

ENSURING EFFICIENT ACCESS TO BOTTLENECK NETWORK FACILITIES. THE CASE OF TELECOMMUNICATIONS IN THE EUROPEAN UNION

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I. INTRODUCTION¹

Access to bottleneck facilities has become a theme of central interest not only for the future evolution and interpretation of EU Competition Law but also for market and economic development in a much broader framework - in the European Union, as in the United States and elsewhere. With the current economic transformation and the growing importance of the "networked" sectors, a number of similar situations² have emerged across these sectors which show common characteristics and are leading to the development of sector specific regulatory regimes, but also to a more sophisticated interpretation of general Competition Law.

Nevertheless, one may safely assume that the issue of access to bottleneck network facilities in the European Union has so far been most clearly developed in the telecommunications sector, in the context of the full liberalisation of the sector since 1st January 1998.

A comprehensive framework of sector specific regulation is now developing, both at Member State level as well as at EU level (the EU ONP framework). In parallel, it is the sector where the European Commission has developed to date the most consistent position concerning the application of EU Competition Law to bottleneck access, with the adoption of the "Access Notice"³.

¹ The statements put forward in this paper are the author's sole responsibility and do not represent positions by the European Commission.

² Reference is made to the developments in the European Union concerning sectors such as air transport, rail transport, electricity, gas, posts, and certain financial services

³ Notice on the application of the competition rules to access agreements in the telecommunications sector (OJ C 265, 22.8.1998, p. 2), hereafter referred as the *Access Notice*

Besides showing the characteristics of a traditional utility sector and therefore showing certain similarities with other such sectors, the situation in the telecoms sector allows to work out the most critical issues perhaps most clearly, mainly due to two characteristics:

- ✓ *Firstly*, apart from the air transport sector, the telecoms sector is the only one of these sectors where full liberalisation has been implemented in the EU to date, and this was achieved within a very short time period.

This has resulted in the setting-up of a comprehensive scheme of sector-specific access regulation, and at the same time has led to a number of lead cases in the application of Competition Rules to such situations, both of which allow the discussion of the main issues in concrete terms ;

- ✓ *Secondly*, the sector is characterised by a rate of innovation, which is amongst the highest experienced in history, and it is faced with the phenomenon of convergence with major neighbouring sectors. This means that the sector requires the application of new tests to the robustness of the methods employed for securing access to bottleneck facilities which may turn out to be fundamental for the measurement of the impact of such measures on economic structures and markets for the future.

As will be set out in this paper, it is proposed to apply three critical tests to the regimes used in the sector for ensuring access to bottleneck facilities :

- ✓ Test 1 : achievement of efficient access in a relatively stable market environment;
- ✓ Test 2 : suitability in a situation of convergence, i.e. inherently unstable market definitions ;
- ✓ Test 3 : suitability of a regime in a market characterised by the requirement to develop innovative ways of access which may even still not exist, but may be required by markets with a high innovation rate.

The discussion in this paper requires substantial simplification. The paper therefore will set out the framework, and then concentrate on a few, but critical, case situations.

II BACKGROUND

The further analysis requires a short reminder of the development of the regime now governing the development of the telecommunications sector in the EU.

The recent history and development of telecom markets and regulation in the European Union are extensively covered elsewhere⁴. Suffice it to explain how the main trends of development have led to the basic framework which now determines access to bottleneck situations in the sector in the EU : a dual regime based on sector specific regulation and the application of EC Competition Rules.

EC telecommunications liberalisation developed mainly as a consequence of three factors. Firstly, by the end of the eighties, the growing digitisation of European telecommunications networks began to transform telecommunications networks into multipurpose information infrastructures. The opportunities offered by telecommunications networks and services started to extend into markets substantially beyond the traditional telephone service, particularly the so-called "value-added-services" - the precursors of today's Internet services and ISPs⁵. As a result, the access to the traditional monopoly networks in the telecommunications sectors became a major issue in all EU Member States, and there was a growing conviction that without a loosening of monopoly rights - and a consequential definition of access conditions -, it could neither be assured that new markets could develop, nor that the new services offered could be made available to consumers. Secondly, in *British Telecommunications*⁶, the European Court of Justice confirmed that EU Competition Rules applied to the telecommunications sector. Third , the impact of developments in the United States, in particular the AT&T divestiture consent decree and the resulting transformation of the US market began to be felt in Europe. At the same time the progressive

⁴ See for example : Herbert Ungerer, *EC Competition Law In The Telecommunications, Media And Information Technology Sectors*, International Antitrust Law&Policy, Fordham University School of Law, 1995 Fordham Corp. L. Inst. 000 (B. Hawk ed. 1996)

⁵ ISPs : Internet Service Providers

deregulation of the telecommunications sector and the privatisation of British Telecom in the United Kingdom since 1982 made Europe more receptive to the concept of market deregulation.

The combination of these factors led the Commission to issue, in 1987, its Telecommunications Green Paper which set forth a comprehensive policy framework for EU action in the telecommunications sector.⁷ The Green Paper envisaged a number of changes in EU telecommunications :

- ✓ Full liberalisation of markets and progressive introduction of competition for services⁸ , in order to allow rapid opening for value-added-services ;
- ✓ the separation of regulation and operations⁹, a pre-requisite for the development of an open market but also the base for the development of a sector specific regulatory regime ; and
- ✓ most notably in the context of this debate, already at the time of the Green Paper, definition of harmonised access conditions (the Open Network Provision" or "ONP" concept)¹⁰

An EU Telecom Review led by 1993 to an agreement on the full liberalisation of the EU telecommunications market by 1st January 1998¹¹, including the remaining public voice telephony and telecommunications network infrastructure / facilities monopolies.

⁶ Commission Decision N° 82/861/EEC, OJL 41/83(1985), [1983] 1 CMLR 457 (British Telecommunications). The issue was presented on appeal in Italy v. Commission, Case C-41/83 [1985] E.C.R. 873, [1985] 2 C.M.L.R. 382.

⁷ Green Paper on the Development of the common Market for Telecommunications Services and Equipment COM(87)290, 30. 6. 1987.

For a detailed review of the process leading up to the Green Paper and its policy options, see Herbert Ungerer, Telecommunications in Europe, The European Perspectives Series, Brussels - Luxembourg 1990. CM-59-90-346-EN-C.

⁸ At that time still with the exception of public voice telephony, and public network infrastructure

⁹ This progressively led to profound organisational reform in all Member States, resulting, in the first stage, in a transformation of telecommunications monopolies (the traditional PTTs, now referred to as "TOs" for Telecommunications Organisation) into normal companies, and in the second stage, in privatisation, now undertaken, to various degrees, in all Member States, with the exception of Sweden and Luxembourg.

Besides the privatisation of BT, the privatisation of Deutsche Telekom (DT), France Telecom (FT) and Telecom Italia were among the largest transactions ever to take place on the European stock markets. Telecom stocks are now leading stocks in all major European stock indices. Most recent offerings were the Swisscom and Sonera (Finland) transactions.

¹⁰ Formalised by the adoption of the *ONP Framework Directive* . Council Directive 90/387/EEC , O.J. L 192/1, 28.6.1990

The Review led, inter alia, to an agreement by the EC Council to adjust the ONP framework to fully liberalised market conditions and to establish a regulatory framework for interconnection and access to services and networks¹².

Without going into further detail, two comments should be made :

- ✓ *First*, the development of the telecommunications policy framework was, from the start, based on a sector specific policy approach, the Green Papers published by the European Commission, setting forth the proposed overall concept and leading to broad consultations and the subsequent adoption of the basic principles, such as on liberalisation, market opening and universal service, by successive resolutions of the EU Council of Ministers (the Member States) and the European Parliament. These resolutions also established the framework for the general competitive conditions sought¹³ ;
- ✓ *Second*, in the course of implementing the telecommunications policy concept, the application of EU competition law was of primary importance since its very beginning¹⁴. Access and its relationship to Competition Law figured centrally on the sector agenda as early as *British Telecommunications*, often called a legal cornerstone of the EU telecommunications framework. Already in *British Telecommunications* the Court hinted at a number of main issues in access which were only fully worked

¹¹ Formalised by the adoption of *Full Competition Directive*, Commission Directive 96/19/EC, 13.3.1996, full competition in telecommunications markets, O.J. L 74, p. 13

¹² This was implemented by the adoption of the *ONP Interconnection Directive*, Directive 97/33/EC of the European Parliament and of the Council of 10.4.1997 on interconnection in Telecommunications with regard to ensuring universal service and interoperability through application of the principles of open network provision (ONP) , O.J. L 199, 26.7.1997, p.32.

It should also be mentioned that the *Full Competition Directive* set general requirements for interconnection and interconnection offerings by the incumbents.

¹³ The telecommunications sector was, with the exception of the television sector, the first sector in which this method of proposing comprehensive policy blueprints, i.e. Green Papers, and broad sector consultation was extensively used. Subsequent to the problems encountered by the European Community during the ratification of the Maastricht Treaty, the Commission emphasised transparency in policy formulation and broad consultation. The method is now widely employed in all areas of EU policy.

¹⁴ In December 1989, a basic policy compromise defined the respective role of measures based on EU competition law (Art 90, associated with application of Art 85 and 86, as well as other Treaty Articles), and harmonisation through internal market legislation based on Article 100a of the EC Treaty. The compromise reached between the Commission and the Member States on the occasion of the adoption of the *Telecommunications Services Directive* and the *ONP framework Directive* established the principle of a complementary role of liberalisation under Article 90, EU Competition Law, and harmonisation under Article 100a.

The *Full Competition Directive* is based on Article 90 and the associated Competition Law principles. The *ONP Interconnection Directive* is based on Article 100(a), internal market legislation. See supra.

out during the last two years.

The Court confirmed the requirement to give access to a "value-added" service provider¹⁵. The Court implied that it would have been in BT's interest to allow the operation of the services offered by private message-forwarding agencies which accessed its network because it would have attracted international telex traffic onto BT's network. The Court specifically addressed the issue that development of new technologies in this context was in the public interest.

It should therefore be noted that as early back as *British Telecommunications* three elements emerged which are also prevalent in the current debate on access :

✓ the key role of access to the network of the incumbent ;

✓ the issue of non-discriminatory access ;

and

✓ the issue of the development of new technology markets / new services.

15 The case concerned the activities of certain private messaging forwarding agencies via the BT network at the time (1982). In its Decision, the Commission found that British Telecom (at that time still in a monopoly position and in public ownership) had abused its dominant position in the telecommunications systems market by taking measures to prevent certain private messaging agencies from offering a given type of service. The service permitted telex messages to be received and forwarded on behalf of third parties at prices lower than those charged by BT for its international telex service.

It should be mentioned that one of the main issues in that case was how far Article 90(2) of the EU Treaty could be applied to exempt BT's abuse of its dominant position on the telecommunications system market by preventing access and the forwarding of the messages in question.

First, the Court made clear that it was for the Commission to decide (subject to review by the Court) on any derogation to be granted from the application of the Competition rules on the basis of Article 90(2). Art 90 (2) stipulates that "undertakings entrusted with the operation of services of general economic interestshall be subject to the rules contained in this Treaty, in particular to the rules on competition, in so far as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them . The development of trade must not be affected to such an extent as would be contrary to the interests of the Community (emphasis added).

Second, the Court made it clear that it would favour a narrow interpretation of the scope of a derogation under Article 90(2) from obligations under competition law, in particular taking into account possible resulting delays in the development of new technologies .

As value added services were progressively liberalised in Europe, access to bottleneck network facilities started to become a recurrent theme and a central issue in the telecommunications, media, and information technology markets.

Competition Law cases emerged first in the context of agreements and co-operations of companies, in the context of notifications under Article 85¹⁶.

The *Infonet* case, an early case right after the start of liberalisation, may stand as an example for this case line¹⁷.

In *Infonet*, the Commission required, inter alia, undertakings from the parties relating to non-discrimination, "to eliminate the risk that [Infonet] is granted more favourable treatment in relation to access and use of the public telecommunications network or reserved services [than other service suppliers] ."

Infonet inaugurated a line of a number of cases of similar nature¹⁸. The issue of access and interconnection acquired a key role in the big alliances cases which started to dominate attention in the application of EU competition law (and more generally at the global level in antitrust) since the mid-nineties, as a prelude to full liberalisation of telecoms in the EU with the *Full Competition Directive* of 1996, in the United States with the adoption of the 1996 Telecom Act, and, at the global level, with the WTO agreement on basic telecom services of 1997.

¹⁶ Art 85, EC Competition Rules concerns "agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market. Notifications and other basic procedures are governed by Council Regulation No 17 of 6.2.1962, First Regulation implementing Articles 85 and 86 of the Treaty (OJ 13, 21.2.1962, p.204), generally referred to as *Regulation 17*

¹⁷ See *Infonet*, OJ C 7/3 (1992). Infonet's data communications services, the largest part of its business, were operated on the basis of an international packet-switched network, constructed with lines leased from the telecommunications organisations and other operators, and nodes belonging to Infonet. At the time, a number of its shareholders had exclusive or special rights for the leasing of lines to telecommunications services suppliers.

Replace monopoly rights with dominant position and international leased lines with Internet backbone, and the reader may find certain similarities with current situations emerging in the Internet context. In fact, the liberalisation of value added services in the start up phase of EU telecom liberalisation in the early nineties was the very basis for the introduction of the Internet in Europe, the first link-ups with the US Internet backbone and the appearance of the first private ISPs (Internet Service Providers) in Europe by that time.

Major examples are the *GlobalOne* and the *Unisource / Uniworld* cases and more recently

*Worldcom / MCI*¹⁹. While these are a topic of Panel II and reference is made to the paper by Alexander Schaub, two aspects should be emphasised :

- ✓ *Firstly*, with EU full liberalisation , and the emerging sector specific EU framework, the definition of access and interconnection within the ONP framework acquired more and more importance. This was refined particularly with the adoption of the ONP Interconnection Directive 1997.
- ✓ At the same time, originally due to developments in other sectors, the access to bottleneck facilities concept started to be defined more explicitly as an *essential facilities concept* in the context of EU competition law, in particular under Article 86. The concept found its current most explicit formulation in the *Access Notice*, which drew the conclusions from a broad range of Commission decisions on access to bottlenecks under Competition Rules, and Court Rulings in this context.

III.EU ONP REGULATION AND ACCESS NOTICE - SECTOR SPECIFIC REGULATION AND EC COMPETITION LAW

The current framework for access in the telecommunications field in Europe is therefore set by the EU's *ONP Directives* and their transposition into national laws ²⁰ which provide now the legal basis in the

¹⁸ It should also be noted that the Commission published in 1991 *Guidelines on the application of Competition Rules in the Telecommunications sector*, outlining potential case situations. (OJC 233, 6.9.1991, p. 2).

¹⁹ Commission Decisions 96/546/EC and 96/547/EC of 17.7.1996, *Atlas and Phoenix* (OJ L 239, 19.9.1996, p.23 and p. 57), now referred to as *GlobalOne*
Press Release IP/96/651, 17/7/1996 ;
Commission Decision 97/780/EC of 29.8.1997, *Unisource* (OJ L 318, 20.11.1997, p.1)
Press Release IP/97/932, 30/10/1997.

²⁰ Reference must also be made to the general framework set by the *Full Competition Directive*.

All Member States have by now set up the sector specific regimes required by the Directives and established sector specific regulators (the National Regulatory Authorities, referred to generally as the *NRAs*). It should be noted that a certain Member States had established sector specific regimes well before the issuing of the Directives, and established well-experienced sector regulators, such as OFTEL in the United Kingdom.

Concerning implementation of the framework by Member States see Fourth Report on the Implementation of the Telecommunications Regulatory Package, Communication from the Commission, COM(1998)594, 25/11/1998.

EU for sector specific regulation of access, and by the *Access Notice* which provides the Commission's interpretation of general EU Competition Law as it applies to access issues.

Before turning to the description of the framework and testing it against the criteria defined, it is worthwhile to have a short look at the relationship of the working of sector-specific regulation under the ONP framework and general Competition Rules - even if there is some danger of overlapping with Panel III. This relationship is defined to substantial detail in the *Access Notice*.

The *Notice* states that a party concerned with access to a telecommunications network or another critical bottleneck network resource in the European Union, faces essentially two main choices, namely :

- ✓ Specific national regulatory procedures now established in accordance with Community Law and harmonised under Open Network Provision
- and
- ✓ An action under national and/or Community Law, in particular Competition Rules, before the Commission, a national court or a national competition authority.

In the *Notice*, the Commission recognises that Community Competition rules are not sufficient to remedy all of the various problems in the telecommunications sector. The (sector-specific) *NRAs* therefore have a significantly wider ambit and a significant and far-reaching role in the regulation of the sector.

The ONP Directives impose on TOs (Telecommunications Operators) having Significant Market Power²¹ certain obligations of transparency and non-discrimination that go beyond those that would normally apply under Article 86 of the Treaty. ONP Directives lay down obligations relating to transparency, obligations to supply and pricing practices . These obligations are enforced by the *NRAs*, which also have jurisdiction to take steps to ensure effective competition.

This is, however, subject to important caveats :

- ✓ *Firstly*, under Community Law, national authorities, including regulatory authorities and competition authorities have a duty not to approve any practice or agreement contrary to Community Competition Law.²² ;
- ✓ *Secondly*, an efficient procedure must be in place. According to the *Access Notice* an access dispute before a National Regulatory authority should be resolved within six months of the matter first being drawn to the attention of that authority. This resolution should take the form of either a final determination of the action or another form of relief which would safeguard the rights of the complainant ;
- ✓ *Thirdly*, there must be availability of and criteria for interim injunctive relief.

The *Notice* states that "if interim injunctive relief were not available, or if such relief was not likely adequately to protect the complainant's right under Community Law, the Commission could consider that the national proceedings did not remove the risk of harm, and could therefore commence its examination of the case ;

- ✓ *Fourthly*, the Commission may nevertheless intervene if, for example, the issue is of sufficient pan-European interest to justify immediate action. More generally, if it appears necessary, the Commission can also open own-initiative investigations or launch sector inquiries where it considers this necessary²³.

Summarising, in the European framework a *dual* system has developed concerning treatment of access to bottleneck situations. Within the framework of sector-specific regulation of access - the ONP framework and the specific regulations at the national levels - the *NRAs* can act in a substantial *ex-ante*

²¹ The concept of Significant Market Power (SMP), now central in ONP, is discussed later

²² See case 66/86, Ahmed Saeed (1989) ECR 838

²³ Under *Regulation 17*, the Commission could be seized of an issue relating to access agreements by way of a notification of an access agreement by one or more of the parties involved, by way of a complaint against a restrictive access agreement or against the behaviour of a dominant company in granting or refusing access , by way of a Commission own-initiative procedure into such a grant or refusal, or by way of a sector inquiry. In addition, a complainant may request that the Commission take interim measures in circumstances where there is an urgent risk of serious and irreparable harm to the complainant or to the public interest.

manner and mandate in substantial detail interconnect provisions concerning pricing, accounting, and the technical details of access.

Application of Competition Rules to access issues is limited - in the current interpretation of EU Competition Law - essentially to dealing *ex-post* with the abuse of a dominant position, and the measures taken to terminate such abuse.

According to the *Access Notice*, sector specific regulation will generally take precedence with regard to action under Competition Law if such sector specific action is pro-competitive and efficient. This is to avoid undue duplication of procedures.

IV TEST 1 : CREATION OF EFFICIENT ACCESS TO BOTTLENECK FACILITIES IN A STABLE MARKET ENVIRONMENT - THE CURRENT APPROACH

It is interesting to examine experience to date in the telecoms sector in Europe concerning the success of the *dual* regime, with a priority role for the sector specific regulation under the ONP framework.

The discussion in this paper requires substantial focus of analysis. Analysis will therefore concentrate on the most prominent aspect in access regulation : the pricing of interconnection and the working of the mechanism to date in this respect at the European level.

A few general remarks on the ONP framework are required, as it has been revised over the last two years, with a particular focus on *the Interconnection Directive*²⁴.

As stated, the (sector specific) ONP framework had been developed originally to secure access for value-added services to the monopolists' networks. With *the Interconnection Directive* it was adjusted to a competitive market situation and a multi-operator environment²⁵:

²⁴ The ONP framework consists of a series of Directives issued since 1990 when the *ONP Framework Directive* was adopted. The most important ONP Directive for this discussion is the *ONP Interconnection Directive*, *supra*

- ✓ ONP became the general framework for the definition of the basic principles of the regulation of access to public telecommunications networks in the EU ;
- ✓ The concept of the " public telecommunications network operator " replaces the role of the monopoly network provider. The Directive defines a number of categories ²⁶ of operators. Each category has rights and obligations which are defined in the Directive ;
- ✓ Rights of public network operators concern in particular the right to interconnect with competitors of the same category.

Obligations concern notably the obligation to supply network access to others, including the safeguarding of general universal service.

A general obligation to supply access is imposed on public network operators with Significant Market Power, the "SMP" operators, principally defined as operators with more than 25% market share.²⁷

25 With the advent of full competition on 1st January 1998 in the European Union, a substantial number of licences have been allocated.

By mid-1998, in the fixed network sector, more than 500 local loop network licences, together with a substantial number of long distance and international licences had been allocated; in the mobile sector, more than 30 GSM licences and some 50 DCS 1800 (PCS) licences.

However, more than 90% of the telecom network market across the Community remains with the incumbents, in particular in the local loop.

26 Annex I of the Directive defines four networks / services as "*Specific Public Telecommunications Networks and Publicly Available Telecommunications Services*" :

- ◆ the fixed public telephone network
- ◆ the leased lines service
- ◆ public mobile telephone networks
- ◆ public mobile telephone services

27 According to the *ONP Interconnection Directive* the notification (by the *NRA*) of an organisation as having significant market power depends on a number of factors, but the starting presumption is that an organisation with a market share of more than 25% will normally be considered to have significant market power. Other factors which can be taken into account by the *NRA* are turnover relative to the size of the market, ability to influence market conditions, control of the means of access to end-user , international links, access to financial resources and experience in providing products and services in the market, as well as the situation of the relevant market.

In practice, to date the traditional telephone incumbents have been notified as having SMP. Some Member States have notified certain public mobile operators as having SMP, or are considering this.

This makes the SMP concept - besides the "category" approach - the central concept in the new framework²⁸.

It should be added that, according to the general line taken in the Directive, details of interconnection should be fixed as far as possible by commercial negotiations between the parties supplying and seeking interconnection. However, the sector specific regulator acquires substantial powers of regulation.

With regard to the *pricing of interconnection*, the *Interconnection Directive* :

- ✓ Establishes the principle of "cost orientation". The national regulators "ensure"²⁹ the implementation of this principle. The Directive therefore defines substantial powers of rate review and rate approval for interconnection pricing, associated with requirements concerning transparency, accounting practice and non-discrimination ;
- ✓ The Directive defines two major markets :
 - A retail market
 - and
 - an interconnection / access market.
- ✓ It limits however price regulation essentially to two areas :
 - Public network operators with Significant Market Power ("SMP" - operators) ;
 - Public Fixed telephony

²⁸ Essential articles of the Interconnection Directive in this context are :
◆ Article 4.2 : obligation to supply access ;
◆ Article 6 : non-discrimination ;
◆ Article 7 : cost orientation ;
◆ Article 8 : accounting separation for "interconnection services".

²⁹ According to Article 7(1) and 7(2), *ONP Interconnection Directive*, Member States "shall ensure" for organisations "operating the public telecommunications networks and / or publicly available telecommunications services" that "charges for interconnection shall follow the principles of transparency and cost orientation".

Apart from setting the general framework in the fifteen EU Member States, a main immediate effect of the *Interconnection Directive* has resulted from the combination of the Directive with a number of Recommendations issued by the Commission after adoption of the Directive³⁰.

The Recommendation on Interconnection Pricing established price ranges for interconnection rates across the EU, based on "best practice" of the three Member States with the lowest interconnect rates at the time of issuing the Recommendation.

These ranges have largely determined the interconnection offerings submitted and approved by the national regulators in the Member States. This benchmarking of interconnection pricing against "best practice" has made the EU an area with some of the lowest interconnection rates in the world market, with local access in the range of 0.5-1 Eurocents / minute³¹.

Therefore, it seems that *sector specific regulation, based on the ONP framework*, has been highly effective in achieving rapidly low priced access to the incumbents' local telephone networks across the EU.

Let us turn to the application of *Competition Law* to the pricing of access to telecommunications networks. The principles and the possibilities for action are set out in the *Access Notice*.³²

The approach is principally based on Article 86, EU Competition Rules³³.

³⁰ Commission Recommendation 98/195/EC on interconnection in a liberalised telecommunications market on Interconnection Pricing ; 98/511/EC : Commission Recommendation of 29.7.1998 amending Recommendation 98/195/EC (Part 1 - Interconnection pricing) (OJ L 228, 15.8.1998 , p. 30); 98/322/EC : Commission Recommendation of 8.4.1998 on interconnection in a liberalised telecommunications market (Part 2 - Accounting separation and cost accounting) (OJ L 141, 13.5.1998, p. 6)

³¹ According Recommendation 98/195/EC, supra, the recommended price ranges are the following :

- ◆ local level : 0.5 - 1.0 ECU / 100 per minute
- ◆ metropolitan level : 0.8 - 1.6 ECU / 100 per minute
- ◆ national level : 1.5 - 2.3 ECU / 100 per minute at peak rate.

An important factor in broadly approaching these ranges in the Member States has been close co-operation of the *NRAs* in various frameworks , in particular in the ONP committee

³² For a general overview see also, K. Coates, Commission Notice on the Application of the Competition Rules to Access agreements in the Telecommunications Sector, Competition Policy Newsletter, 1998 / 2, DGIV, European Commission

³³ Art 86 stipulates :

Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part

The *Access Notice* addresses in particular :

- ✓ The issue of market definition of the access market under Competition Law.

The *Access Notice* explicitly states that it does not define markets : market definition under Competition Law can only be undertaken in the context of an individual case. The *Notice* does, however, refer to two types of essential product markets : the provision of services and the provision of access to facilities to provide those services³⁴

- ✓ The geographic market is defined as the area in which the objective conditions of competition are similar : regard will be had to the economic structure of the market, as well as regulatory conditions such as the terms of licences.

Given the former monopolisation of telecoms within individual Member States, and the regulatory regime in Europe, markets will often be national.

- ✓ Abusive pricing.

In line with the basic orientation of Article 86 (which does not intend to regulate prices, but addresses the issue of unfair pricing only), the *Notice* limits itself to *addressing the issues of excessive pricing and of predatory pricing*.

of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States.

Such abuse may, in particular, consist in :

- (a) directly, or indirectly, imposing unfair purchase or selling prices or other unfair trading conditions ;
- (b) limiting production, markets or technical development to the prejudice of consumers ;
- (c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage ;
- (d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

³⁴ The Commission has published a Notice on the definition of the relevant market for the purposes of Community competition law (OJ C 372, 9.12.1997, p.5)

Excessive pricing : _The Access Notice indicates a number of methods, which can be used to determine excessive prices :

- ✓ By reference to the costs of providing the service : this would require a full cost analysis, together with a decision on the appropriate cost allocation method to be used³⁵ ;
- ✓ By reference to prices charged in other geographic areas.

The *Notice* states that a comparison with other geographic areas can be used as an indicator of an excessive price : the Court held that if possible a comparison could be made between the prices charged by a dominant company, and those charged on markets which are open to competition. Such a comparison could provide a basis for assessing whether or not the prices charged by the dominant company were fair. In certain circumstances, where comparative data are not available, regulatory authorities have sought to determine what would have been the competitive price were a competitive market to exist. In an appropriate case, such an analysis may be taken into account by the Commission in its determination of an excessive price³⁶.

It is this method of comparative analysis, which has been principally used to date in the cases dealt with under Competition Law as regards excessive pricing in the sector³⁷.

³⁵ It should be noted that the ONP framework emphasises the use of "current cost accounting" (CCA) methodology, and evaluation of network assets at forward-looking or current value of an efficient operator (emphasis added). See *Commission Recommendation on Interconnection* (part II - Accounting separation and cost accounting), *supra*.

The *ONP Interconnection Directive* states that "charges for interconnection based on a price level closely linked to the long-run incremental costs for providing access to interconnection are appropriate for encouraging the rapid development of an open and competitive market".

³⁶ The Court has said ; joint cases 110/88 ; 241/88 and 242/88 (Lucazeau a.o. / SACEM, ECR [1989] 2811 (paragraph 25)) : "*when an undertaking holding a dominant position imposes scales of fees for its services which are appreciably higher than those charged by other Member States and where a comparison of the fee levels has been made on a consistent basis, that difference must be regarded as indicative of an abuse of a dominant position. In such a case it is for the undertaking in question to justify the difference by reference to objective dissimilarities between the situation in the Member State concerned and the situation prevailing in all the other Member States*".

³⁷ *DT case*, press release IP/96/975, 4.11.1996. See Marcel Haag and Robert Klotz, Commission Practice concerning excessive pricing in Telecommunications, Competition Policy Newsletter, 1998 / 2, DGIV, European Commission.

In this case, the Commission dealt with the problem of access to the network of Deutsche Telekom (DT). A comparative market analysis commissioned by the Commission showed that the proposed prices were likely to be

- ✓ By reference to calculations undertaken by regulatory authorities to determine prices which would be charged were a competitive market to exist.

The Court has indicated that account may be taken of Community legislation setting out price principles for the particular sector, i.e. in the current case sector specific regulation of access prices³⁸ The Notice refers explicitly to the ONP context *"if a case arises, the ONP rules and Commission Recommendations concerning accounting requirements and transparency will help to ensure the effective application of Article 86 in this context"*.

Predatory pricing : While excessive pricing in interconnection is still the dominant issue in the current transition from monopoly to a competitive environment in the European Union, predatory pricing issues are becoming a common denominator of a number of cases in front of the Commission and may become the major issue in the longer term . The Notice makes reference to the *AKZO doctrine*³⁹ that *a price is abusive if it is below the dominant company's average variable costs or it is below average total costs and part of an anti-competitive plan*.

However, it also states that *"in network industries a simple application of the above rule would not reflect the economic reality of network industries"*.

As the Notice sets out, in the case of the provision of telecommunications services, a price that equates the variable cost of a service may be substantially lower than the price the operator needs in order to cover the cost of providing the service. The Notice states that *"to apply the AKZO test to prices which are to be applied over time by an operator, and which will form the basis of that operator's decisions to invest, the costs considered should include the total costs which are incremental to the provision of the service. In*

excessive. It was assumed that a price is highly likely to be abusive if it exceeds by more than 100% the ones found on comparable competitive markets. As a result, DT declared itself willing to substantially reduce its access tariffs.

The method of comparative market analysis was subsequently applied in the "best practice" approach for access pricing (EC Recommendation on Interconnection, supra).

³⁸ In *Ahmed Saeed*, supra, the Court held that pricing principles set out in sector specific regulation could be used to determine whether a price was excessive.

³⁹ Case C-62/86, *Akzo v. Commission* [1991] ECR I-3359 (paragraphs 71-72).

*analysing the situation, consideration will have to be given to the appropriate time frame over which costs should be analysed".*⁴⁰

The Commission has applied the principles set forth on pricing with substantial success in the DT case (*supra*) and is proceeding on certain cases still pending.

Without going into further detail, some *conclusions* may be drawn at this stage on the question as to how far the *dual approach* has ensured efficient access to the incumbents' telecom networks in Europe to date, particularly with regard to the pricing of access.

Ex-ante sector-specific ("ONP") regulation allows going substantially further than general Competition Law does in regulating access. In the EU, the intervention by the (in most Member States newly set up) regulators has generally proven, during recent months, an overall very efficient means in securing access to the incumbent's bottleneck network, particularly as concerns pricing of interconnection and access.

General Competition Law must concentrate in general on the two extreme situations in pricing, excessive pricing and predatory pricing. *Ex-post* action in these areas is based on the establishment of abuse, and is subject to the (still relatively slow) procedures of *Regulation 17*.⁴¹ In many instances, the case law to which reference can be made, is limited. The principles set forth in the *Access Notice* will be helpful in this context.

The Commission therefore has tended in major recent cases where procedures had been opened under Competition Rules, to stay procedures where sector-specific proceedings under ONP or derived

⁴⁰ The context of predatory pricing also requires a comment on discounting. If a dominant operator were to target its discount at particular customers where it was facing competition, this *could* constitute discrimination as it would tend to have an effect on its competitors. Particularly substantial discounts could have the effect of constituting predatory pricing on the retail level, or could contribute to a price squeeze.

⁴¹ However, it should also be kept in mind that the establishment of anti-competitive behaviour such as unfair pricing can entail substantial fines under EU competition law for the bottleneck holder concerned. The Commission has recently published guidelines on the method of setting fines imposed pursuant to Article 15(2) of *Regulation No 17* (OJ C 9, 14.1.1998, p.3)

national regulations were likely to resolve the issue (see the *Mobile Interconnect*⁴² proceeding and the *Accounting Rate*⁴³ proceeding). This confirms the Commission's basic position that sector-specific regulation should take precedence where efficient procedures exist which can terminate the abuse.

However, there remain a *number of caveats* to be made :

Firstly, sector specific regulation, particularly as regards price regulation, is a deep intervention in market mechanisms, with a high risk and responsibility for the regulator. Pushed too far, it can substantially

42 *Mobile Interconnect* proceeding : Press Release IP/98/707, 27/7/1998

In January 1998, the Commission launched an inquiry into interconnection charges between fixed and mobile operators opening 15 cases, i.e. one for each Member State due to growing concern about persistently high prices for mobile communications particularly for fixed to mobile calls. The objective of the Commission's Inquiry was to check whether : - prices charged by the incumbent fixed network operator for terminating mobile calls into its fixed network were excessive or discriminatory ; - termination fees charged by mobile operators, which have joint control among themselves over call termination in their networks, were excessive, and ; - the revenues retained by the incumbent fixed network operator on fixed to mobile calls were excessive.

In the Press Release, the Commission concluded that at least 14 cases warranted in-depth investigation given preliminary indications of possibly excessive or discriminatory prices. The fourteen cases comprised: 4 cases of mobile-to-fixed termination charges by Deutsche Telekom, Telefónica, KPN Telekom (Netherlands) and Telecom Italia respectively, which would be suspended for 6 months in favour of action by national regulators ; 2 cases of termination fees charges by mobile operators in Italy and Germany respectively ; 8 cases regarding the retention on fixed-to-mobile calls by public switched telecommunications networks (PSTN) operators Belgacom, Telecom Éireann, BT, P&T Austria, Telefónica, KPN Telekom (Netherlands), Telecom Italia and Deutsche Telekom. The Commission would suspend the case involving BT given an on-going inquiry by the UK Monopolies and Mergers Commission (MMC) on this issue. (emphasis added)

The Commission has acted similarly in other cases. For example, in early January 1998, the Commission proceeded under Article 86, EC Competition Rules against DT's high fees concerning the provision of carrier-pre-selection and number portability. Given that a parallel procedure was opened before the national *NRA* , and that fees were considerably reduced, the Commission terminated its own procedure. See Press Release IP/98/430, 13.05/1998 "*Commission terminates procedure against Deutsche Telekom's fees for preselection and number portability and transfers the case to national authorities*". See also Marcel Haag and Robert Klotz, *supra*.

43 *Accounting Rate* proceeding : Press Release IP/98/763, 13/08/1998.

The Commission opened procedures in the Autumn of 1997 concerning European operators with a potentially dominant position, regarding the accounting rates (transfer prices) charged to terminate international calls. Following a preliminary assessment, the Commission announced in the press release that it appeared that "the international accounting rates charged within the EU by 7 operators may result in excessive margins". The 7 operators were : OTE of Greece, Post & Telekom Austria, Postes et Télécommunications Luxembourg, SONERA (formerly Telecom Finland), Telecom Eireann, Telecom Italia, Telecom Portugal.

The Commission concluded that it would further investigate on the prices for international phone calls paid to these operators. On the occasion, the Commission stated that "the issue may also be tackled under the ONP rules (Open Network Provision). In line with its "*Notice on the application of Competition Rules to access agreements in the telecommunications sector*" the Commission has informed the national regulatory authorities of the findings of its first phase of investigation. In those cases where the relevant authority will decide to pursue the issues under its own jurisdiction, the Commission will stay its own proceedings, and assess in six months whether it should continue its proceedings" (emphasis added).

reduce investment incentives in facilities, both for the bottleneck holder, as well as for the party seeking access.⁴⁴

Second, the ONP regime and the derived national sector specific regimes have become highly dependent on definitions, which imply a high degree of technicality, and therefore have a high potential of legal conflict. The regime as established, is depending in its impact largely on two concepts : the "category" within which the party seeking access and the bottleneck holder falls; and the SMP ("Significant Market Power") determination.

In a number of Member States major conflicts threaten concerning the interpretation of these concepts. The questions of who qualifies as public network operator (and therefore for the low network interconnect rates), and who should be designated as an SMP operator (and therefore become subject to substantial regulatory scrutiny and to regulatory rate approval) has become central.

Thirdly, the regulatory approval of interconnect rates (and the associated approvals of costing and accounting systems) inevitably lead to a substantial intervention by the regulator in the day-to-day business practices and strategies of the bottleneck holder, with the danger of a heavy-handed regulatory approach. The difficulties become even more apparent when one considers the issue of unbundling the "dark" access wire / fibre . Again there is a danger that the European telecom sector could be drawn into protracted legal conflicts between the incumbent and the NRA, as has happened, for different reasons, elsewhere.

Therefore, while sector specific intervention can assure, without doubt, in many cases efficient intervention for opening access and interconnection to the incumbent bottleneck provider in a relatively stable environment, issues remain. The limitations of a sector-specific approach become the more apparent, the more situations of rapidly changing markets are considered.

⁴⁴ For example, in the EU telecom sector a major current question is how far access regulation should be extended from the fixed to the mobile sector, (which has grown in an environment where prices were generally not subject to approval by a sector regulator).

The most immediate challenge of rapid market change is the convergence of markets, which will now be examined.

V TEST II : SECURING ACCESS IN CONVERGING MARKETS - THE SITUATION OF RAPID MARKET CHANGE

Since the mid-nineties, the telecom sector is undergoing a phase of rapid convergence with neighbouring sectors. While attention is generally fixed on the convergence of telecom and media⁴⁵ - and a number of major merger cases have resulted from this convergence which have been examined under EC competition law, the impact of this phenomenon is felt also in other fields. The convergence of mobile / fixed is an obvious example, but also convergence between telecom and financial services, and telecom and certain distribution services could become major issues - all of them with their own sector regulations, and often sector regulators.

For the issue of access to bottlenecks, two major consequences seem to emerge :

- ✓ *firstly*, new types of Service Providers will require new types of resources and access to new types of bottlenecks and bottleneck holders, ranging from sophisticated network resources to access to set-top boxes, conditional access systems, navigator software, APIs⁴⁶, and content rights.
- ✓ *secondly*, convergence threatens to outpace existing sector-specific regimes. Additionally, in many instances, sectoral regimes for ensuring access to bottlenecks in the neighbouring sectors are far less developed than in the telecom sector.

The growing complexity of requirements to resources is shown in *Table I*⁴⁷, which is only meant to give a demonstration of the growing complexity. The Table sets out requirements for four types of Service

⁴⁵ The Commission has published a Green Paper on the convergence of the telecom and media sectors which examines this situation to substantial detail. See Green Paper on the convergence of the telecommunications, media and information technology sectors, and the implications for regulation, COM(97) 623, 3.12.1997

⁴⁶ APIs : Application Programme Interfaces, notably relevant for the programming of set-top boxes

⁴⁷ Taken from Wilmer, Cutler & Pickering, Competition Aspects of Access by Service Providers to the Resources of Telecommunications Network Operators, Report to the European Commission (DGIV), Dec 1995

Providers : service providers acting as resellers, providers of mobile services, providers of multi-media services, and providers of Internet services - (the ISPs).

The complexity of requirements - and of access to be secured - is bound to grow further, as the Internet develops.

EXAMPLE : NETWORK ACCESS REQUIREMENTS OF SERVICE PROVIDERS

Network Resource	Reseller	International GSM Service	ISP	Multimedia
Telephone Networks:				
Public switched services	X		X	X
Leased circuits, VPN	X		X	
Caller identification	X		X	
Inward dialling	X		X	
Numbering schemes	X		X	
Tariff discount schemes	X		X	
Operator assistance	X			
Customer directories	X			
Telephone cards	X			
Billing data	X		X	X
Billing services			X	X
Network management data	X		X	
Videotex/gateway s-system			X	X
Mobile Networks :				
Subscriber numbers		X		
Air time		X	X	
Billing data		X	X	
CATV/Satellite Networks:				
Channels	X		X	X
Conditional access systems			X	X
Billing data	X		X	X
Billing services			X	X

Imagine an Internet with 100 times the current performance / cost levels in throughput and speed to the final user. Telephone would become a by-product. Nearly unlimited distribution capability for television or other video products from distributed video servers via the Internet could become available - not just for national but for world-wide distribution. E-commerce would become a reality in every household.

Such possibilities may seem remote at current levels of Internet performance and use, but there are some indications : cable access to the Internet, Internet telephony, and high performance video streaming techniques. Bandwidth requirements within the Internet have started to double every six months. We could be faced with such a situation in three to four years from now, unlikely as it may sound.

If this will happen, market definitions will have to change radically. Actors will be faced with a plethora of new access issues - such as those now discussed in the Internet domain name arena.

One likely reaction is to seek convergence of sector-specific regulatory regimes, in order to parallel market convergence - such as between telecom and media .⁴⁸

But there will be a growing number of cases which will not be covered by any - even extended - sector specific regime (which by nature is "ex-ante" in its basic concepts , and therefore cannot plan for all possible situations of innovation).

It can therefore be safely expected that general competition law (which by definition is cross-sector) will be more and more faced with bottleneck situations, which cannot be covered by any sector-specific regime. This will inevitably emphasise the treatment of bottleneck situations under general competition law.

The further development of the "essential facility" concept under competition law will be a natural consequence and one response to the challenge of convergence. It is therefore worthwhile, to examine in some detail the principles concerning that concept in the *Access Notice*.⁴⁹

The *Notice* uses the expression "essential facilities" to describe a facility or infrastructure which is essential for reaching customers and / or enabling competitors to carry on their business, and which cannot be replicated by any reasonable means⁵⁰

The Commission " must ensure that the control over facilities enjoyed by incumbent operators is not used to hamper the development of a competitive telecommunications environment. A company which is dominant on a market for services and which commits an abuse contrary to Article 86 on that market may be required, in order to put an end to the abuse, to supply access to its facility to one or more competitors on that market. In particular , a company may abuse its dominant position if by its actions it prevents the emergence of a new product or service". (emphasis added)

The *Notice* addresses the balance to be drawn between the rights of those requesting access and those who have to give access, the crucial point in any essential facility concept.

Main principles are (to be taken cumulatively) :

⁴⁸ In the US and Canada, a single regulator carries the responsibility for both telecoms and media, as does the newly created *NRA* in Italy.

⁴⁹ The "essential facility" concept is at the centre of the approach taken in the "*Access Notice*". While the Notice relates explicitly to the application of EU competition rules to the telecom sector, it also states in its preamble the objective "to create greater market certainty and more stable conditions for investment and commercial initiative in the telecoms and multimedia sectors....." and "to explain how competition rules will be applied in a consistent way across the sectors involved in the provision of new services , and in particular to access issues and gateways in this context."(emphasis added)

⁵⁰ See also the definition included in the "*Additional commitments on regulatory principles by the European Communities and their Member States*" (often referred as the "Regulatory Annex") used by the Group on basic telecommunications in the context of the World Trade Organisations (WTO) negotiations (the "basic telecom liberalisations agreement"):

"Essential facilities mean 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 (emphasis added)

The essential facilities is a relatively recent concept under EC competition law. It derives from a line of cases, originally in sectors other than telecommunications. See in particular : Joined Cases 6/73 and 7/73 *Commercial Solvents v. Commission* [1874] ECR 223 (chemicals); Commission Decision 94/19/EC of 21.12.1993, *Sea Containers v. Stena Sealink* (OJ L 15, 18.1.1994, p.8) / Commission Decision 94/119/EEC of 21.12.1993, *Port of Rodby (Denmark)* (OJ L 55, 26.2.1994,p.52) (transport); Joined cases C-241 / 91P & C-242/91P, *Radio Telefis Éireann v. Commission*, ("Magill"), [1995] ECR, I-743. See also John Temple Lang, *Defining Legitimate Competition, Companies Duties to Supply Competitors and Access to Essential Facilities*, in 1994 *Fordham Corp. L. Inst.* (Barry Hawk ed., 1993), 245.

It should also be noted that the essential facilities concept has been substantially developed in US antitrust law.

- it will not be sufficient that the position of the company requesting access would be more advantageous if access were granted. Refusal of access must lead to the proposed activities being made "either impossible or seriously and unavoidably uneconomic".
- there is sufficient capacity available to provide access
- the facility owner "fails to satisfy demand on an existing service or product market, blocks the emergence of a potential new service or product, or impedes competition on an existing or potential service or product market."
- the company seeking access is prepared to pay a reasonable and non-discriminatory price and will otherwise in all respects accept non-discriminatory access terms and conditions.
- there is no objective justification for refusing to provide access, "such as an overriding difficulty of providing access to the requesting company, or the need for a facility owner which has undertaken investment aimed at the introduction of a new product or service to have sufficient time and opportunity to use the facility in order to place that new product or service on the market."⁵¹

The latter expresses the delicate balance which must be found between the interest of the party seeking access (which will generally want to achieve access at low rates and according to its own requirements), and the rights of the bottleneck holder (who will focus on obtaining benefits from the investment undertaken for the development of his own product).

However, the basic principle to be kept in mind is that the bottleneck holder - given his dominant position - must not act to prevent competition from emerging.

⁵¹ However the Notice also states that "although any justification will have to be examined carefully on a case-by-case basis, it is particularly important in the telecommunications sector that the benefits to end-users which will arise from a competitive environment are not undermined by the actions of the former state monopolists in preventing competition from emerging and developing.

Without going into further detail⁵², *suffice it to say* that competition law - in the form of a developed essential facilities concept - can adjust, in a flexible manner, to situations of convergence, by adjusting the market definitions used and without changing either the regulatory framework or its basic principles.

Test 2 - securing access in a converging environment - therefore would seem to give a certain advantage to general competition law in the handling of access to bottleneck situations, as compared to the sector-specific regimes which due to their intrinsic ex-ante and more interventionist nature must "outguess" to some extent the future (market and social) development if they want to ensure efficient access in such a situation of rapid market change.

VI TEST 3 : DEVELOPMENT OF NEW WAYS OF ACCESS

The most demanding situation in terms of both sector-specific regulation and general Competition Law will be the situation where new markets can only develop if the bottleneck holder develops new ways of access and makes the necessary investment.

The discussion of this situation will be focused on one single case, which, however, is crucial for the future development of the EU telecom sector and , more generally, the development of the future Internet, e-commerce and media markets in the European Union.

The future development of the local access market in telecoms in Europe is likely to be determined by its capability to develop the multi-functional capabilities which are required to support the converging telecom / multi- media and Internet markets. Leaving aside satellites and wireless access means⁵³, there

⁵² The *Access Notice* sets out a number of requirements (besides the issues of excessive and predatory pricing referred to previously) concerning supply, technical configuration (such as requiring an excessive number of interconnection points), bundling, and discrimination (such as restrictions on the types or level in the network hierarchy involved in access)

⁵³ which still have intrinsically limited technological capabilities for meeting all (interactive) multi-media requirements; see Arthur D. Little Int., Study on the competition implications in telecommunications and multimedia markets of (a) joint provision of cable and telecoms networks by a single dominant operator and (b)

are two mass distribution systems available in the local loop, both of which have the capability to develop the multifunctional broadband access likely to be required : the public telephone network (now connecting some 190 million lines in the European Union, with a household penetration of near 100%), and the cable TV networks (with a total of now more than 40 million and a household penetration near 30%, but reaching penetrations of 50% and over 90% in some Member States).

The telephone network could be upgraded via the new xDSL⁵⁴ technologies to carry broadband access. The (broadband) cable networks could be upgraded to also carry two way (including narrow-band telephone) traffic. Both will require substantial investments.

By 1997, cable networks were "cross-owned" in more than half of the Member States by the incumbent telephone operator. This meant that by that time, nearly 60% of cable customers were served by a cable operator wholly or partly owned by the main telecommunications provider. As a consequence, the Commission launched in 1997 a Review to investigate if, under these conditions, any of the two networks was likely to be upgraded to a full multi-functional access capability. It published the Review (and proposals) in March of this year⁵⁵.

The Review was based on substantial legal and market analysis.⁵⁶ The market analysis was focused on examining the incentive for a local bottleneck provider to upgrade the local network under these conditions. Some of the main options investigated were :

- (1) Extend the (sector specific) ONP regime to cover the new situation

restrictions on the use of telecommunications networks for the provision of cable television services, Report to the European Commission, 1997

⁵⁴ Various modes of Digital Subscriber Lines. See Arthur D. Little, *supra*

⁵⁵ Commission communication concerning the review under competition rules of the joint provision of telecommunications and cable TV networks by a single operator and the abolition of restrictions on the provision of cable TV capacity over telecommunications networks (OJ C 71, 7.3.1998, p.4); referred to as the *Cable Review*

⁵⁶ The Commission commissioned two studies. Market : See Arthur D. Little, *supra*; Legal : See Coudert, Study on the Scope of the Legal Instruments under EC Competition Law available to the European Commission to implement the Results of the ongoing review of certain situations in the telecommunications and cable television sectors, 1997

- (2) Legal separation, to establish a minimum separate development base for both networks
- (3) Full-scale divestiture of the cable network by the incumbent telephone operator, to establish a business case for both networks to develop full future capabilities

As regards option (1) , it was found that the (sector specific) regulator would face a substantial challenge to implement an ONP regime efficiently in the new environment but that it would still not resolve the investment issue. It would require that the regulator would order the incumbent to undertake a very high investment under conditions of relatively high market uncertainty⁵⁷.

As regards option (2) , this was found to be the main condition for establishing effective surveillance of competitive behaviour. However, only option (3) would establish the conditions for the required full-scale development of the local access market , by eliminating any conflict of interest of the owners and establishing full competition between the two networks in the local access market.

In fact, the Commission chose, in the *Review*, option (2) as a minimal solution for the European Union as a whole⁵⁸. However, it made also clear that "Article 86 should be applied *a fortiori* to an undertaking which is the owner of both a telecommunications and a cable network, in particular when it is

⁵⁷ It should however be mentioned that the options should not necessarily be considered as exclusive of each other. Facing complaints by service providers, the French *NRA* (the *ART*) has in fact ordered France Telecom (owner of the basic network cable infrastructure in the Paris area) to upgrade the cable network to a certain two way capability by a given date.

Another option discussed in the studies was the option of separating network and services. It was found that, in the given situation, this would attract only very limited network upgrade owing to the risk aversion of the network owner, and his limited possibilities to participate in the possible benefits in such a situation.

It should also be noted that the recent *ONP Recommendation on Accounting Separation* (see supra) recommends accounting separation for the "local access network", in order to strengthen regulatory surveillance by the NRAs.

⁵⁸ The Commission found in *Cable Review* that joint ownership of both telecommunications networks and cable TV networks "limits the development of the telecommunications and multimedia market in the Member States in four main ways. These are :

- ◆ delaying the upgrading of cable networks to have bi-directional capability,
- ◆ blocking the development of competing infrastructures
- ◆ limiting service competition, and
- ◆ constraining innovation

It stated that "the mere separation of accounts will only render financial flows more transparent, whereas legal separation will lead to more transparency of assets and costs and will facilitate monitoring of the profitability and the management of the cable network operations. "

The Commission published a proposal for a Commission Directive to implement legal separation (to be issued on the basis of Art (90) EC Competition Law), for a public consultation period. At the time of writing, this consultation was still not concluded.

dominant on both markets. Where companies enjoy a dominant position on two markets, they must take particular care not to allow their conduct to impair genuine undistorted competition. In particular, that dominance cannot be leveraged into neighbouring markets, impede the emergence of new services or strengthen their dominance through acquisitions or co-operative ventures either horizontally or vertically".(emphasis added).

The Commission went on to state that "in certain circumstances it might be that the only means which would allow the creation of a competitive environment consists in the divestment of the cable television network by the telecommunications operator. Other solutions may also be explored depending on the precise circumstances of the case". (emphasis added)

In summary, while it is difficult to see that sector specific regulation could be used to force an incumbent bottleneck holder to upgrade access facilities into new technologies where massive investment are required (such as for widespread deployment of xDSL, or advanced two way capability for cable networks⁵⁹) to open new market opportunity, in certain cases only the creation of a competitive access market may resolve the issue.

The Commission has made it clear that it strongly favours this perspective in the cable TV market. It said in the *Cable Review* that "from a competition policy point of view, convergence must build on the development of a broad base of pro- competitive infrastructures of telecommunications and cable TV networks. Therefore this review is central to the success of convergence in building pro-competitive structures, and complementary to the Convergence Green Paper".

How far a divestiture of bottleneck facilities could be enforced under EU competition rules will be an issue for future case law. The Commission has however made it clear that for notifications of co-operative joint ventures or mergers in the field "the Commission will assess such a notification in the light of the facts underlying the case. It can be expected that an extension of an operator dominant in both

⁵⁹ Estimates for investment requirements for upgrading Europe's existing cable networks alone to advanced two way capability total some 20 - 40 billion Euros, depending on technologies used.

telecommunications and cable television networks into related fields could raise serious competition concerns". Reference is made to Alexander Schaub's paper , Panel II, and the description of recent merger and Article 85 cases, in particular with regard to certain divestiture requirements in that context.

VII CONCLUSION

The European Union's experience of regulation for securing access to network bottleneck facilities is still in its early stage. It seems that the EU's current approach to interconnection and access is shaped by a three pillar approach, based on the interplay of "hands-on" sector-specific *ex-ante* regulation of access, an *ex-post* use of EU competition rules, and, to some extent, the search for structural solutions aimed at the development of competitive access markets.

All of these approaches have been applied to varying degrees also elsewhere, in the United States and Canada, Japan, and Australia and New Zealand.

While the first group of countries seems to emphasise a sector-specific regulatory approach (but has also not hesitated to use anti-trust to achieve radical structural solutions, such as the ATT divestiture), more lately Australia, and especially New Zealand have emphasised an approach based on competition law.

The EU and its Member States, in the current phase of full market opening since 1 January 1998, clearly emphasise the sector-specific approach based on *ex-ante* regulation of the bottleneck holder. The three tests employed (efficiency of access in the current market situation; access in converging markets; access in innovation markets) tend to demonstrate that this choice is likely to be the right approach in the phase of transition to full competition in the telephone market. However, the tests also show, that the more the convergence of markets becomes the dominant feature, and the more rapidly innovation proceeds and innovative investments by the bottleneck holders are needed, the more an approach based on general competition law principles will become necessary.

This concerns the basic principles applied. It does not address the (separate) question as to which authority ultimately applies those principles. The institutional questions involved, concerning the relationship of sector specific and general competition authorities, be it at the national level or the European or international one, are of the remit of Panel III.

The need for the application of general competition principles becomes the more evident when analysing the global market developments. As the current events surrounding the Internet have shown, given the global nature of the Internet - and of e-commerce - it is unlikely that any detailed sector-specific global framework for regulating access can - or even should - be established. However, the very concept of private sector self-regulation of the Internet will make strict application of antitrust and competition rules indispensable, as well as the search for structural solutions for securing competitive access markets, in order to avoid the emergence of new bottleneck holders at the level of the global communications market : be it at network level, at the Internet domain name level, at the navigation level, or at the level of the organisations which will provide global trust and certification services.

This puts new requirements on the interaction between competition authorities worldwide and their specific counterparts in the telecom sector.

While these global aspects fall to Panel II and Panel III, and therefore need not be developed further here, this paper was intended, with substantial simplifications, to address the current access framework in the EU telecommunications market. A main task in the EU will be to ensure on the one hand, the further development of the efficiency of the system of sector regulation, given that important bottlenecks continue to exist in the core telephone market which could frustrate the effects of the market liberalisation just achieved. EU competition law application can - and will - support this operation, whenever the pro-competitive results cannot be achieved otherwise.

On the other hand, it will become important to avoid the danger of over-regulation, and of a too deep an intervention particularly in the field of pricing, where wrong investment signals could be set. The

development path should be towards a competitive regime, which is characterised by competitive access markets, and the application of general competition rules.