regulation and the respective roles of the regulatory actors (in particular the Commission which is otherwise never evaluated by an external body) in advance of each major Review of the regulatory framework.¹¹⁸³

Another important reform relates to the Article 7 review. Today, there are several linked problems: it is not clear what are the role of the Commission review, the standard of review of the Commission, the legal value of its decisions, and the possibility of appeal to the Community Courts. These issues should be dealt in two steps: what should be the competence of the Commission and what should be the procedure.

Regarding the competence of the Commission,¹¹⁸⁴ it is important to go back to the goal of the Commission review. To me, the review aims to ensure that NRAs' decisions that affect the trade between Member States respect European law and do not undermine the establishment of the internal market, hence it should not become a general (European) appeal system. On that basis, three aspects of the Commission competence should be set up.

First, the review of the Commission should be limited to NRAs decisions whose implementation affects the trade between Member States. Obviously, the interpretation of such criterion is controversial as it may lead to a narrow view (only the NRA decisions having cross countries spill-over effects, international roaming being a case in point) or a broader view (all decisions that concern a service that may potentially be traded between countries, all

¹¹⁸³ Like the Report of the Australian Productivity Commission (2001) or the Report Sinclair (2006) for the government of Canada.

¹¹⁸⁴ I follow here some ideas proposed by Pierre Larouche at the Thinktel seminar of September 2006.

electronic communications services being potentially covered) and I would tend for a reasonably restrained economic interpretation.¹¹⁸⁵ Thus the mere fact that one NRA adopts a different approach than other NRAs is not sufficient *per se* to justify a Commission review, but it should also lead to an impediment to commerce between Member States. Compared with the current system, the power of the Commission will be more limited as the internal market condition¹¹⁸⁶ will be taken more seriously.

Second, the Commission should be able to review the four steps of the market analysis (market selection, delineation, SMP assessment, and choice of remedies). Compared to the current system, the Commission power would cover remedies. This is justified because the most important aspect of a regulatory decision is often the remedies imposed and some divergences have been observed today.

Third, the Commission should keep full discretion to take any case, but it should solely have the right to take a case when it has serious doubts as to compatibility with Community law and wants to open a Phase II investigation. Relatedly, all Commission decisions should be reviewable by the Community Courts. Compared to the current systems, the Commission should not be entitled any more to simply make comments. The Commission will surely see drawbacks in losing one soft means to build a European regulatory culture. However, the advantages of my proposal is that (1) there will not be any more Commission comments that are not reviewable by Community Courts (hence for which the Commission is not sufficiently accountable) and yet have an influence in the national proceedings, and (2) that will free time for the Commission to concentrate on the most serious cases.

Regarding the procedure, it should be simplified. First, the number of notified decisions should decrease if the internal market condition is assessed more strictly. Second, the Commission could adopt Guidelines on the controversial issues (like the treatment of Voice over IP or cable for market definition; the application of the modified greenfield approach and the treatment of captives sales for market power assessment; and the imposition asymmetric remedies to operators active in the same relevant market, the use of glide path for price control and the imposition of wholesale line rental for the choice of remedies) to ease the

¹¹⁸⁵ Case C-376/98 *Germany v European Parliament and Council of the European Union (Advertising and sponsorship of tobacco products)* [2000] ECR I-8419.

¹¹⁸⁶ Article 7(3) of the Framework Directive.

review process. Going further, the Commission may decide that if the NRAs follow the proposed approach by the Commission, their draft decisions should not be notified.¹¹⁸⁷

Commission proposals and assessment

The proposals of the Commission are analysed according to the competence of the Commission and then the procedure. Regarding the competence, the Commission maintains a broad view of harmonisation arguing that market players complain about the divergences in approach of the NRAs in different countries and points to the increased cost for business of handling 25 different regulatory approaches.¹¹⁸⁸ Therefore, it maintains a broad conception of the internal market condition and submits that NRAs draft decision would in most cases fulfil this condition.¹¹⁸⁹ Then, the Commission proposes to extend its veto power on the choice of remedies to secure the benefits of the internal market¹¹⁹⁰ as already tried during the Review 1999.¹¹⁹¹ The Commission does neither aim to replace the NRA nor to micro-manage the whole electronic communications sector from Brussels, but only to ensure common methodologies among regulators (like on cost orientation methodologies or the obligation to impose reciprocity of termination charges between incumbents and new entrants)¹¹⁹² and intervene in flagrant divergence of approaches.¹¹⁹³ The Commission proposes also to control ex-ante the measures NRAs may want to take under Article 5(1) of the Access Directive, i.e.

¹¹⁸⁷ This would be a generalisation of the Commission practice not to comment on some types of notifications and be similar to the block exemptions used in Article 81 EC and in State Aids control. Indeed, it is efficient to have an ex-ante control only if the cost for the Commission to force NRA to change decisions afterwards and the cost of regulatory errors are high: Barros (2004). Hogan & Hartson and Analysis (2006:154-155) propose a 'white list' of a priori non-problematic decisions that would be excluded from the Commission notification. A typical structure for such a "white list" NRA decision that would not require notification could include, for example, the following elements: (a) description of the relevant market concerned; (b) reference to certain basic features that would need to be present in the previous market analysis adopted by this NRA for that market (e.g., the incumbent found to have more than x% market share and SMP); (c) a detailed description of *ex ante* remedies whose maintenance would not require notification to the Commission, as long as the conditions referred to under (b) were still in place; the imposition of new remedies or the amendment of the existing ones would need to be notified separately to the Commission, but perhaps be subject to a simplified procedure.

¹¹⁸⁸ Impact assessment on the Review 2006, p. 19.

¹¹⁸⁹ Draft Explanatory Memorandum for the second Recommendation on relevant markets, p. 12.

¹¹⁹⁰ Proposed Changes for the Review 2006, p. 18. Hogan & Hartson and Analysis (2006:157-159) analyse the effects of a Commission veto on remedies? The pros are: pressure for more uniform remedies, thus encouraging pan-European or cross-border offerings. The cons are: more delay likely; the few occasional disagreement between the Commission and the NRAs have been more limited and less public, and have tended to focus on the need for more detail and clarifications rather than a substantive Commission objection to the proposed remedy; and a discretionary Commission veto against discretionary Member State measures, drawing its justification from vague policy objectives would be an unprecedented, and perhaps even legally questionable, EU measure.

¹¹⁹¹ Article 6(4) of the Proposed Framework Directive, OJ [2000] C 365E/198.

¹¹⁹² See Tables 3.1a and 3.4b.

¹¹⁹³ Those clarifications were given by Bernd Langeheine at the NHH Conference in Budapest in September 2006. The power of the Commission to veto an NRA decision on remedies may be limited in the same way as the power of the Commission to replace an NCA according to Article 11(6) of Regulation 1/2003: see para 54 of the Commission Cooperation Notice.

the measures imposed on operators controlling access to end-users to ensure end-to-end connectivity and measures imposed on API and EPG operators to ensure accessibility for end-users to digital specified broadcasting services.¹¹⁹⁴ Finally, the Commission does not propose that its decisions are reviewable by the Community Courts.

Regarding the procedures, the Commission aims to streamline market reviews. It proposes a simplified Article 7 review (like for the merger control)¹¹⁹⁵ in two cases: when the analysed markets were found competitive in the previous review unless substantial changes in competitive conditions have occurred, and when only minor changes to previously notified measures are proposed (such as the details of a remedy.)¹¹⁹⁶ The Commission also proposes to replace and extend the current procedural Recommendation¹¹⁹⁷ into a Commission Regulation as it is already the case for merger or State Aid control. Such Recommendation would set precise and legally binding timetable for initiating and completing market analyses,¹¹⁹⁸ require regulators to include in their notifications all the four aspects of the market review (market selection, market definition, SMP designation, and remedies), and oblige them to notify their re-assessment of market review when having faced a veto.¹¹⁹⁹

Thus, the proposal seems to be unbalanced for a political bargain, and worse, not appropriate. Indeed, the Commission tries to extend its power independently of the establishment of the internal market and seems reluctant to be under the judicial review of the Community Courts.

¹¹⁹⁴ Proposed Changes for the Review 2006, p. 20

¹¹⁹⁵ Commission Notice on a simplified procedure for treatment of certain concentrations under Council Regulation 139/2004, OJ [2005] C 56/32.

¹¹⁹⁶ However, this last proposal risks of encouraging conservatism of the regulators. See similarly, Hogan & Hartson and Analysys (2006:156).

¹¹⁹⁷ Commission Recommendation 2003/561 of 23 July 2003 on notifications, time limits and consultations provided for in Article 7 of 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, OJ [2003] L 190/13.

¹¹⁹⁸ Also suggested by Hogan & Hartson and Analysys (2006:147).

¹¹⁹⁹ Proposed Changes for the Review 2006, p. 16-17.

C4. European Regulatory Authority and European Regulators Group

Suggestions for improvements

The creation of a Euro-regulator is the hydra of the regulatory debate since the beginning of the liberalisation.¹²⁰⁰ The literature is divided and Ehlermann (2000:xlvi) summarises the debate of the Third Workshop on European Competition Law in 1998: “some participants were in favour of a Euro-regulator to assure a level playing field in the EU and give the EU telecommunications regime credibility at global level, whereas other participants were sceptical or even opposed to the ERA because of the already existing powers of the Commission, the progress in the implementation of the EU rules and the length of time that would be necessary to agree upon and to set up a new agency.”

Thus some authors¹²⁰¹ favour a Euro-regulator for several reasons: (1) it would internalise the cross-countries externalities created by regulatory decisions (these may be decisions of cross-border nature related to pan-European services, but more broadly, also decisions that affect the competitiveness of the market players thus impacting the conditions of competition in the internal market like the determination of the interconnection rates); (2) it would ensure economies of scale in regulatory decisions, which may be important in technically complicated or analysis-intensive regulatory fields such as network pricing; (3) it would remove the resolution of technical issues from political pressures, thereby securing policy consistency over time and would provide a substitute for inadequate NRA activities; and (4) it would lighten the workload of other EC institutions, which could in turn focus on their core strategic functions and it would clarify the competences (political and strategic duties to the Commission – technical tasks for the agencies), which in turn would contribute to a better understanding of the EC by its citizens.

Others¹²⁰² oppose the creation of a Euro-regulator because (1) it would lead to an additional administrative layer, (2) it is difficult to distinguish between national and Community issues, (3) it would be too distant from the market, (4) it is currently not justified as the market conditions in the Member States remain very different, and (5) it may be harmful in the future as it will be more difficult to dismantle once sector-specific regulation will not be justified any more.

¹²⁰⁰ This issue is equally discussed in other network industries, like electricity.

¹²⁰¹ Geradin and Petit (2004:61); Kiessling and Blondeel (1998:591); Melody (1999:20).

¹²⁰² Cave and Crowther (1996:737), Temple Lang (2006:44-46).

Similar divergences exist at the policy level. Back in 1994, the High Level Group on the Information Society chaired by the then Commissioner Bangemann favoured the creation a Euro-regulator with limited competencies.¹²⁰³ In 1997, an independent study for the Commission also favoured such ERA with competencies limited to management of scarce resources, and the resolution of access and interconnection disputes.¹²⁰⁴ However in 1999, another independent study found no support in the industry for such European Authority and concluded that its cost would probably outweigh its benefit.¹²⁰⁵ In 2006, the majority of operators are still opposed to a Euro-regulator,¹²⁰⁶ as well as the European Parliament as the political tide has moved against centralisation.¹²⁰⁷

However, it is difficult and not helpful to draw an overall assessment of a 'Euro-regulator'. Indeed, all pros and cons should be fined-tuned according to the variations that this authority may take regarding its forms or its competences. Regarding the forms, the Commission has identified several variations, from the most to the less centralised:¹²⁰⁸ (i) a central authority replacing the NRAs; (ii) a centrally-managed but geographically-dispersed authority, with the existing NRAs being subsumed into a European Regulatory authority, and in effect becoming the local offices of the European regulator (local offices might have some limited power for local decision-making, e.g. in areas such as rights of way); (iii) a 'European central bank' model, whereby the NRAs would remain as independent entities, but would be obliged to act in accordance with the guidelines and instructions issued by the European regulator; and (iv) a European regulator that act as an appeals body for decisions taken by national regulators, but without power to instruct an individual NRA in advance of a decision.

Regarding the competences, several variations are also possible from the broad to the most specific authority. More those competences are limited, more the Euro-regulator will be appropriate, legally possible and politically acceptable to the Member States. For instance, the Court of Justice held about ENISA, which advises the Commission on network security:¹²⁰⁹

¹²⁰³ Bangemann (1994:13).

¹²⁰⁴ NERA/Denton Hall (1997). See also Forrester, Norall and Sutton (1995).

¹²⁰⁵ Eurostrategies/Cullen International (1999). The study was based on surveys among stakeholders, a dubious methodology according to Geradin and Petit (2004:11).

¹²⁰⁶ Hogan & Hartson and Analysys (2006:91-93, 134)

¹²⁰⁷ Intervention of MEP Malcom Harbour at the NHH Conference in Budapest in September 2006.

¹²⁰⁸ Impact Assessment on the 2006 Review, p. 19-20.

¹²⁰⁹ Case C-217/04 *United Kingdom v European Parliament and Council (ENISA Regulation)* [2006] ECR I-0000.

61. (...) the Community legislature was confronted with an area in which technology is being implemented which is not only complex but also developing rapidly. It concluded from this that it was foreseeable that the transposition and application of the Framework Directive and the specific directives would lead to differences as between the Member States.

62. Accordingly, the Community legislature considered that the establishment of a Community body such as the Agency was an appropriate means of preventing the emergence of disparities likely to create obstacles to the smooth functioning of the internal market in the area.

63. It is stated in recitals 3 and 10 in the preamble to the [ENISA] regulation that the Community legislature considers that, as a result of the technical complexity of networks and information systems, the variety of products and services that are interconnected, and 'the huge number of private and public actors that bear their own responsibility', the smooth functioning of the internal market risks being undermined by a heterogeneous application of the technical requirements laid down in the Framework Directive and the specific directives.

64. In that context, the Community legislature was entitled to consider that the opinion of an independent authority providing technical advice at the request of the Commission and the Member States might facilitate the transposition of the directives at issue into the laws of the Member States and the implementation of those directives at national level.

Similarly, the case for an EU agency on spectrum, which has a clear cross-border nature (hence cross countries spill-over effects) is stronger than the case for a general EU regulator.

A way to achieve one variation of the Euro-regulator (for instance the Central bank model) would be to start from the existing European Regulators Group, and transform this cosy club of national regulators into a European institution. This route has some advantages as it would be less disruptive and more politically acceptable for the Member States. However, it has also some drawbacks as the NRAs, with their current structure, have no incentive to take into account the effects of their regulation in the other countries or even to align their policies on their European colleagues. Indeed, the functioning of the ERG today does not show a strong European culture. Thus, if the ERG would voluntary or under the pressure of the Commission and the industry evolves towards a European body, I would welcome such move. However, the current attitude of the ERG and the past fierce opposition of the national central banks to the creation of the ECB are not very encouraging.

Commission proposals and assessment

The Commission decided at this stage not to favour the creation a Euro-regulator with broad competences¹²¹⁰ because (1) it would entail transfer of powers over electronic communications regulation to a supra-national body and there would be a strong national resistance to the fact that a trans-national body is regulating domestic issues, and (2) a European regulator could in some cases represent another layer of regulation which would increase the overall administrative burden. Thus, the Commission concludes that the option of a European regulator may offer the best prospects for creating a truly single market in eCommunications, but until Europe had truly pan-European electronic services, it is unlikely that a pan-European regulator will be justified. The Commission does not even propose the creation of Euro-regulator with competence limited to spectrum issues because it goes beyond the scope of the present review, and changing the organisational structure of European spectrum management could require substantial time and resources, although the Commission recognised that such authority could achieve a high level of harmonisation, higher efficiency in the internal market and more streamlined decision-making and could adopt decisions speedily and, where pan-European authorisations are concerned, with consistent applicability.¹²¹¹

Surprisingly but perhaps only politically, Commissioner Reding (2006:7) is more open on this issue noting that:

The most effective way to achieve a real level playing field for telecom operators across the EU would of course be to create an independent European telecom regulator that would work together with national regulators in a system, similar to the European System of Central Banks. In such a system, national regulators would continue to act as direct contact points with operators and could directly analyse the market. At the same time, a light European agency,

¹²¹⁰ Impact Assessment on the 2006 Review, p. 21. In general, the Commission tests the impact of the creation of an EU agency against nine criteria: (a) the problem which must be resolved and the need which must be met in the short or long term; (b) the added value of Community action; (c) alternatives to the creation of a European regulatory agency, such as responsibility being taken by the Commission for the activities envisaged, extending the tasks of an existing agency, setting up an office or executive agency, and/or subcontracting individual tasks; (d) the objectives to be met at general, specific and operational levels and the indicators necessary for evaluating them; (e) any inadvertent repercussions and mutual concessions to be considered; (f) the tasks to be allocated; (g) any benefits in terms of expertise, visibility, transparency, flexibility and timeliness, coherence, credibility and effectiveness of public action; (h) the costs generated by control, coordination and the impact on human resources and other administrative expenditure; (i) the lessons learned from previous similar exercises; (j) the system of monitoring and periodic evaluation to be established: Commission: Point 7 of the draft inter-institutional agreement on the operating framework for European regulatory agencies, COM(2005) 59.

¹²¹¹ Impact Assessment on the 2006 Review, p. 18.

independent from the Commission and from national governments, could ensure by guidelines and, if necessary, instructions that EU rules are applied consistently in all Member States.

On the other hand, the Commission does not make any proposal regarding future of the ERG. This is regrettable given the important role played by the ERG so far, but understandable as the Commission sees the ERG as a competing institution to ensure a common regulatory culture. We will thus have to wait at the proposals that the ERG will make itself.¹²¹²

C5. Community Courts

Suggestions for improvements

Today, there is no problem as such with the role of the Community Courts in the regulation of electronic communications, other than the length of the procedure (around 2 to 3 years) which is inadequate in a fast moving sector. However, there is an insufficient coordination between the national Courts and the standard coordination way in European law, i.e. the preliminary ruling, is not appropriate in the electronic communications sector because the issues to be solved are technical and need rapid answers. Therefore, some are thinking to by-pass entirely the national courts and that the NRAs decisions should be directly reviewed by a European Court (being part of the Community Courts or not)¹²¹³. As seen, this solution will probably lead to insurmountable constitutional problems in the Member States. To me, a less radical and more acceptable solution would be the creation of a panel of independent experts advising the national judges.

Commission proposals and assessment

The Commission does not propose to change the Community judicial architecture for the electronic communications sector. It only assesses the possibility of an authority that would be the appeals body for the decisions taken by the national regulators as one (minimalist) form of European regulator, but rejects it as not appropriate and politically feasible.¹²¹⁴

¹²¹² This should be discussed at the next Plenary meeting of the ERG in October 2006.

¹²¹³ It may be established under Article 225A EC.

¹²¹⁴ Impact assessment on the Review 2006, p. 20-21.

4.2.3. Conclusion

To conclude, I think that the proposals of the Commission go in the right direction, but that its policy strategy is flawed. Most of the reforms that are necessary at this stage (and indeed that the Commission is proposing) could be done without modifying the directives but only by amending the Recommendation on relevant markets and adopting new soft law instruments (like on best practice in national procedures). Thus, I do not think that today it is worth to trigger the heavy and time-consuming co-decision machinery for the minor changes proposed. The Commission should have postponed the review for another two years as it has done in 2003 for the revision of the Television Without Frontiers Directive¹²¹⁵ and as it is proposing to do for the universal service in electronic communications.¹²¹⁶ Only then, all the stakeholders and the Commission will have sufficient experience with the current regulatory framework to see what needs to be amended. Moreover, in two years time, stakeholders would have a clearer idea on the direction and the path of some fundamental technological evolutions that are only emerging today (like convergence and quadruple play offer).

Regarding the short term proposals, the Commission should have better emancipated regulation from the 'big brother' competition law and focus the regulatory threshold on a clarified and revised economic three criteria test aimed at identifying the hard-core market that competition law is less efficient at policing that sector-specific regulation. It could also have clarified further the status of emerging market. Finally, it could have reduced the number of selected markets in the forthcoming Recommendation.

Regarding the longer term proposals, some more radical proposals could (later) be made along three directions. First, they should fully reflect the increasing technological convergence such that the relationship between the rules on electronic commerce, on media services¹²¹⁷ and the electronic commerce¹²¹⁸ should be better integrated. Second, a vision of

¹²¹⁵ Communication from the Commission of 15 December 2003 on the future of European regulatory audiovisual policy, COM(2003)784

¹²¹⁶ Commission Communication on the Review 2006, p. 10 where the Commission notes its intention to publish a Green Paper on universal service in 2007 to launch a wide ranging debate.

¹²¹⁷ Directive 89/552 of the Council of 3 October 1989 on the coordination of certain provisions laid down by Law, Regulation or Administrative Action in Member States concerning the pursuit of television broadcasting activities (Directive Television Without Frontiers), OJ [1989] L 298/23, as amended by Directive 97/36. This Directive is currently under review: Proposal from the Commission of 13 December 2005 for a Directive amending the Directive 89/552, COM(2005) 646 (which will then be called the Audiovisual Media Services Directive).

the role of the State in the sector, and in particular a road for economic deregulation, should be included in the law. Third, a procedural second-generation harmonisation should follow the substantive first-generation harmonisation. Clearly, given the different legal traditions of the Member States and the weaker legal basis for the Community institutions to intervene in procedural matters, such second-generation harmonisation will always be less pervasive than the substantive harmonisation. The road will long and difficult, but the Commission should start this journey one day.

¹²¹⁸ Directive 2000/31 of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce'), OJ [2000] L 178/1.

CHAPTER 5: CONCLUSION

To conclude, I summarise the main points of this dissertation. I studied the relationship between European competition law and sector-specific regulation in the electronic communications sector and I tried to answer two questions. The first question is substantive and asks what criteria should be used to determine the scope of a sector-specific regulation that applies in addition to antitrust law, and relatedly whether a sector-specific regulation should use the same methodologies than antitrust law. The second question is institutional and asks whether the substantive (or first-generation) harmonisation in Community law should be followed by an institutional (or second-generation) harmonisation.

To do so, I described in Chapter 2 the application of European competition law in the electronic communications sector. After a brief preliminary section, I studied, from a substantive perspective, both branches of antitrust rules: the *ex-post* control of anti-competitive behaviours (agreements, concerted practices or individual abuses of dominance) and the *ex-ante* control of concentrations and showed how the current review of Article 82 approach and the recent reform of the Merger regulation has moved competition closer to the economic reasoning. I described also how those instruments have been applied in the sector and showed that the Commission (and the national competition authorities) have been more interventionist in this liberalised and network industry than in other sectors of the economy. Thus, competition law has evolved towards a regulatory antitrust. Then, I analysed the institutional design and showed how the recent decentralisation of competition law has enhanced the role of national competition authorities and national courts, and more generally the whole competition law. I showed also how the Commission used its antitrust powers to support its liberalisation program, and to some extent, control the national regulatory authorities.

In Chapter 3, I turned to the other main economic policy instruments to intervene in the electronic communications, the sector-specific regulation. I described the objectives and the regulatory principles of the recently reformed 2003 European regulatory framework. I detailed the four steps of the Significant Market Power regime, which is the main threshold to impose obligations. These four steps are (1) the selection of markets susceptible of regulatory

intervention in addition to competition law, which is done on the basis of three cumulative criteria (high and non-transitory entry barriers, no competition dynamics behind the barriers, and insufficiency of antitrust remedies to solve the problem); (2) the delineation of the market on the basis of the antitrust economic Hypothetical Monopolist Test; (3) the assessment of Significant Market Power, which corresponds to an adapted prospective dominance test; and (4) the choice of appropriate and proportionate (principally behavioural) remedies to be imposed on operators with SMP. I studied how this regime has been applied in practice so far and showed that many retail and wholesale markets are still heavily regulated in the sector and that liberalisation has really led to more regulation. Then I studied the institutional design and showed how the 2003 rules have dramatically increased the power of the national regulatory authorities to enable them to rapidly adapt to dynamic market evolution. Finally, I tried a first assessment of the implementation of the 2003 rules and concluded that if some good governance principles that were aimed for have been achieved (transparency, flexibility), others have not (proportionality, legal certainty, and to some extent harmonisation). I suggested reasons of such relative failure: absence of clear objectives in the rules and alignment on competition law methodologies leading to confusion and lack of focus of the regulatory authorities, as well as bad institutional design and lack of checks and balances to control the national regulatory authorities and ensure that *le pouvoir arête le pouvoir*. I concluded that transforming sector-specific regulation into a preventive competitive law has many drawbacks.

Finally in Chapter 4, I compared both legal instruments (competition law and sector-specific regulation). I tried to find ways for an optimal balance between both substantive rules. To do so, I submitted that the main difference between competition law and sector-specific regulation is that the former has a higher burden of proof to intervene than the latter, and I linked this issue of burden of proof with the risk and the cost of type I errors (i.e. false condemnation) and type II error (i.e. false acquittal). Thus, I submitted that sector-specific regulation should be limited to market segments where the risk of type I errors is low and the risk of type II errors is high, which means in the sector, where there are characteristics of natural monopoly and strong network effects combined with additional elements. I also tried to find ways to ensure an optimal coordination between the institutions in charge. I submitted there is no optimal model for all countries, but that all should provide for appropriate cooperation mechanisms between institutions in case of overlapping jurisdiction and for a single court hearing appeal of all authorities. On such basis, I reviewed the Commission

preliminary proposals for the 2006 Review of the current rules. Regarding the short terms proposals of the Commission (i.e. applicable in 2007) related to Commission legal instruments only, I submitted that they go in the right direction but not far enough: (1) the Commission should have take this opportunity to send a strong de-regulatory signal (by removing more markets of the Recommendation listing relevant markets susceptible to ex-ante regulation) in a sector where regulation has constantly increased since the liberalisation; (2) it should have clarified further the status of the emerging markets and the commitments devices that the regulatory actors should rely upon to protect investment; (3) and it should have proposed a Recommendation on best procedural practices in the Member States. Regarding the long terms proposals of the Commission (i.e. applicable in 2010 at the earliest) related to Council and European Parliament legal instruments, I submitted that they are premature (hence too minimalist) and do not justify to kick off the heavy and time consuming co-decision machinery.

Thus, to answer my first question, I think the scope of sector-specific regulation that applies in addition to antitrust should be limited to market segments where the risk of type I errors is low and the risk of type II errors is high, which implies an alternative regulatory threshold in the sector: on the one hand natural monopoly test and on the other hand network effects-plus test. Relatedly, I do not think that a hybridisation of sector-specific regulation with competition law methodologies is recommended because it creates confusion, lack of regulatory focus and risk of unjustified extension of the competition principles. To answer the second question, I think that substantive harmonisation should be followed by some sort of institutional harmonisation. Indeed, both types of rules are closely linked together and it makes little sense to harmonise the former without working on the latter.



GLOSSARY OF TERMS

Telecommunications Terms

Access: The making available of facilities and/or services, to another undertaking, under defined conditions, on either an exclusive or non-exclusive basis, for the purpose of providing electronic communications services. It covers inter alia: access to network elements and associated facilities, which may involve the connection of equipment, by fixed and non-fixed means (in particular this include access to the local loop and to facilities and services necessary to provide services over the local loop), access to physical infrastructure including buildings, ducts and masts; access to relevant software systems including operational support systems, access to number translation or systems offering equivalent functionality, access to fixed and mobile networks, in particular for roaming, access to conditional access systems for digital television services; access to virtual network services (*Access Directive, Art. 2a*).

Application Programme Interface (API): The software interfaces between applications, made available by broadcasters or services providers, and the resources in the enhanced digital television equipment for digital television and radio services (*Framework Directive, Art. 2p*).

Associated facilities: Means those facilities associated with an electronic communications network and/or an electronic communications service which enable and/or support the provision of services via that network and/or service. It includes conditional access systems and electronic programme guides (*Framework Directive, Article 2e*).

Base Station: Radio transmitter/receiver and antenna used in the mobile cellular network. It maintains communications with cellular telephones within a given cell and transfers mobile traffic to other base stations and the fixed network (*Intven, 2000:Glossary*).

Bill and Keep: Interconnection arrangement where no charges are payable between interconnecting operators for termination each other's traffic. Synonymous for Sender Keep All (*Intven, 2000:Glossary*).

Bitstream Access: High-speed bit-stream access refers to the situation where the incumbent installs a high speed access link to the customers premises (e.g. by installing its preferred ADSL equipment and configuration in its local access network) and then makes this access link available to third parties, to enable them to provide high-speed services to customers. The incumbent may also provide transmission services to its competitors, to carry traffic to a higher level in the network hierarchy where new entrants may already have a point of presence (e.g. a transit switch location) (*Recommendation from the Commission of 26 April 2000 on Unbundled access to the local loop, OJ [2000] C 272/55, para 2.3*).

Carrier selection: refers to the possibility for an end-user to rely on another operator to offer telephone services than the operator that provide the line connection, by dialling a short code of number. In case of pre-selection, the short code is registered in the end-user terminal who should then not dial the code.

Conditional Access System (CAS): Any technical measure and/or arrangements whereby access to a protected radio or television broadcasting service in intelligible form is made conditional upon subscription or other form of prior individual authorisation (*Framework Directive, Art. 2f*).

Circuit Switched Connection: A temporary connection that is established on request between tow or more terminals in order to allow the exclusive use of that connection until it is released (*Intven, 2000:Glossary*).

Dedicated Lines: Telecommunications lines dedicated or reserved for use by particular users along predetermined routes. They interconnect a switching system to a dedicated customer and may be connected to a specific telephone (*Intven, 2000:Glossary*).

Electronic Communications Network: Transmission systems and, where applicable, switching or routing equipment and other resources which permit the conveyance of signal by wire, by radio, by optical and by other electronic means, including satellite networks, fixed (circuit and packet-switched, including Internet) and mobile terrestrial networks, electricity cable systems, to the extent that they are used for the purpose of transmitting

signals, networks used for radio and television broadcasting, and cable television, irrespective of the type of information conveyed (*Framework Directive, Art. 2a*).

Electronic Communications Service: Service normally provided for remuneration which consists wholly or mainly in the conveyance of signals on electronic communications networks, including telecommunications services and transmission services in networks used for broadcasting, but exclude service, or exercising editorial content over, content transmitted using electronic communications networks and services; it does not include information society services which do not consist wholly or mainly in the conveyance of signals on electronic communications networks (*Framework Directive, Art. 2c*).

Half-Circuit: Component of an international circuit between two countries that originates in one country and terminates at a theoretical midpoint between the countries (*Intven, 2000:Glossary*).

Interconnection: Physical and logical lining of public communications networks used by the same or a different undertaking in order to allow the users of one undertaking to communicate with the users of the same or another undertaking. Services may be provided by the parties involved or other parties who have access to the network. Interconnection is a specific type of access implemented between public network operators (*Access Directive, Art. 2b*).

Local Loop: Physical circuit connecting the network termination point at the subscriber's premises to the Main Distribution Frame (MDF) or equivalent facility in the fixed public network (*Access Directive, Art. 2e*).

Leased Line: A point-to-point communication channel or circuit that is committed by the network operator to the exclusive use of an individual subscriber (*Intven, 2000:Glossary*).

Main Distribution Frame (MDF): Apparatus in the local concentrator (exchange) building where the copper cables terminate and cross connection to other apparatus can be made by flexible jumpers (*Ofiel Glossary*).

Naked DSL: Situation where DSL service can be provided to an end-user by an alternative operator using shared access or wholesale bitstream access without a requirement from the incumbent that the end-user has (and retains) a PSTN voice telephony subscription over the same loop (*Cullen International*).

New Generation Network (NGN): A packet based architecture fostering the provisioning of existing and new/emerging services through a loosely coupled, open and converged communications infrastructures (*International Telecommunications Union*).

Number Portability: Ability of a customer to transfer its service account from one operator to another without requiring a change its customer's number (*Intven, 2000:Glossary*).

Packet Switching: Data telecommunications technique in which information is grouped into packets for ease of handling, routing, supervising and controlling on telecommunications networks. Packets are sent to their destination by the fastest route. The transmission channel is occupied only while the packets is being transmitted and the channel is then available to transfer for other packets between other data terminal equipment. Individual packets may reach the destination by different routes and in the wrong order. The destination ode is responsible for reassembling the packets into the proper sequence. Packet switching is used in most data network, including those that use the older X.25 protocol, and the Internet which uses TCP/IP Protocols (*Intven, 2000:Glossary*).

Peering: Exchange of routing announcement between two Internet Services Providers for the purpose of ensuring that traffic from the first can reach customer of the second and vice-versa. Peering takes place predominantly at Internet Exchange Point and usually is offered either without charge or subject to mutually agreed commercial arrangement (*Intven, 2000:Glossary*).

Public Switched Telephone Network (PSTN): Infrastructure of physical switching and transmission facilities that is used to provide the majority of telephone and other telecommunications services (*Intven, 2000:Glossary*).

Roaming: Service allowing cellular subscriber to use handsets on network of other operators (*Intven, 2000:Glossary*).

Router: Specialised computers that receive transmissions of packets and compare their destination addresses to internal routing tables and, depending on routing policy, send the packets out to the appropriate interface. This process may be repeated many times until the packets reach their intended destination (*Intven, 2000:Glossary*).

Switch: Telecommunications equipment that established and routes communications paths between different lines, trunks or other circuits. Switches establish circuits or paths between different end users or between other devices attached to telecommunications networks (*Intven, 2000:Glossary*).

Universal Mobile Telecommunications Systems (UMTS): European third-generation mobile standard ETSI has agreed on which draws upon both W-CDMA and TDMA-CDMA proposals (*Intven, 2000:Glossary*).

Voice over Internet Protocol (VoIP): Generic name for the transport of voice traffic using Internet Protocol (IP) technology. The VoIP can be carried on a private managed network or the public Internet or a combination of both. Some organisations use the term 'IP telephony' interchangeably with 'VoIP' (*Ofel Glossary*).

Wireless Local Loop (WLL): Technique using radio technology to provide the connection from the telephone exchange to the subscriber (*Intven, 2000:Glossary*).

Wholesale line rental (WLR): The incumbent operator rents its subscriber lines on a wholesale basis to alternative operators that would then 'resell' the subscriber line to the end user. In conjunction with carrier pre-selection ('all calls' option), WLR enables alternative operators to end the billing relationship between the incumbent and the end user (*Cullen International*).

Economic Terms

Cost-Average: Specified cost divided by the quantity of output (*Intven, 2000:Glossary*).

Costs Fixed: Cost that does not vary by volume of production. A specific type of fixed cost is sunk costs, costs that cannot be changed or avoided even by ceasing production entirely. For instance, head office space is a fixed cost, but the labour component of the installation of the copper wire in the local loop is a sunk cost. Neither fixed nor sunk costs enter into marginal-cost pricing decisions because neither varies with output (*Intven, 2000:Glossary*).

FDC-Fully Distributed Cost: This approach is usually based on an allocation of historical accounting of costs to various broad services categories. After assigning direct costs to each category, the joint and common costs are allocated to applicable service categories based on formulas that reflect relative usage or other factors (*Intven, 2000:Glossary*).

Incremental cost: Equals total cost assuming the increment is produced, minus total cost assuming total cost is not produced. Because of wide variety of increments can be specified, incremental cost can conceptually range all the way from total cost per unit (entire output as the increment) to marginal cost (one unit as the increment). The size of the increment used in any specific cost analysis will be a matter of judgement. The most common practice is to use the entire service or element as the increment, in which case the service or element specific fixed cost of the service would be included in the increment (*Intven, 2000:Glossary*).

Joint Cost: Specific kind of common cost incurred when a production process yields two or more outputs in fixed proportion. Joint costs vary in proportion to the total output of the joint production process, not to the output of the individual joint products (*Intven, 2000:Glossary*).

LRIC-Long Run Incremental Cost: Costs caused by the provision of a defined increment of output, taking a long run perspective, assuming that some output is already produced. The 'long run' means the time horizon over which all costs (including capital investment) are variable (*Ofel Glossary*).

Marginal Cost: Change in total cost resulting from a very small change in the volume of output produced. Due to the number of practical issues, including the lumpiness of capital increments (i.e. the inability of telecommunications plant to be divided into very small parts, or scaled to provide an exact fit with the actual requirement of the network), marginal cost is difficult to estimate. Accordingly, most estimates of marginal cost are based on incremental cost (*Intven, 2000:Glossary*).

SAC-Stand Alone Cost: Total cost to provide a particular product or service in a separate production process, i.e. without benefit of scope economies (*Intven, 2000:Glossary*).

Barriers to entry: Factors that make entry impossible or unprofitable while permitting established undertakings to charge prices above the competitive level (*DP exclusionary abuses, para 38*).

Economies of scale: Overall increasing (decreasing) returns to scale if a proportionate increase in all outputs results in a less (more) than proportionate increase in total costs (*Fuss and Waverman, 2002:153*).

Economies of scope: A firm which produce both toll and local services is said to enjoy economies of scope if it can produce these services at lower cost than would occur if each service were produced separately by a stand-alone firm (*Fuss and Waverman, 2002:153*).

ECPR-Efficient Component Pricing Rule: Access charges is equal to the cost of providing access *plus* the incumbent's lost profit in the retail markets caused by providing access. Alternatively, access charges is equal to the incumbent's retail price *minus* incumbent's cost in the retail activity (*Armstrong, 2002:311*).

Foreclosure: Dominant firm's denial of proper access to an essential good it produces, with the intent of extending monopoly power from that segment of the market -the bottleneck segment- to an adjacent segment -the potentially competitive segment- (*Rey and Tirole, 2003:1*).

Natural monopoly: One firm can provide all amounts of service at a lower cost than could two or more firms. Formally, production cost must be sub-additive at each level of output within relevant range (*Woroch, 2002:671*).

Network Effect: Change in the benefit, or surplus, that an agent derives from a good when the number of other agents consuming the same kind of good changes (*Liebowitz and Margolis, 2002:77*).

Predation: involves a short-run cost or investment in order to achieve a longer term gain by inducing the exit or deterring the entry of rivals (*Tirole, 1988*)

Predatory pricing: Practice where a dominant company lowers its price and thereby deliberately incurs losses or foregoes profits in the short run so as to enable it to eliminate or discipline one or more rivals or to prevent entry by one or more potential rivals thereby hindering the maintenance or the degree of competition still existing in the market or the growth of that competition (*DP exclusionary abuses, para 93*).

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