

FINAL REPORT

ON

REGULATING OPERATORS
WITH SIGNIFICANT MARKET POWER



This study has been prepared by ETO on behalf of ECTRA for the Commission of the European Union.

ECTRA has given its approval for the report to be delivered to the Commission; nevertheless, individual ECTRA members do not necessarily endorse all findings and proposals contained herein.

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EXECUTIVE SUMMARY

The purpose of this study is to identify and analyse the telecommunication-specific obligations imposed on operators of public networks and telecommunications services which have significant market power, and to propose harmonised conditions to be attached to the authorisations of operators with significant market power in CEPT countries, following the liberalisation of voice telephony services and infrastructure in the European Union.

The expression “dominant operators” which originally appeared in the title of the study was actually misleading with regard to the content of the study. “Dominant operators” is in fact a concept commonly used in competition law, linked to actions which can be taken against a possible abuse of a dominant position in the market. The scope of this study is instead linked to telecommunication-specific regulation aiming at controlling “operators with significant market power” in accordance with the EU regulatory framework. Therefore, in this report the expression “dominant operators” has been replaced with the expression “operators with significant market power”.

The study has been prepared by ETO on behalf of ECTRA for the European Commission. It has been commissioned as one of a series of independent studies aimed at proposing common licensing regimes in European countries.

The starting point for the entire analysis conducted in the study is the EU regulatory framework with regard to operators with significant market power.

The report contains the following:

- a) an introduction to the study (Chapter 1)
- b) a description of the current situation with regard to regulation of operators with significant market power in some European countries (Chapter 2)
- c) a survey of some of the issues identified in b) and c) above (Chapter 3)
- d) a comparative analysis of the information collected through the survey and some conclusions (Chapter 4)
- e) a set of Annexes containing detailed information on the different issues treated in the core of the report.

Chapter 2 of this report is based partly on information collected by the consulting company SAGATEL (Paris, France) and partly on information collected directly by ETO from European NRAs. The scope of this Chapter consists of analysing how the concept of “operator with significant market power” has been defined in CEPT countries and how national legislation/regulations of these countries regulate operators with significant market power in a telecommunications market open to competition. The tasks of SAGATEL with regard to this study are attached in Annex 2 and the detailed country-related information is contained in Annex 4.

The conditions imposed on operators with significant market power identified in Chapter 2 (and Annex 4) and the corresponding provisions in the EU regulatory framework (presented in Annex 7) have been discussed with ECTRA experts in order to verify, for each condition, whether or not further analysis/harmonisation was needed.

It was concluded that, for the moment, ECTRA members did not see any need for further harmonisation with regard to any of the obligations on operators with significant market power identified in the study, but they could agree that a more detailed analysis of the following issues would be very useful: “definition of relevant market”, “criteria for determining whether an operator has significant market power”, “reference interconnection offer”, “interconnection charges”, “interconnection agreements”, “accounting separation and accounting systems suitable for implementation of provisions on interconnection”.

Therefore, following the decision taken by ECTRA members, ETO undertook an in depth analysis of the issues listed above. At the same time, in order to fulfil the work requirements contained in the contract signed with the European Commission, ETO investigated whether harmonisation of some of the same issues was necessary and feasible.

Therefore, **Chapter 3** of the report consists of a collection of information and analysis with regard to the following issues: “definition of the relevant market”, “criteria for determining whether an operator has significant market power”, “reference interconnection offer”, “interconnection charges”, “interconnection agreements”, “accounting separation and accounting systems suitable for implementation of provisions on interconnection”. The survey, based on a careful examination of the particulars of national regulation in European countries, makes it possible to ascertain common conditions, procedures and practices. The detailed collection of country-specific information is presented in Annex 5.

With regard to the “definition of the relevant market”, the survey concentrates on how, in practice, the different European NRAs determine the relevant market in which an operator might have significant market power.

With regard to the “criteria for determining whether an operator has significant market power”, the survey covers the practical application of the criteria which have to be taken into account when determining whether an operator has significant market power.

A detailed collection of information on how different NRAs are applying the criteria for determining the market power of an operator in European countries and a comparative analysis of such information can be seen as a possible means for gaining experience on common European approaches on regulating operators with significant market power.

With regard to the “reference interconnection offer” and to the “interconnection charges”, the survey focuses on how the reference interconnection offers have been developed in European countries; on how NRAs intend to ensure their publication and on the elements of interconnection charges to be included in the reference interconnection offer in European countries.

With regard to “interconnection agreements”, the survey concentrates on how NRAs intend to make interconnection agreements available on request to interested parties and on which parts of the agreements deal with the commercial strategy of the parties and should therefore be excluded from publication.

With regard to “accounting separation and accounting systems suitable for implementation of provisions on interconnection”, the survey analyses the rules established in European countries on how operators with significant market power have to implement accounting separation and on how they should implement an accounting system suitable for the implementation of provisions on interconnection.

Chapter 4 of this reports presents a comparative analysis of the information collected in Chapter 3 and lists the conclusions of the study.

From the analysis undertaken in this study with regard to:

- Criteria used for determining whether an operator has significant market power
- Criteria used for determining the relevant market

it became evident that:

- The approach used by NRAs in implementing the rules of the ONP-Interconnection Directive is combined and strictly interfused with the concepts of dominant position in accordance with the Community competition rules. It is recommendable for those countries which are still in the process of defining their regulation of operators with significant market power to do so taking into account the interrelation between ONP-rules and competition rules.
- The application of the criteria differs significantly from country to country. In the near future it is recommendable to harmonise the applications of these basic principles in Europe in order to avoid divergent interpretations and distortions among European countries. And it is also recommendable to take into account the pan-European dimension when defining the relevant geographical market.

From the analysis undertaken in this study with regard to:

- Reference interconnection offer
- Interconnection agreements

it became evident that:

- All countries which have already developed national regulation on the issues have done so in a sufficiently harmonised way in accordance with the ONP-Interconnection Directive. In this sense, no further harmonisation is necessary.
- With regard to the necessity of a certain level of harmonisation of the content of interconnection agreements, ETO refers to the work done by the EIF.
- With regard to the necessity of a high level of transparency of interconnection agreements, ETO proposes to investigate whether an archive of interconnection agreements available on a Web site is desirable.

With regard to the last bullet point above, the discussion of this study with the industry during a Workshop held in Brussels, which can be considered as a first investigation of the desirability of an archive of interconnection agreements published on the Web, led to the conclusion that such a publication is not at all desirable. If operators with SMP are obliged to behave in accordance with the non-discriminatory principle, the publication of their interconnection agreements with new entrants is not the solution for controlling their behaviour. The only way to ensure that SMP operators behave in a non-discriminatory way is a real harmonisation and publication of their Reference Interconnection Offer

From the analysis undertaken in this study with regard to:

- Interconnection prices
- Accounting systems suitable to implement provisions on interconnection

it became evident that:

- The implementation of these provisions by NRAs differs significantly from country to country. The need for harmonisation of the principles for interconnection charges and the underlying principles for accounting systems is urged, particularly by the operators.

The trend towards the use of the LRIC methodology is not so clear among the countries analysed in the study. And even if LRIC proves to be the most commonly adopted methodology, it is not clear yet which kind of LRIC should be the preferable one.

ETO proposes to work, in collaboration with all relevant parties, on the development of a harmonised set of principles for interconnection charges and the underlying principles for accounting systems.

CHAPTER 1 -PRESENTATION OF THE STUDY

The purpose of this study is to identify and analyse the specific obligations of those operators of public networks and telecommunications services who have significant market power, and to propose harmonised conditions to be attached to the authorisations of operators with significant market power in CEPT countries, following the liberalisation of voice telephony services and infrastructure in the European Union.

The justification for such a study lies in the fact that in a telecommunications market open to competition, regulators should be allowed to impose specific conditions on operators providing public telecommunications networks and telecommunications services because of their dominant position in the market. It is reasonable to expect that these conditions imposed on operators with significant market power will not be uniform throughout Europe, but subject to national legislation which varies from country to country. The existence of different obligations to be respected by operators with significant market power might prevent the creation of an internal market for telecommunications networks and services. A set of common obligations to be included in the list of licensing conditions which may be imposed on telecommunications operators with significant market power has therefore to be agreed upon by European countries.

The work requirements assigned to ETO were the following:

- (1) to identify and analyse obligations attached to authorisations of telecommunications operators with significant market power as well as the legal means used to implement them. The work will aim at identifying and analysing obligations which are specific to dominant operators and are not applicable to non-dominant operators.
- (2) to describe and analyse new areas or new markets where significant market positions could be established after the liberalisation of telecommunications services or infrastructures.
- (3) to analyse criteria identifying significant market positions in specific markets.
- (4) to propose a set of harmonised obligations which may be included in the future set of licensing conditions to be imposed on telecommunications operators with significant market power.

The text of the work order signed by the Commission and ETO is attached as annex 1.

Work requirement (1) is dealt with in Chapter 2 and Annex 4, which describe national regulation in CEPT countries with regard to operators with significant market power. Some theoretical considerations on the subject are presented in Annex 3.

Work requirement (2) is dealt with in those parts of Chapter 3 and Annex 5 which analyse the criteria for determining a relevant market; work requirement (3) is dealt with in those parts of Chapter 3 and Annex 5 which analyse the criteria for determining whether an operator has significant market power in a relevant market.

Finally, work requirement (4) is the scope of Chapter 4, which contains conclusions and recommendations on the issues analysed in the previous chapters.

Conclusions and proposals are based on the following considerations:

1. Analysis of different aspects of EU and national regulations with regard to operators with significant market power with the aim of identifying the existing level of harmonisation;
2. Identification of aspects of the regulation of operators with significant market power which are not uniform throughout Europe but are subject to national interpretation which may vary from country to country.

CHAPTER 2 -BACKGROUNDS ON NATIONAL SITUATIONS

-Introduction

The collection of information necessary to carry out this chapter was conducted by the consulting company SAGATEL (Paris, France). SAGATEL had to identify how the concept of operator with significant market power has been interpreted in CEPT countries and how the national legislation/regulations of these countries regulate telecommunications operators with significant market power in a telecommunications market open to competition.

The tasks of SAGATEL with regard to this study are attached in Annex 2.

The country-analysis presented in this chapter is based on ETO's re-organisation and integration of SAGATEL's information according to the following considerations:

1. definition of operator with significant market power
2. identification of obligations which are specific to operators with significant market power and are not applicable to other operators
3. identification of obligations, if any, which are specific to former monopolists.

Point 3 above is included in the analysis for the following reason:

- Former monopolists, which inherited from their past an incumbent position, in general meet the criteria used for determining whether an operator has significant market power and are therefore subject to all obligations applicable to operators with significant market power.
- However, in most countries, at least in the transitional period, in addition to the "operators with significant market power conditions", the former monopolists also have to respect some other very specific conditions, in most cases related to the provision of Universal Service. In fact, for the sake of continuity and in order to ensure the provision of Universal Service in the transitional period from monopoly to competition, the easiest solution seems to be the appointment of the ex-monopolist as a provider of Universal Service.
- Universal Service Obligations will therefore appear in the following analysis, but it is very important to clarify from the start that there should not be any confusion between obligations of Universal Service and obligations applicable to operators with significant market power. The scope of this report is how to regulate the "market behaviour" of operators with significant market power and not their "social obligations".

The country-analysis includes only those European countries which, according to the information collected, have already issued a new regulatory framework (or have at least prepared a draft of it), which contains provisions on regulating operators with significant market power, as of November 1997. The following countries in which

specific provisions on the subject exist were identified: Denmark, France, Finland, Germany, Italy, The Netherlands, Spain, Sweden, Switzerland and the United Kingdom.

The details of the country-analysis are presented in Annex 4. The following is a summary of such an analysis. Information on Portugal is included in Annex 4, but not in the following analysis, since Portugal is not one of the countries which have already issued a new regulatory framework which contains provisions on regulating operators with significant market power in a completely liberalised market.

2.1 –Definitions of operators enjoying significant market power

EU An organisation shall be presumed to have significant market power when it has a share of more than 25% of a particular telecommunications market in the geographical area in a Member State within which it is authorised to operate.

NRAs may nevertheless determine that an organisation with a market share of less than 25% in the relevant market has significant market power or that an organisation with a market share of more than 25% in the relevant market does not have significant market power. In either case, the determination shall take into account:

1. the organisation's ability to influence market conditions
2. its turnover relative to the size of the market
3. its control of the means of access to end-users
4. its access to financial resources
5. its experience in providing products and services in the market.

Denmark Providers of public telecommunications networks or telecommunications services shall be presumed to have significant market power when they have a share of more than 25% of a particular telecommunications market in the geographical areas within which they are providing telecommunications networks or services.

The National Telecom Agency may nevertheless decide that providers of public telecommunications networks or services with a market share of 25% or less shall be regarded as providers with significant market power, and that providers of telecommunications networks or services with a market share of more than 25% shall not be regarded as providers with significant market power. In making such a decision, the National Telecom Agency shall take into account the provider's:

- ability to influence market conditions
- turnover relative to the size of the market
- control of means of access to end-users
- access to financial resources
- experience with regard to providing telecommunications services

- Finland** Operators of public telecommunications networks or services shall be presumed to have significant market power when they have a share of more than 25% of a particular telecommunications market in the geographical areas within which they are providing telecommunications networks or services.
- The Ministry of Transport and Communications may nevertheless decide that public telecommunications operators or service operators with a market share of 25% or less shall be regarded as operators with significant market power, and that network operators or service operators with a market share of more than 25% shall not be regarded as operators with significant market power. In making such a decision, the Ministry of Transport and Communications shall take into account the operator's:
- ability to influence market conditions
 - turnover relative to the size of the market
 - control of means of access to end-users
 - access to financial resources
 - experience with regard to providing telecommunications services
- France** An operator with a share of more than 25% of a particular telecommunications market shall be presumed to have a significant influence on that market. The telecommunications regulatory authority shall also take into account the operator's
- turnover relative to the size of the market
 - control of the means of access to end-users
 - access to financial resources
 - experience in providing products and services in the market.
- Germany** According to §22 of the "Law against Restraints of Competition", a company dominates the market for a certain type of goods or commercial services insofar as:
- it has no competitors or is not exposed to substantial competition
 - it has a paramount market position relative to its competitors, as can be shown by such factors as:
 - its market share
 - its financial strength
 - its access to supply or sale markets
 - its links with other companies
 - the existence of barriers to the entry of other companies into the market
- More generally, market positions presuming dominance can refer to one company or to more companies linked together in a merger. On this basis, the following criteria can be used to presume the existence of a dominant position:
- a company has a market share of at least one third of a certain market and its turnover is at least DM 250 million in the last business year;
 - three or less "non-substantially competing" companies or mergers have a combined market share of at least 50%, or five or less such companies or mergers have a combined market share of at least two thirds. Companies with a turnover below DM 100 million shall not be taken into account.

Italy In accordance with Article 1 am) of the ministerial regulation implementing Community Directives on telecommunications:
“significant market power” is the position of an organisation which has a share of more than 25% of a particular telecommunications market on a national level or in the geographical area within which it is authorised to operate; the NRA, after consulting with the Competition Authority, may nevertheless determine that an organisation which has, in the relevant market, a market share of less than or equal to 25% has significant market power or that an organisation with a market share of more than 25% in the relevant market does not have significant market power. In either case, the determination shall take into account:

1. the organisation’s ability to influence market conditions
2. its turnover relative to the size of the market
3. its control of the means of access to end-users
4. its access to financial resources
5. its experience in providing products and services in the market.

Netherlands The Consultation Document “A New Look for Telecommunications in the Netherlands - Basic Principles for a Review of the Telecommunications Act”, prepared by the Ministry of Transport, Public Works and Water Management, provides some rules to be temporarily applied to the telecommunications sector in order to supplement market rules in the transitional period towards competition, with particular reference to those operators holding a dominant position in the market.

The criteria for determining whether an operator has significant market power are its share of the relevant market, with reference to the 25% threshold, and its control of end-user access means.

Spain The Spanish regulatory system provides different criteria for determining whether an operator has significant market power in different telecommunications areas:

Provision of Leased Lines- The criteria for determining whether an operator has significant market power in the leased line market are the following:

- leased line operators holding more than 25% of the total gross turnover of leased lines services in a relevant market are presumed to be dominant;
- the relevant market is the geographical area within the area assigned under the authorisation when at least two operators are in competition. For Telefonica the relevant market is nation-wide;
- the assessment of turnover takes into account leased lines with both ends within the relevant territory, or with at least one end in Spain for nation-wide operators.

The effective qualification is decided every two years by the Ministry.

Cable TV operators- Cable TV operators are authorised to provide telecommunications services according to a recently issued decree. They are subject to conditions which refer essentially to the market they are operating in. With regard to the criteria for determining whether operators have

- Spain (contin.)** significant market power in their market, the same provisions mentioned above for leased line providers also apply to cable TV operators.
- Providers of voice services to Closed User Groups-** The Decree regulating the provision of voice services to CUGs provides specific rules for:
- those entities that, because of their special position in the telecommunications market, because they hold some special or exclusive rights or because of any other reason, may enjoy a dominant position in the national or international telecommunications services market.
- Sweden** No definition of operator with significant market power exists.
- Switzerland** “Enterprises having a dominant position in the market” means one or more enterprises being able, as regards supply or demand, to behave in a substantially independent manner with regard to the other participants in the market.
- United Kingdom** The trigger for consideration of SMP is set initially in terms of market share. A share of 25% of activity in the relevant sector gives rise to a presumption of SMP. This can be supported or rebutted taking into account the following factors:
- market power (judged by an operator’s ability to influence market conditions)
 - turnover relative to the size of the market
 - control of the means of access to end-users
 - access to financial resources; and
 - experience in providing products and services in the market.
- This definition of SMP is based on Article 4(3) of the Interconnection Directive.

2.2 – Conditions imposed on operators with significant market power

PROVISIONS	DK	FI	SW	FR	IT	SP	GE	NL	UK	SWI	EU
meet all requests for access to network	X	X	X	X	X		X	X	(8)	X	X
non-discrimination in interconnection	X	X	X	X	X		X	X	X	X	X
make available information on interconnection	X		X	X	X	?	X		X	X	X
make public all details on agreements for special network access	X						(5)		X	X	X
communicate interconnection agreements to NRA	X		X	X			X	X	X	X	X
publish a reference interconnection offer	X	X	X	X	X	?	X	X	X		X
interconnect charges: transparency and cost-orientation	X(2)	X	X	X	X		X		X	X	X
unbundled charges for interconnection	X	X					X		X	X	X

PROVISIONS	DK	FI	SW	FR	IT	SP	GE	NL	UK	SWI	EU
special interconnection conditions for leased lines	X					X					
justify refusal to interconnect	X		X					X	X	X	
cost accounting system suitable for implementation of above requirements	X	(3)	X		X		X		X	X	X
cost accounting system detailed	X				X				X	X	X
presentation of annual accounts to NRA	X				X				X	(6)	
unbundled charges related to USO	X										X
accounting separation	X	X	X	X	X		X	X	X	X	X
unbundled tariffs for additional facilities	X								BT		X
transparency and cost-orientation of tariffs	X(1)		X						X		X
tariffs for access and use of network independent of use	X						X			(6)	X
access tariff changes only after appropriate public notice	X	X(4)					X		X	X	X
cost accounting											

PROVISIONS	DK	FI	SW	FR	IT	SP	GE	NL	UK	SWI	EU
system suitable for implementation of provisions on tariffs									X		X
provision of advanced facilities	(1)						X				X
non-discrimination in the provision of telephone services									X		X
separation of activities	X	X		X		X	X		X	X	
contribute to US provision							X		X	(7)	
contribute to US funding	X						X			(7)	
rates for the provision of leased lines approved by NRA	X					X	X				
provision of a minimum set of leased lines	X	X	X			X		X	X	X	

Legend: X = the provision applies **blank box** = the provision does not apply

- Notes:
- (1) This applies only to Universal Service (US) providers
 - (2) Interconnection charges are based on Long Run Incremental Costs
 - (3) This applies only partly
 - (4) Access tariff changes only after mutual agreement
 - (5) Excluded commercial confidential information
 - (6) This applies only in the Universal Service Obligations framework
 - (7) This could be applicable, depending on the need
 - (8) Applicable to all PTOs

2.3 -Specific conditions imposed on former monopolists

Tele Danmark (Denmark)

TeleDanmark is responsible for the provision of general and special **universal service obligations** established by law until 31 December 1997.

After that date the NRA will appoint one or more providers of universal

service if these providers have a market share of 50% or more of the total provision of one or more telecommunications services under the universal services obligation.

(Finland)	No specific obligations are imposed on the ex-monopolist.
France Télécom (France)	France Télécom is responsible for the provision of universal service and all mandatory services . France Télécom is also obliged to rebalance its tariffs .
Deutsche Telekom (Germany)	Deutsche Telekom is responsible for the provision of universal service and subject to the obligations of mandatory services imposed on licensees providing voice communications services for the public.
Telecom Italia (Italy)	Telecom Italia is responsible for the provision of universal service . From 1 January 1998 other organisations can also be entrusted with the provision of Universal Service.
Telefonica (Spain)	Telefonica has the same obligations as other operators with significant market power.
Telia (Sweden)	Telia is responsible for the provision of universal service and is obliged to supply network capacity to those who request it
KPN (The Netherlands)	KPN has to respect specific conditions related to universal service obligations : <ul style="list-style-type: none">• voice telephony services,• meeting specified quality requirements• public call boxes• free emergency numbers
BT (UK)	A number of specific conditions are included in BT's licence that do not appear in the licences of most other domestic Public Telecommunications Operators.
Swiss PTT (Switzerland)	Swiss PTT is responsible for the provision of universal service during 5 years from 1.1.1998 and subject to the obligations imposed on other licensed providers of Universal Service.

CHAPTER 3 –SURVEY

-Introduction

The issues identified in Chapter 2, analysed in Annex 4 and summarised in the table in paragraph 2.2, were discussed by ETO with ECTRA experts with the aim of identifying, in the existing provisions to regulate operators with significant market power, areas where further analysis/harmonisation is necessary.

It was concluded that, for the moment, ECTRA members did not see any need for further harmonisation with regard to any of the obligations on operators with significant market power identified in the study, but they could agree that a more detailed analysis of some of the identified issues would be very useful. Therefore, following the decision taken by ECTRA members, ETO undertook an in depth analysis of the issues listed below. At the same time, in order to fulfil the work requirements contained in the contract signed with the European Commission, ETO investigated whether harmonisation of some of the same issues was necessary and feasible.

It appeared necessary to take a comprehensive view, in European countries, of national practices with regard to “**how to determine the existence of significant market power in a relevant market**”. A careful examination of the particulars of national regulation in European countries would make it possible to ascertain common conditions, procedures and practices and it would help ETO determining whether harmonisation is necessary and feasible.

The **definition of the relevant market** and the practical application of **the criteria which have to be taken into account when determining whether an operator has significant market power** could result in lack of uniformity throughout Europe; they are subject to national interpretation which may vary from country to country.

A detailed collection of information on how different NRAs are defining the relevant market and are applying the criteria for determining the market power of an operator in European countries and a comparative analysis of such information can be seen as a possible means for gaining experience on common European approaches on regulating operators with significant market power. The analysis is also useful for ETO to determine whether harmonisation is necessary and feasible.

Obligations related to **Interconnection** and **Accounting systems** also appeared to be areas where further studies could be conducted in order to identify common European approaches. The practical implementation of obligations on interconnection and accounting systems imposed on operators with significant market power could in fact result in conditions throughout Europe not being uniform but subject to national interpretation which may vary from country to country.

A detailed collection of information on issues related to obligations on interconnection and accounting systems imposed on operators with significant market power in European countries and a comparative analysis of such information can also be seen as

a possible means for gaining experience on common European approaches on regulating operators with significant market power. The analysis is also useful for ETO to determine whether harmonisation is necessary and feasible.

It was therefore concluded that the scope of Chapter 3 should include a survey of the following issues:

- Definition of relevant market
- Criteria for determining whether an operator has significant market power
- Reference interconnection offer
- Interconnection charges
- Interconnection agreements
- Accounting separation and accounting systems suitable for implementation of provisions on interconnection

This chapter consists, therefore, of a survey aiming at analysing information with regard to the above-listed issues.

The following is a summary of the above-mentioned survey, the detailed results of which are presented in Annex 5. Information on Portugal is included in Annex 5, but not in the following analysis, since Portugal is not one of the countries which have already issued a new regulatory framework containing provisions on regulating operators with significant market power in a completely liberalised market.

3.1 -Criteria for determining the relevant market

DENMARK	<p>The relevant product market is defined according to the approach of demand-substitutability in competition law, applied in a dynamic way adjusted on an ongoing basis and through a case-by-case evaluation.</p> <p>For fixed telecommunications networks, the geographic extent of the network is especially relevant, while for mobile networks and their capability of substituting each other mutually, the area covered according to the licence and the stipulated coverage percentage has to be considered.</p>
FINLAND	<p>The relevant markets are pre-defined by the NRA on the basis of two criteria: type of telecommunications and geographic areas. 1) Mobile communications, in Finland (including Ahvenamaa); 2) Fixed local telecommunications, in the local areas as of 31.12.93; 3) Long distance telecommunications (mobile excluded,) in 13 telecommunications districts; 4) International telecommunications, in Finland (including Ahvenamaa)</p>
FRANCE	<p>The decision on the determination of a relevant market is taken on a case by case basis.</p>

- GERMANY The relevant market is determined according to the approach of “**demand substitutability**” **on the basis of the Law against Restraints of Competition** in co-operation with the Federal Cartel Office. Accordingly, all goods and services which, in their characteristics, economic use and price are sufficiently similar (for the informed consumer) to be regarded as suitable to meet a specific demand, and as substitutable, are considered equivalent in the market. It is the functional substitutability which is crucial, rather than the physical and technical identity.
- ITALY The definition of the relevant market is instrumental to the identification of the context in **which anti-competitive behaviour** is possible.
The Competition Authority proposes the following definition:
“The smallest context (in terms of products and geographical area) in which, if monopoly conditions were created, the monopolist could profitably fix a price significantly above the competition price and maintain it at that level for a relevant period of time”
The definition is based on the approach of **demand substitutability**.

“**Price tests**” are often used as references when determining the relevant market in competition regulation.
- NETHERLANDS The only explicit reference to the “relevant market” is:
“The market share of a provider is of eminent importance. The criteria refer to a market-share of 25% of the relevant telecommunications market in the specific geographical area of the Netherlands in which this provider offers the service concerned”.
Because of the close relation between these provisions and the competition law, OPTA has agreed to consult the Ministry of Economic Affairs when classifying an operator as having a significant market position in a relevant market.
- SPAIN¹ For the purposes of the Ministerial Order on Interconnection, the relevant market is the market of basic telephony at a national level.

¹ Spain has established its own schedule of the process towards liberalisation, consisting of opening up the market gradually: Retevisión already has a voice telephony licence and cable operators will have it on 1 January 1998. A Ministerial Order on Interconnection is the legal framework in force until full liberalisation in December 1998.

SWEDEN	<p>Same definitions as in Community legislation:</p> <ul style="list-style-type: none">-The relevant “product market” comprises all those products or services which are regarded as substitutable by the potential partners, by reason of their products’ characteristics and their intended use.-The relevant “geographic market” comprises the area in which the potential partners of the exchange are involved in the supply or demand of products or services which make up the product market. <p>Criteria applied on a case-by-case basis in co-ordination with competition authority.</p>
SWITZERLAND	<p>Same definitions as in Community legislation:</p> <ul style="list-style-type: none">-The relevant “product market” comprises all those products or services which are regarded as substitutable by the potential partners, by reason of their products’ characteristics and their intended use.-The relevant “geographic market” comprises the area in which the potential partners of the exchange are involved in the supply or demand of products or services which make up the product market.
UK	<p>The relevant “product markets” for determining SMP under the Interconnection Directive are set out in Annex I of the Interconnection Directive. They are:</p> <ul style="list-style-type: none">• fixed networks and services• mobile networks and services• leased lines services. <p>The relevant “geographic market” for identifying whether an operator has SMP is the geographical area within which an organisation is authorised to operate.</p>

3.2 - Application of the criteria for determining whether an operator has significant market power (SMP)

DENMARK	<p>The relevant criteria (same as in Community legislation) will be applied on a case-by-case basis by the NRA.</p> <p>The NRA will assess whether a provider of telecommunications networks or services must be presumed to have SMP on the basis of the relevant statistical and other information available.</p>
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FINLAND	<p>An operator is normally considered as having SMP when it has a share exceeding 25% of such a market.</p> <p>In addition to the market share criteria, the following issues have also to be taken into account: Resources; Mother company's power to influence Finnish markets; Pricing practices that bind the customers; Daughter companies which can use the mother company's customer base; and Experience in providing telecommunication services.</p> <p>A decision on which operators have SMP is usually taken every year in consultation with operators.</p>
FRANCE	<p>The criteria for determining whether an operator has SMP will be applied on case by case basis and a decision will be taken every year in consultation with the Competition Authority.</p>
GERMANY	<p>As the application of regulatory mechanisms to the special features of the telecommunication sector is something new in Germany, experience in practical application can solely be gained, for the time being, through decisions taken on a case-by-case basis in accordance with the provisions of the Law against Restraint of Competition.</p>
ITALY	<p>In order to determine whether an operator has had a dominant position in a relevant market in the telecommunications sector, the Competition Authority, in some law-cases, has applied the following case-by-case approach which can be expected to be applied in the future too for determining the presumption of a significant market power:</p> <ul style="list-style-type: none">-a structural analysis of the relevant market in question and a detailed collection of information, also through direct discussions with the operator involved, with the aim of making available data on certain criteria aimed at determining the SMP. The criteria applied differ from case to case.
NETHERLANDS	<p>The regulators are of the opinion that the incumbent ex-monopolist (KPN) will continue to have a significant market position in the market for years to come. If in the future either the regulators or KPN feel that the situation has changed, a decision will be taken on a case-by-case basis. Because of the close relation between these provisions and the competition law, OPTA has agreed to consult the Ministry of Economic Affairs when classifying an operator as having a significant market position in a relevant market.</p>
SPAIN	<p>Until 1 December 1998, the date of full liberalisation, dominant operators are those operators of basic telephony at a national level who have obtained, within the determined territorial limits, an authorisation and, during the immediately previous year, more than 25% market share in terms of gross income from the service in question.</p>
SWEDEN	<p>Criteria for determining whether an operator has SMP are applied on a case-by-case basis according to competition rules.</p>
SWITZERLAND	<p>In the present regulation there is no reference to "SMP", but to</p>

“enterprises having a dominant position in the market” (behaving in an independent manner with regard to the other participants in the market).

The important criteria to be considered are number, quality and position of potential competitors, barriers to entry (official and de facto) and market share.

UK In November 1997 OFTEL published a *Consultative Document* (“Identification of SMP for the purpose of the EU Interconnection Directive”) setting out the UK approach to identifying SMP and explaining which operators it proposes to determine as having SMP, in compliance with Article 18 of the Interconnection Directive. A follow-up *Statement*, with the same title, was published in February 1998.

3.3 -Reference interconnection offer

DENMARK More specific rules on the standard interconnection offer have not yet been laid down by the Minister responsible for telecommunications

FINLAND Operators with significant market power must publish the conditions for interconnection including specifications.
Further details are not available at the moment.

FRANCE France Télécom’s reference interconnection offer was approved by the NRA in July 1997. All details of the offer are described in Annex 5 under the paragraph covering France.

GERMANY The publication of a standard offer is foreseen in the Ordinance concerning Special Network Access. Deutsche Telekom has prepared a standard agreement for the interconnection of its public telecommunications networks and telecommunications networks of other operators. Such a standard agreement can be obtained from Deutsche Telekom.

ITALY Telecom Italia has published its reference interconnection offer within the deadline of 1 July 1997 All details of the offer are described in Annex 5 under the paragraph covering Italy.

According to regulation, such an offer shall include

- the description of the interconnection offerings broken down into components, according to market needs, and the associated terms and conditions.

NETHERLANDS KPN has a standard interconnection offer, but it has not been officially approved by the Ministry. Whenever a complaint is received with regard to the interconnection offer, including interconnection charges, the Minister will analyse the part of the standard offer subject to the complaint and could oblige KPN to modify the parts of the offer which are under discussion.

SPAIN All provisions about interconnection services and interconnection terms and conditions, including tariffs, for interconnection between the

dominant operator and other authorised operators, are included in the Ministerial Order on Interconnection.

- SWEDEN **Telia has a model interconnection agreement** that is a publicly available reference interconnection offer.
- SWITZERLAND National regulation on the subject is not ready yet.
- UK Operators with SMP in the fixed network and service market are required to offer to enter into agreements, to observe the principle of non-discrimination (including non-discrimination in such agreements) and to make offers that meet the Interconnection Directive requirements for a Reference Interconnection Offer.

3.4 -Interconnection charges

- DENMARK Obligations on interconnection charges are applicable only to providers of telecommunications networks or services who have SMP in the combined markets of fixed networks and mobile communications, in the market of leased lines or in the market of fixed networks. These obligations are that interconnection prices must be based on the **Long Run Average Incremental Costs** method with the addition of a reasonable profit.
In a transitional period the calculation of the prices will be based on a more straightforward method.
- FINLAND Interconnection charges must be public, broken down into components and in relation to costs (including profit on investments).
Operators shall publish a price list including conditions.
Further details not available at the moment.
- FRANCE “Interconnection tariffs for a given year shall be based on the forecast relevant **average historic costs** for the year in question, evaluated by the NRA taking into account:
-the efficiency of new investments made or forecast by the operator in view of industrially-available state of the art technology;
-international benchmarks for interconnection tariffs and costs”.
France Télécom costs which have to be charged to interconnection services include:
-general network costs (shared between interconnection services and other services)
-costs specific to interconnection services (fully allocated)
-relevant common costs (shared between interconnection services and other services).
In a second step, interconnection charges shall be based on **Long Run Incremental Costs**. The NRA will introduce this method for the determination of 1999 interconnection tariffs.
- GERMANY A level of interconnection charges has been established on a case by case basis in accordance with article 37 of the Telecommunications Act. An action against this decision has been brought before the

administrative court.

ITALY

Interconnection charges have to be based on **actual costs** determined in accordance with an accounting system which allows breakdown into the following elements:

- a. **direct costs** for the installation, functioning, maintenance and commercialisation of public networks and telecommunications services publicly available;
- b. **common costs**, which cannot be directly allocated.

Other cost accounting systems may be applied, in particular the system of **Long Run Incremental Costs**, which will include the normal rate of return of the capital invested for that purpose.

Charges for interconnection consist of single prices established for each network section or structure provided to the interconnected party.

NETHERLANDS

For the time being whenever there is a complaint about KPN interconnection charges, the Minister analyses the interconnection charges offered by KPN and can oblige KPN to modify them, if judged as too high. For the moment a decision has been taken on a dispute which specifies an interim interconnection charge. The definitive interconnection charges have to be published before 1 July 1998.

SPAIN

The charges for traffic interchanges between the interconnected organisations shall always be calculated on the basis of the traffic actually carried out, meaning the traffic terminated at the destination wished by the user. The maximum levels of interconnection tariffs to be applied, expressed in pesetas per minute, are contained in the Ministerial Order on Interconnection.

SWEDEN

Interconnection charges as agreed in interconnection agreements are not in the public domain. However, Telia has published a price-list that serves as a basis for negotiation; in reality there could be deviations from the published tariffs.

Current prices in Telia's price-list include payment for the actual connection. The operator's costs for the line between his own and Telia's network are thus not included in the connection price.

Payment for the **connection includes:**

- a. a **non-recurrent fee** and an **annual charge for the point of interconnection**
- b. a **non-recurrent fee** and an **annual charge for each PCM system inlet used at Telia's telephone exchange**

- SWITZERLAND National regulation on the subject is not ready yet.
- UK Fixed service operators with SMP are required to publish a list of standard interconnect services detailing the charges for each individual service. Such operators must give 28 days notice of any changes to the list where competitive services are concerned and 90 days of notice of any changes where non-competitive services are concerned.

3.5 -Interconnection agreements

- DENMARK The NRA shall ensure that interconnection agreements (submitted to the NRA immediately after establishment) and the terms for interconnection are made available to the public.
If a party to an agreement so requests when the agreement is submitted, the NRA may decide that parts containing information of essential commercial significance to the party shall not be made available to the public. However, prices for interconnection and other terms of general importance shall always be made available to the public.
- FINLAND Interconnection agreements shall be communicated to the Ministry where they are publicly available, except those parts, decided by the Ministry, that concern the commercial strategy of the company.
Further details not available at the moment.
- FRANCE The interconnection agreement shall be communicated to the NRA less than ten days after its conclusion. The NRA may make available to interested parties, on request, the information contained therein, without prejudice to information covered by commercial confidentiality.
When essential for the purpose of fair competition and interoperability of services, the NRA may ask for the agreement to be modified, after consultation with the Competition Authority.
- Interconnection agreements should specify as a minimum, unless agreed otherwise with the NRA:
-general principles
-description of the interconnection services provided and the corresponding remuneration
-technical characteristics of interconnection services
-arrangements for the establishment of interconnection.
- GERMANY A standard interconnection agreement can be obtained from Deutsche Telekom.

ITALY	<p>The NRA shall ensure that interconnection agreements (submitted to the NRA immediately after establishment) and the terms for interconnection are made available, on request, to interested parties, except for information of essential commercial significance.</p> <p>However, prices for interconnection and other terms of general importance shall always be made available to the public.</p> <p>The NRA shall make public details about offices and hours in which the interested parties, on request and without payment, can have access to the above-mentioned information.</p> <p>Content of agreements: as in Annex 7 of the Interconnection Directive.</p>
NETHERLANDS	National regulation on the subject is not ready yet.
SPAIN	<p>All interconnection conditions shall be agreed upon between the interconnecting parties within two months from the formal request for interconnection.</p> <p>If, after the two month period, an agreement has not been reached, the conditions included in the Annex to the Ministerial Order on Interconnection shall apply: technical and operational conditions, conditions related to quality, information interchange, security and risk, as well as all other conditions applicable to interconnection.</p>
SWEDEN	Interconnection agreements are not published and therefore are not in the public domain.
SWITZERLAND	National regulation on the subject is not ready yet.
UK	Operators with SMP in the fixed networks and services market are required to offer a standard interconnection agreement.

3.6 -Accounting separation and Accounting systems suitable to implement provisions on interconnection

DENMARK	<p>The separate accounting system which has to be arranged by operators with SMP for a number of specified business areas must allow, at least, breakdown into the following elements (in accordance with Art.13 of the ONP-Voice Directive 95/62/EC):</p> <ol style="list-style-type: none">a. direct costs for setting up, operating, maintaining, marketing and billing the activity in question;b. common costs, which cannot be directly allocated; these costs are attributed as follows:<ol style="list-style-type: none">1. on the basis of the direct analysis of their origin, whenever that is possible;2. when 1. is not possible, on the basis of an indirect link between these and another category or group of categories of costs for which direct allocation or assignment is possible;3. when 1.and 2. are not possible, a general allocator is applied,
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DENMARK
(continuation)

computed on the basis of the ratio between the expenses directly or indirectly allocated or assigned to the service in question and those related to other services.

FINLAND

Operators shall use a cost accounting system, the description of which should be sent to the Ministry. Such a description has to include the standard costs used, the book-keeping methods, the division of costs into categories and the distribution rules. The cost accounting system is considered as approved if the Ministry does not notify otherwise within one month from receipt. The operator shall keep the description available for interested parties.

FRANCE

The purpose of a separate accounting system is to identify the external transfer price of the activities, services and network components used by these operators or, in the absence of such data, to identify the cost by reference to the tariffs that these operators charge users or operators to interconnect to their networks.

Such an accounting system shall allow in particular for the identification of the following costs:

-general network costs (costs of the network components used both by the operator to provide services to its own users and interconnection services);

-costs specific to interconnection services (costs directly caused only by interconnection services);

-costs specific to the operator's services other than interconnection, (costs caused only by these services);

-common costs (costs which do not fall into one of the above categories)

GERMANY

The principles governing cost accounting for interconnection will be examined as part of the examination of rates on the basis of the procedures.

ITALY	<p>The accounting system which has to be implemented by operators with SMP must allow, at least, breakdown into the following elements (in accordance with Art.13 of the ONP-Voice Directive 95/62/EC):</p> <ol style="list-style-type: none">a. direct costs for the installation, functioning, maintenance and commercialisation of public networks and telecommunications services publicly available;b. common costs, which cannot be directly allocated; these costs are attributed as follows:<ol style="list-style-type: none">1. on the basis of the direct analysis of their origin, whenever that is possible;2. when 1. is not possible, on the basis of an indirect link to another category or group of categories of costs directly allocable or attributable3. when 1.and 2. are not possible, a general attribution parameter is applied, determined on the basis of the relation between the expenses directly attributed to the prevailing service and those related to other services. <p>Other cost accounting systems may be applied, in particular the system of Long Run Incremental Costs. The list of elements which can be included in the cost accounting system is the same as in Annex V of the Interconnection Directive.</p>
NETHERLANDS	<p>National regulation on the subject is not ready yet, but KPN has been obliged to cooperate in the establishment of a cost-accounting/cost-allocation system for the purpose of fixing the definitive interconnection charges.</p> <p>Besides the work done by KPN, a 'bottom-up model' will be developed by OPTA which will help achieve a better understanding of all different issues and difficulties and which must be used to judge the KPN-model at the beginning of 1998.</p>
SPAIN	<p>Not available.</p>
SWEDEN	<p>The licensee shall account for relevant costs and revenues in a documented and transparent calculation model according to generally accepted business and economic principles. The full costs shall be calculated for each service distinguished in the tariffs.</p> <p>Direct costs shall be specified and separated under the following categories: -establishment of the telephony services -operation and maintenance of the telephony service -billing and marketing of the telephony services and -other direct costs with specification.</p> <p>Thereafter, indirect costs (costs which cannot be directly attributed to a separate service) shall be accounted for. Indirect costs shall be accounted for according to a defined cost apportionment basis.</p> <p>The sum of direct and indirect costs shall be accounted for the service.</p>
SWITZERLAND	<p>National regulation on the subject is not ready yet.</p>

UK

BT has been required since 1995 to provide separate regulatory accounts for Access, Network, Retail, Apparatus Supply, Supplemental (enhanced) Services and Residual Businesses. These regulatory accounts are supported by detailed requirements for the cost attribution, valuation and other methodologies needed to produce them – set out in documents agreed with or scrutinised by OFTEL. A similar separation into regulatory accounts will apply to the UK's regional SMP operator (Kingston).

CHAPTER 4 –COMPARATIVE ANALYSIS AND CONCLUSIONS

It has to be recalled that the scope of this study was based on the following consideration:

The advantages of the liberalisation of the telecommunications market cannot be jeopardised by restrictive or abusive practices undertaken by organisations operating in such a market. As a consequence, there is a need to impose specific *a priori* obligations on those organisations which are in the position to undertake restrictive or abusive actions. The Interconnection Directive defines those operators which will presumably act in the market in a way that might jeopardise the advantages of liberalisation as **operators enjoying significant market power in a defined relevant market** and imposes on such operators a set of specific obligations, mainly related to **interconnection and accounting systems**.

From the above consideration, the following problems arose:

1. It appeared necessary to take a comprehensive view, in European countries, of national practices with regard to **the criteria which have to be taken into account when determining whether an operator has significant market power**. These criteria might not be uniform throughout Europe, but subject to national interpretation varying from country to country.
2. It appeared necessary to analyse the **criteria used by different NRAs in determining the relevant market**, in order to verify how in practice the different European NRAs determine the relevant market in which an operator might have significant market power. These criteria might also in fact not be uniform throughout Europe, but could be based on divergent interpretations in different countries.
3. The ONP-obligations related to **Interconnection and Accounting systems** also appeared to be an area where further studies could be conducted in order to identify common European approaches. The practical implementation of obligations on interconnection and accounting systems imposed on operators with significant market power in accordance with the Interconnection Directive might not be uniform throughout Europe but subject to national interpretation which may vary from country to country.

The following section presents a comparative analysis of the information collected in Chapter 2 (and Annex 4) and through the survey described in Chapter 3 (and Annex 5).

The comparative analysis is based on the countries for which information is available, i.e. those EU members, plus Switzerland, which have already issued a new regulatory framework (or have at least prepared a draft of it), containing provisions on regulating operators with significant market power, as of November 1997.

The 10 countries are: Denmark, France, Finland, Germany, Italy, The Netherlands, Spain, Sweden and Switzerland and the United Kingdom.

In order to provide a complete picture of the present situation within the Union, some information on the other EU members which have not yet defined their regulation on SMP operators is also added. This brings the number of countries in the sample to 16.

The last paragraph of this section presents the conclusions of the study.

4.1 – Definition of operators with significant market power

In 40% of the analysed countries, a definition of operator with significant market power has not been implemented yet.

In almost 78% of the remaining 60%, the definition used is the same as in the Interconnection Directive (with Spain only using the criterion of 25% market share). The remaining countries use definitions based on competition law, an example of this being Germany where the provisions of §22 of the Law against Restraints of Competition apply to the definition of a market-dominating position in the telecommunication sector.

4.2 – Practical application of the criteria for determining whether an operator has significant market power

In 40% of the analysed countries, practical implementation of the criteria for determining whether an operator has significant market power has not yet been defined.

Of the countries which have defined how to implement the criteria for determining SMP, more than 55% apply competition rules/criteria and at least 22% of them clearly declare that they apply the criteria in collaboration/consultation with the body in charge of competition. In Spain, due to the fact that the country has established its special schedule in the process of liberalisation, criteria on how to determine operators with significant market power are temporarily pre-defined in the Ministerial Order on Interconnection.

4.3 – Criteria for determining the relevant market

In 40% of the analysed countries, practical implementation of the criteria for determining the relevant market has not yet been defined.

Of the countries which have defined how to implement the criteria for determining the relevant market, more than 55% apply competition rules/criteria and at least one country clearly states its intention to do this in collaboration/consultation with the body in charge of competition. In Finland the relevant markets are pre-defined by the NRA on the basis of two criteria: type of telecommunications and geographical areas.

4.4 – Reference Interconnection Offer (RIO)

In 60% of the analysed countries, provisions related to the RIO have not been defined yet.

The remaining 40% have implemented provisions on the RIO in accordance with the Interconnection Directive, either as a RIO published by the ex-monopolist, or as the model interconnection agreement of the incumbent operator or through rules defined by Decree.

4.5 – Interconnection charges

In 53% of the analysed countries, provisions on interconnection charges have not been defined yet.

The remaining 47% have implemented the provision of the Interconnection Directive in very different ways. One country has decided to implement the LRIC as Long Run Average Incremental Cost. One country has decided to use historic cost with a view of introducing LRIC in a second step, without specifying how. Three countries only specify that interconnection charges have to be based on actual costs, without further specifying the methodology to be adopted, but one of these foresees the implementation of LRIC in the future, without specifying how. Two countries, for the time being, have defined the interconnection charges by Decree/Guidelines, and one of these foresees the implementation of the methodology of Embedded Direct Cost in a second step.

4.6 – Interconnection agreements

In 53% of the analysed countries, provisions on interconnection agreements have not been defined yet.

The remaining countries have implemented provisions on interconnection agreements according to the Interconnection Directive, i.e. the interconnection agreements involving SMP have to be publicly available, except for the confidential commercial parts. The only difference is that in some countries it is specified that the agreements have to be available on request to interested parties, while others simply say that they have to be publicly available. For one country, detailed information on this subject is not available.

4.7 – Accounting systems and accounting separation

Only 5 of the 16 countries included in the sample have already implemented detailed provisions on the development, by SMP operators, of accounting systems suitable for the implementation of the provisions on interconnection. With different levels of detail, all countries implement the provision in accordance with the new ONP-Voice Directive: an accounting system which must allow, at least, the breakdown of the cost elements into “direct costs” and “common costs”.

4.8 – Conclusions

The following paragraph presents some conclusive analysis of the information collected and proposes some ETO recommendations. Conclusions and proposals are based on the following considerations:

- a- Analysis of different aspects of EU and national regulations with regard to operators with significant market power with the aim of identifying the existing level of harmonisation;
- b- Identification of aspects of the regulation of operators with significant market power which is not uniform throughout Europe but subject to national interpretation which may vary from country to country.

From the analysis undertaken in this study with regard to:

- **criteria used for determining whether an operator has significant market power;**
- **criteria used for determining the relevant market**

it became evident that:

- 1. the approach used by NRAs in implementing the ONP-Interconnection Directive rules is combined and strictly interfused with the concepts of dominant position in accordance with the Community competition rules;**
- 2. the application of the criteria differs significantly from country to country.**

The conclusion stated at point 1. above is not particularly surprising, since the Commission itself has recognised that “..... *it is obvious that Community acts adopted in the telecommunications sector are to be interpreted in a way consistent with competition rules, so as to ensure the best possible implementation of all aspects of the Community telecommunications policy.....This applies, inter alia, to the relationship between competition rules applicable to undertakings and the ONP rules*”.

And also: “*NRAs may require strict standards of transparency, obligations to supply and pricing practices on the market, particularly when this is necessary in early stages of liberalisation. When appropriate, legislation such as the ONP framework will be used as an aid in the interpretation of the competition rules. Given the duty resting on NRAs to ensure that effective competition is possible, application of the competition rules is likewise required for an appropriate interpretation of the ONP principles*”.

It is worth noting that the objectives of the sector-specific ONP-rules and competition rules, even if coherent, are different. Nevertheless, the practical implementation of the ONP-rules by the NRAs of European countries seems to be carried out in strict interrelation with competition rules and in consultation with national Competition Authorities. Thus, policies aimed at different goals from a theoretical point of view, seem to become very close to each other in their practical implementation.

Due to the particularities of the telecommunications sector, the aim of ensuring competition in the market corresponds, particularly in an early stage, to the aim of ensuring new entrants "access to essential facilities". According to the Commission's view, an essential facility in the telecommunications sector is, for example, the public telecommunications network for voice services; leased circuit and related network terminating equipment; basic data regarding subscribers, customer information, etc. Therefore, in ensuring the development of competition in the sector, particular care should be paid by NRAs to operators controlling the access to essential facilities. It must be noted that the notion of operator controlling essential facilities, in accordance with the Commission's view, actually corresponds to the definition of a "dominant operator" in the telecommunications sector.

This shows, once again, the strict correlation between the application of ONP-rules and competition rules.

It is therefore recommendable for those countries which are still in the process of defining their regulation of operators with significant market power to do so taking into account the interrelation between ONP-rules and competition rules.

The conclusion stated at point 2. above implies the **need for a certain level of harmonisation, at the European level, on the principles used for determining both SMP and relevant markets.**

At this point of time such a harmonisation might be premature, since many countries still have to implement the ONP-rules in their national legislation and in those countries which have implemented the ONP-rules, the practical applications of the criteria still have to be proven. However,

In the near future it is recommendable to harmonise the application of the basic principles used for defining the relevant market and for determining whether an operator has significant market power, in order to avoid divergent interpretations and distortions among European countries.

When defining the relevant geographical market it is recommendable to take into account the pan-European dimension of the market.

The opinion of the telecommunications industry on the above recommendations is presented in Annex 6, which consists of a summary of the comments collected during a Workshop held in Brussels on 21 October 1997 with the aim of presenting and discussing three ETO studies, including the one on "Regulating operators with significant market power".

Concerning the need to promote a common understanding of certain aspects of the ONP-rules, it must be recalled that the ONP Committee is working on a document addressing the issue of significant market power. The document, which as of December 1997 is still a working document for discussion and does not represent a formal position of the European Commission, gives an interpretation of how the concepts of “significant market power” and “particular telecommunications market” used in the Interconnection Directive have to be understood.

From the analysis undertaken in the ETO study with regard to:

- **Reference interconnection offer**
- **Interconnection agreements**

it became evident that:

- **All countries which have already developed national regulation on the issues have done this in a sufficiently harmonised way in accordance with the ONP-Interconnection Directive. In this sense, no further harmonisation is necessary.**

With regard to the actual content of interconnection agreements, a certain level of harmonisation seems to be desirable in order to avoid divergence which might prevent the development of effective competition within the internal market.

A substantial amount of work on the issue has been already done by the European Interconnection Forum (EIF) with the development of the “Framework Interconnection Agreement Guidelines” and the “Code of Practice for Special Network Access”, which are living documents reflecting agreed industry practices.

With regard to the necessity of a certain level of harmonisation of the content of interconnection agreements, ETO refers to the work done by the EIF.

The documents produced by the EIF (the “Framework Interconnection Agreement Guidelines” and the “Code of Practice for Special Network Access”) can be considered as a very widely accepted industry self-regulation. The possibility of an official endorsement and recognition of these documents by institutional bodies is being discussed.

With regard to the necessity of a high level of transparency of interconnection agreements, ETO proposes to investigate whether an archive of interconnection agreements available on a Web site is desirable.

The opinion of the telecommunications industry on the above recommendations is presented in Annex 6, which summarises the discussion of this study with the representatives of industry during a Workshop held in Brussels. The result of this discussion, which can be considered as a first investigation of the desirability of an archive of interconnection agreements published on the Web, led to the conclusion that such a publication is not at all desirable. If operators with SMP are obliged to behave

in accordance with the non-discriminatory principle, the publication of their interconnection agreements with new entrants is not the solution for controlling their behaviour.

It is the opinion of the industry that the only way to ensure that operators with significant market power behave in a non-discriminatory way is a real harmonisation and publication of their Reference Interconnection Offer.

ETO therefore proposes to work, in collaboration with relevant parties, on the harmonisation and easily accessible publication of the Reference Interconnection Offer of operators with significant market power.

From the analysis undertaken in this study with regard to:

- **Interconnection prices**
- **Accounting systems suitable to implement provisions on interconnection**

it became evident that:

- **The implementation of these provisions by NRAs differs significantly from country to country.**

The need for harmonisation of the principles for interconnection charges and the underlying principles for accounting systems is urged, particularly by operators.

The trend towards the use of the LRIC methodology is not so clear among the countries analysed in the study. And even if LRIC proves to be the most commonly adopted methodology, it is not clear yet which kind of LRIC should be the preferable one.

ETO proposes to work, in collaboration with relevant parties, on the development of a harmonised set of principles for accounting systems.

The European Commission has recently published the first part of a Recommendation on Interconnection in a liberalised telecommunications market. The purpose of this first part is to make available to the NRAs in the Member States information concerning best practice for interconnection charges, while the second part will provide recommendations on cost accounting and accounting separation.

The ETO proposal aims at concentrating, together with the industry, on the harmonisation of the details contained in the principles and best practices set out by the Commission in its Recommendation.

The opinion of the telecommunications industry on the above recommendations is presented in Annex 6.

ANNEX 1 -WORKORDER ON “REGULATING DOMINANT OPERATORS” SIGNED BY ETO WITH THE EUROPEAN COMMISSION

Purpose

To identify and analyse the obligations of dominant operators of public networks and telecommunications services, and to propose harmonised conditions to be attached to authorisations of dominant operators in CEPT/ECTRA countries, after the liberalisation of voice telephony services and infrastructure in the European Union.

Justification

The Council resolution of 22 July 1993 on the review of the situation in the telecommunications sectors and the need for further development in that market, establishing the timetable of the liberalisation of telecommunications services, including additional periods of up to five years to five Member States.

The Council resolution of 18 September 1995 on the implementation of the future regulatory framework for telecommunications, inviting the Member States to foster the establishment of dynamic competition by defining and publishing at the earliest opportunity, with a view to the future Community regulatory framework, the general authorisation and individual licensing regimes applicable to the whole telecommunication sector.

The Proposal of 14 November 1995 for a “European Parliament and Council Directive on a common framework for general authorisations and individual licences in the field of telecommunications services” which goes beyond the objectives of ensuring full Union-wide competition and harmonising national legislation, but also reflects the role of authorisation regimes in imposing rights and obligations and in monitoring the market.

Annex 1 of the above-mentioned proposal for a directive (14 November 1995) listing the only conditions which may be attached to authorisations.

The Proposal for a European Parliament and Council Directive on Interconnection in Telecommunications with regard to ensuring universal service and interoperability through application of the principles of Open Network Provision (ONP).

The Proposal for a European Parliament and Council Directive amending Council Directives 90/387/EEC and 92/44/EEC for the purpose of adaptation to a competitive environment in telecommunications.

Work requirements

- (1) to identify and analyse obligations attached to authorisations of dominant telecommunications operators as well as the legal means used to implement them. The work will aim at identifying and analysing obligations which are specific to dominant operators and are not applicable to non-dominant operators.
- (2) to describe and analyse new areas or new markets where dominant positions could be established after the liberalisation of telecommunications services or infrastructures.
- (3) to analyse criteria identifying dominant positions in specific markets.
- (4) to propose a set of harmonised obligations which may be included in the future set of licensing conditions to be imposed on dominant telecommunications operators.

Execution

The final report on this work requirement will be made available to the Commission, on 15 July 1997.

Deliverables

Two interim reports and one final report shall be delivered.

The first interim report shall be delivered during the course of the work, containing identification and analysis of obligations to be included in authorisations of telecommunications dominant operators; and description and analysis of areas or markets to be considered for such licensing conditions (October 1996).

The second interim report shall contain the draft findings and proposals as they will be submitted to CEPT/ECTRA for approval (March 1997).

The final report shall contain the findings and proposals, as approved by CEPT/ECTRA and will include any comments individual CEPT/ECTRA members have on the implementation with regard to their respective national regimes.

All reports shall be made available in draft form one month before a liaison meeting at which the results will be discussed and approval can be given for their release.

The Commission shall receive three copies of the interim reports, while the approved final report shall be made available in 15 bound copies, one unbound copy and one copy on floppy disk in Word for Windows V2.0 format. Graphics shall be made available on separate hard copies.

Manpower

It is expected that this task can be accomplished in 12 man-months of effort at expert level, including subcontracting.

Subcontracting

Work Order n. 48370

Regulating Operators with
Significant Market Power

15 April 1998

Subcontracts may be given to external experts for the execution of parts of this contract, representing 2 man-months.

ANNEX 2 -CONTRACT BETWEEN ETO AND SAGATEL ON “REGULATING DOMINANT OPERATORS”

The purpose of this ETO study is to identify and analyse the telecommunication-specific obligations of dominant telecommunications operators and to propose harmonised conditions to be attached to the authorisation of operators with significant market power in CEPT/ECTRA countries after the liberalisation of voice telephony services and infrastructure in the European Union. The study will aim at identifying and analysing those obligations which are specific to operators with significant market power and which are not applicable to other operators.

ETO's study should result in a proposal for a set of licensing conditions which may be included in the future set of licensing conditions to be imposed on telecommunications operators which have significant market power.

The tasks of the subcontractor with regard to this study are the following:-

Work requirements:

- (1) to identify how the concept of dominant telecommunications operator has been interpreted in new national legislation/regulation and to identify whether the concept of dominant operator differs for different categories of services and between services and networks;
- (2) to collect information on how new national legislation/regulations regulate telecommunications dominant operators (in an asymmetric or non-asymmetric way);
- (3) to identify conditions which are specific to dominant operators and to identify where, in national regulations, the conditions to be fulfilled by dominant operators are set (general law, telecommunication specific regulation, licences, etc.) and how national administrations control dominant telecommunications operators;
- (4) to collect information on the regulation of dominant operators from present dominant operators in those European countries in which the telecommunications sector has already been liberalised e.g. the UK and Sweden;
- (5) to identify issues which are still under discussion in the related countries and which require further study;
- (6) to give a short overview of the situation in non-European countries where the telecommunications sector has already been liberalised e.g. United States and Japan.

The study, to be based on work requirements 1-5 listed above, should be conducted in the following countries:-

a) EEA countries:

Austria, Belgium Denmark, France, Finland, Germany, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, the UK;

b) Other CEPT countries:

Albania, Andorra, Bosnia, Bulgaria, Croatia, Cyprus, Czech republic, Estonia, Hungary, Latvia, Lithuania, Malta, Moldova, Monaco, Poland, Romania, Russian Federation, San Marino, Slovak republic, Slovenia, Switzerland, The former Yugoslav Republic of Macedonia, Turkey, Ukraine, Vatican City.

Information on EEA countries has to be as complete and exhaustive as possible; for other CEPT countries, information should be provided where applicable/available.

Execution:

The final report on this study will be made available to ETO on 1 October 1996. The subcontractor will give a presentation of the study to ETO and the ECTRA Project Team on Licensing at a meeting which will be held in a European country after 1 October 1996.

Manpower:

The task is evaluated at 2 man-months.

ANNEX 3- THEORETICAL CONSIDERATIONS

-Introduction

The telecommunications sector is going through a period of transition from *regulated monopoly* to *competition*. The sector has historically been considered a natural monopoly, i.e. an industry the nature of which required a single supplier in order to avoid overlapping and duplication of activities and the functioning of which was based on the existence of clear State regulation. The transition of this industry to perfect competition would mean a transformation of the sector from a regulated monopoly to a situation where all parties enjoy the same freedom, have the same responsibilities and rights and respect the same obligations and constraints. In reality, no institutional regime is perfect and States very soon find out that the goal of promoting efficiency cannot be reached merely through the indirect means of competition and that they have to maintain some form of direct regulation in the sector. Therefore, it is probably more correct to say that the transition is from *regulated monopoly* to *regulated competition*.

Moreover, it is also necessary to consider that in the transitional period from monopoly to competition it is very important to analyse whether ex-monopolists, which inherited from their past an incumbent position, can be considered as *dominant operators* and whether other telecommunications operators can also enjoy a dominant position and, if so, in which areas of the market.

Furthermore, the elimination of the former monopolies leads to the entry into the market of new players. Since it has been assessed that some kind of regulation is also necessary in the competitive market, the question is whether to apply rules to dominant and non-dominant operators in a symmetric or asymmetric manner. The scope of this report assumes the application of asymmetric regulation, at least in the transitional period from monopoly to competition, but it is nevertheless useful to refer to the two different approaches.

The theoretical considerations of this chapter have been used as a guideline for analysing the different national situations with regard to the regulation of dominant operators in this report.

The implications of regulation in a competitive environment are analysed in **paragraph 1**.

Paragraph 2 examines some approaches for determining whether an operator has significant market power in a relevant market.

Paragraphs 3 and 4 give indicative definitions of symmetric and asymmetric regulation.

1 - Competition and regulation

A theoretical framework of the relation between regulation and competition in public utilities in general² can be used to give an overview of the relation between competition and regulation in the *deregulated* telecommunications sector of Europe in the future.

Deregulation of the monopolistic telecommunications industry means in practice the removal of those barriers which the State imposed in the past against competition and against the operation of a free market. There is a general agreement that competition will have at least the following positive results:

- Higher competition in prices of services, in comparison with the previous situation of prescribed tariffs;
- Individual prices of services much more in line with their respective costs (with important exceptions, nevertheless);
- Increased productivity/efficiency;
- Differentiation of the available services in terms of variety of quality/price options;
- Substantial increases in the quality of services.

Despite these undoubted advantages, it can be expected, from the experience gained in other sectors, that competition will also result in a number of imperfections, among which may be:

- Proliferation of companies offering low cost/low quality options, which were forbidden under the monopoly regime;
- Concentration of the industry, with the risk of bringing the industry back to a sort of new monopoly (through the disappearance of all low cost/low quality companies and the reduction of the industry to a very limited number of large dominant companies);
- Increases in price discrimination, with great advantages for large users who have a larger negotiation power and can compare different offers.

Faced with this contradictory situation (advantages and disadvantages of competition), governments can decide (i) to do nothing and go along with the intrinsic imperfections of competition, or (ii) they can take cognisance of the fact that deregulation does not at all mean a complete *laissez-faire* and that liberalisation is not supposed to relieve governments of a great variety of functions, but that actually these functions will assume even greater importance.

The preference of European governments seems to be in the direction of option (ii).

The necessity for maintaining a certain quantity of direct regulation in the liberalised telecommunications sector is justified for two major reasons:

1. Users of telecommunications services can be harmed by disadvantages of competition;
2. Ex-monopolists and other dominant operators could compete unfairly with new entrants in the market.

² The theoretical framework used here is based on "Regulation and Competition in Public Utilities: a Theoretical Framework", Alfred E. Kahn, Cornell University of Ithaca (NY).

1) The need to protect users from the disadvantages of competition results from the imperfections of competition described above (proliferation of low cost/low quality options; increases in price discrimination; etc.), and also from the fact that under the regulated monopoly the ex-monopolists fulfilled a wide variety of social goals (nation-wide average pricing, obligations to provide a minimum range of services of specified quality at an affordable price, access to emergency services, etc.) which they were only able to carry out because of their regulated monopoly status. Society still expects these obligations to be met in the new liberalised telecommunications sector, but it is to be expected that many of these goals cannot be achieved in a completely unregulated competitive market.

2) Unfair competition from ex-monopolists and other dominant operators can be described as follows:

- As long as ex-monopolists and dominant operators are regulated on the basis of their total costs, there is always the risk that they can counter-subsidise services offered in areas more open to competition at the expense of services offered in less or non-competitive areas. This means that ex-monopolists and other dominant operators can reduce the prices of services in competitive areas in order to exclude competitors or force them out of the market and charge their possible losses or subsidies on their captive customers.
- Ex-monopolists and other dominant operators can exercise control over “bottlenecks” to which their potential competitors must have access in order to reach final users (e.g. local loop, information on subscribers of high commercial interest, scarce resources). In this way, they can make it impossible for new entrants to compete on a level playing field.

From the above considerations, it is possible to conclude that competition in the telecommunications sector will certainly work and will bring many undoubted advantages, but it will also create discrepancies and distortions which require intervention and integration by the State. State intervention should be aimed at enhancing anti-trust laws and at using regulation in order to guarantee equal competitive opportunities to all players in the market and the protection of users. It is essential that all regulatory policies chosen by governments are not in contradiction to the main objective of promoting efficiency through the means of competition.

In the context of this study, coherence between regulatory policies and the establishment of competition in the telecommunications sector in European countries has to be seen both at Community and national level.

The presentation and analysis of national legislation/regulation in CEPT countries with regard to dominant operators in Chapter 2 of this report has been prepared in the light of Community provisions on this issue, but it also takes into account national specificity with regard to the relation between national policies promoting competition and regulatory policies seen as proxies for competition, i.e. regulations “replacing” competition by “imitating” it through artificial interventions aimed at creating the desirable competitive environment.

2 -Approaches for determining whether an operator has significant market power

Controlling the behaviour and agreements of dominant players in the context of liberalisation of the telecommunications sector is apparently one of the main issues to be tackled when developing a regulatory framework consistent with the aim of establishing competition.

Whether or not an operator is in the position to dominate the market is a fundamental issue in determining whether specific regulation applies to this operator.

Different approaches for determining whether an operator has significant market power can be found in economic theory, in practical law-cases, in Community and national legislation.

2.1 -Juridical approaches

The following is an overview of some juridical approaches to assessing “dominance”.

Generally speaking, dominance is primarily considered as a measure of market power in a relevant market. There is some doubt, however, as to whether dominance *exclusively* concerns market power. Given the lack of a precise, fully agreed formulation, it appears to be a good solution to try to assess dominance through different approaches based on lines of reasoning proposed by the case law authorities. All different approaches proposed below share nevertheless a common focus on market power as the primary relevant measure³.

The Australasian Courts proposed, in some specific cases, to give the term “dominance” the following ordinary (dictionary) meaning:

- dominance is something less than control, and similar to having a **commanding influence in the market**.

Significantly, though, in assessing whether this threshold was reached, the Courts proposed that five main factors be considered, all of which are well-accepted indicators of market power:

1. the degree of market concentration, and market shares
2. the ability to determine prices independently without being consistently inhibited
3. barriers to entry
4. the extent to which products are characterised by product differentiation and sales promotion
5. the character of corporate relationship and integration.

Another view of “dominance” is that it is essentially “market power” at a high degree, defined as the **ability to behave independently of competitive constraint**. The Australian High Court proposed the following:

- market power means the ability of a firm to raise prices above the supply cost without rivals taking away customers in due time, supply cost being the minimum cost an efficient firm would incur in producing the product.

³ This overview is based on an enquiry of AUSTEL (Australian Telecommunications Authority) about whether Telstra (the Australian PTO) is in a position to dominate the international telecommunications services market.

Further:

- A firm possesses market power when it can behave persistently in a manner different from the behaviour that a competitive market would enforce on a firm facing otherwise similar cost and demand conditions.

A different view of the meaning of dominant position, again including the concept of independent behaviour, has been adopted by the European Court⁴:

- Such a position does not preclude some competition, which it does when there is a monopoly or quasi-monopoly, but enables the undertaking which profits by it, if not to determine, at least to have an appreciable influence on the condition under which competition will develop, and in any case to act largely in disregard of it so long as such conduct does not operate to its detriment.

Another formulation of dominance is the following:

- If the size or strength of an entity is such that, in practice, **other entities are unable or unwilling actively to compete** with it in a particular market, that entity is dominant in that market⁵.

2.2 -Economic approaches

The following two economic explanations of market power, are useful for the scope of this study:

- From an economic perspective, market power is summarised by the price elasticity of demand⁶ facing the firm (not the industry)⁷. The greater the price elasticity, the less scope the firm has for independent pricing (market power) and the higher the equilibrium price-cost margin. It is well known that any profit maximising firm (under uniform pricing) sets the price-marginal cost mark-up equal to the reciprocal of the price elasticity of demand it faces⁸.
- Market power is the ability to raise prices above costs without suffering serious competitive consequences. In price theoretical terms, market power is measured as the inverse of the elasticity of demand a firm confronts. Elasticity is a measure of

⁴ European Court in *Hoffman-La Roche AG v ECC* (1979) 3 CMLR 211 (“*Hoffman-La Roche*”)

⁵ Wilcox J in AMH (1988) ATPR 40-876 at 49,496.

⁶ Elasticity of demand is: $\varepsilon = -(\text{Percent changes in quantity} / \text{Percent changes in price})$. It is a measure of how strongly the quantity demanded responds to a change in prices.

⁷ The demand for an individual firm’s product is different than that for the whole industry, and the elasticity of demand for a single firm is greater than the elasticity of demand for the entire industry when the products of other firms in the industry are close substitutes for the product of any one particular firm. Each firm faces many close substitutes, having therefore a highly elastic demand. However, for the industry as a whole, the substitute products are not so close or numerous, so the elasticity is lower.

⁸ Schankerman, Mark “Symmetric Regulation for a Competitive Era”, paper prepared for the Twenty-Sixth Annual Conference of the Institute of Public Utilities, Williamsburg, Virginia (December 1994)

demand sensitivity. If demand is very sensitive to price changes (because of the availability of substitute products), elasticity is large and its inverse is small⁹.

From the two definitions given above, it is possible to conclude that from a theoretical economic point of view, market power, seen as the ability to behave independently of competitors, depends on the absence of substitute products in the relevant market.

2.3 -The need to define the relevant market

In order to determine whether an organisation has significant market power in a relevant market, the first problem to be solved is the definition of a relevant market

With regard to the definition of a relevant market, it is important to keep in mind the following:

- in the Commission's definition of SMP¹⁰, the reference to *the geographical area in a Member State* seems to refer not to the identification of the relevant market, but to the scope of applicability of the regulation.
- the concept of "relevant market" does not have an absolute value, but a relative value. It is a concept essentially useful for selecting the information which is interesting in evaluating a specific case. The 25% market share of an organisation, its ability to influence market conditions, its turnover relative to the size of the market, its control of the means of access to end-users, its access to financial resources and its experience in providing products and services in the market are all structural parameters which have to be identified "in reference to a relevant market".

⁹ Haring, John "Implications of Asymmetric Regulation for Competition Policy Analysis"

¹⁰ According to Article 4 of the proposed "Interconnection Directive":

- An organisation shall be presumed to have significant market power when it has a share of more than 25% of a particular telecommunications market in the geographical area in a Member State within which it is authorised to operate.

NRAs may nevertheless determine that an organisation with a market share of less than 25% in the relevant market has significant market power or that an organisation with a market share of more than 25% in the relevant market does not have significant market power. In either case, the determination shall take into account:

- i. the organisation's ability to influence market conditions
- ii. its turnover relative to the size of the market
- iii. its control of the means of access to end-users
- iv. its access to financial resources
- v. its experience in providing products and services in the market.

In determining whether an operator has significant market power, the “relevant market” is the context (set of products/services or geographical area) in which an operator can have a certain share of the market (e.g. 25%), a strong ability to influence market conditions, a certain turnover relative to the size of the market, a significant control of the means of access to end-users or immense experience in providing services in the market.

Some of the traditional approaches used to define the relevant market are based on the following tools:

- **demand substitutability** - In economic terms, the market power of a company is its ability to profitably increase its price over the competitive price. This is linked to the existence of substitutable products in the market. In this case, to determine a relevant market means to determine a set of products which are substitutable from an economic point of view.
- **supply substitutability** - When determining market shares of company A, it is essential to take into account the capability of other companies to offer the same product in the same market in the case of an increase of the price by company A.

In the context of the application of competition rules, the Commission has traditionally based itself on the approach of demand substitutability in defining the relevant product market.

Supply-side substitutability is instead used for the purposes of determining whether a company has a significant market power. This means that supply substitutability is not a tool used in the first phase - defining a relevant market - but in the second phase - determining whether a company has significant market power on the already defined relevant market.

With reference to telecommunications in particular, according to the regulation, when an operator reaches a share of 25% of a relevant market it is presumed to have significant market power and it is therefore subject to certain specific provisions. In this situation it is essential, when determining the market share, to take into account supply substitutability, which is something strictly interrelated with potential competition.

In the draft “Notice on the application of the competition rules to access agreements in the telecommunications sector”, the Commission refers to:

- **Relevant product market:** “A relevant product market comprises all those products and/or services which are interchangeable or substitutable by the consumer, by reason of the products’ characteristics, their prices and their intended use”.
- **Relevant geographic market:** “The relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, 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”.

When applying the above-mentioned definitions to the telecommunications sector, the Commission has identified at least two types of relevant product markets:

- **Services market:** the provision of any telecommunications services to end-users. Different telecommunications services will be considered substitutable if they show a

sufficient degree of interchangeability for the end-users. An example of relevant market could be “provision of public voice telephony to the public”.

- **Access market:** access to those facilities necessary to provide services to end-users (physical access, information, etc.). An example of relevant market could be “interconnection to the public telecommunications network” or “directory services”.

3 -Symmetric regulation

“In general terms symmetric regulation means providing all suppliers, incumbents and new entrants alike, with a level playing field on which to compete - the same price signals, the same restrictions, and the same obligations. I emphasise that symmetric regulation is perfectly compatible with situations in which an incumbent controls an essential intermediate input, or ‘bottleneck’ facility. In that case, the symmetry principle requires that all firms have access to this facility on identical terms as the incumbent (‘non-discriminatory access’)”¹¹

4 -Asymmetric regulation

Asymmetric regulation can be defined as “the practice of imposing market constraints on the incumbent firm not likewise borne by its competitors. In the telecommunications industry, asymmetric regulation has taken the form of: -

- (i) pricing constraints necessary to support cross-subsidiation such as toll-to-local subsidies;
- (ii) geographically averaged rate structures that do not reflect corresponding cost differences;
- (iii) carrier of last resort obligations that require the incumbent firm to stand by with capacity in place to serve consumers on demand;
- (iv) information disclosure requirements that force the incumbent firm to reveal in advance (to competitors) plans for new service offerings and associated prices and strategies.”¹²

¹¹ Schankerman, Mark “Symmetric Regulation for a Competitive Era”, paper prepared for the Twenty-Sixth Annual Conference of the Institute of Public Utilities, Williamsburg, Virginia (December 1994)

¹² Weisman, Dennis L. “Asymmetrical Regulation: Principles for Emerging Competition in Local service Markets”, Telecommunications Policy 18 (1994): 499-505

ANNEX 4 – DETAILED INFORMATION ON NATIONAL SITUATIONS

1 -Denmark

*Definition of operator with significant market power*¹³

Providers of public telecommunications networks or telecommunications services shall be presumed to have significant market power when they have a share of more than 25% of a particular telecommunications market in the geographical areas within which they are providing telecommunications networks or services.

The National Telecom Agency may nevertheless decide that providers of public telecommunications networks or services with a market share of 25% or less shall be regarded as providers with significant market power, and that providers of telecommunications networks or services with a market share of more than 25% shall not be regarded as providers with significant market power. In making such a decision, the National Telecom Agency shall take into account the provider's:

- ability to influence market conditions
- turnover relative to the size of the market
- control of means of access to end-users
- access to financial resources
- experience with regard to providing telecommunications services

Obligations specific to operators with significant market power and not applicable to other operators

Providers of public telecommunications networks or telecommunications services who have significant market power shall **meet all reasonable requests for establishing or modifying interconnection agreements** within determined telecommunications areas.

The above-mentioned interconnection agreements shall give access to interconnection on objective, transparent and non-discriminatory terms at prices based on long run incremental costs with the addition of a reasonable profit.

Interconnection agreements where at least one of the parties is a provider of public telecommunications networks or telecommunications services and has significant market power shall be submitted to the National Telecom Agency directly after the signing of such agreements.

Providers of public telecommunications networks or telecommunications services who have significant market power shall arrange for **separate accounts** to be kept for a number of specifically determined business areas.

Annual accounts for each individual business area as well as annual accounts, including consolidated accounts where applicable, and annual reports for the entire

¹³ From “Executive Order on Accounting Rules etc. for Providers of Public Telecommunications Networks and Services who have Significant Market Power” and also “Act on Competitive Conditions and Interconnection in the Telecommunications Sector”

company, shall be submitted to the National Telecom Agency not later than six months after the end of the accounting year.

Obligations specific to Tele Danmark

Tele Danmark A/S shall handle, as a Universal Service provider, the provision of the general and special **Universal Service Obligations** established by law¹⁴ until 31 December 1997. After that date the National Telecom Agency will be able, without a prior public tender procedure, to appoint one or more providers as providers of Universal Service if these providers on a nation-wide scale - or exceptionally in regional or local markets - have a market share of 50% or more of the total provision of one or more telecommunications services under the Universal Services Obligation.

The reason why Tele Danmark A/S has been directly assigned the duty of handling the Universal Service Obligation until 31 December 1997 is partly due to the need to ensure the appointment of a Universal Service provider during a transitional period via relatively simple procedures, and partly due to the fact that the present price cap regulation of Tele Danmark A/S will not expire until that date.

2 -France

*Definition of operator with significant market power*¹⁵

An operator with a share of more than 25% of a particular telecommunications market shall be presumed to have a significant influence on that market. The telecommunications regulatory authority shall also take into account the operator's

- turnover relative to the size of the market
- control of the means of access to end-users
- access to financial resources
- experience in providing products and services in the market.

Obligations specific to operators with significant market power and not applicable to other operators

Public network operators having a significant influence on a particular telecommunications market, shall be required to **publish the technical and pricing terms of their interconnection offering**, with the prior approval of the telecommunications regulatory authority and in accordance with the conditions set out in the schedule of conditions. Interconnection tariffs shall be cost-oriented and shall cover the effective cost of using the network.

The above-mentioned operators shall **provide users and suppliers of telecommunications services other than the public telephone service, with access to their network** and to the audio-visual communications services in an **objective, transparent and non-discriminatory** manner.

¹⁴ "Act on Universal Service Obligation and Certain Consumer Interests within the Telecommunications Sector"

¹⁵ From "Telecommunications Act of 1996"

Operators with an annual turnover exceeding a threshold set by the Minister of Telecommunications and the Ministry of Economy, shall be required to keep **separate accounts** for the authorised activity.

In addition, if, according to the Competition Authority, the above-mentioned operators also enjoy a monopoly or dominant position in a sector other than telecommunications and the infrastructure used for this activity may be separate, they have to **separate this activity on a legal basis**.

Obligations specific to France Télécom

France Télécom shall be the public operator responsible for **universal service** and it shall provide all **mandatory services** (which include access, throughout the country, to the Integrated Services Digital Network, to leased lines, to packet switched data services, to enhanced voice telephony services and to telex services).

France Télécom is also obliged to **rebalance its tariffs**.

3 -Germany

Definition of operator with significant market power¹⁶

According to §22 of the “Law against Restraints of Competition”, a company dominates the market for a certain type of goods or commercial services insofar as:

- it has no competitors or is not exposed to substantial competition
- it has a paramount market position relative to its competitors, as can be shown by such factors as:
 - its market share
 - its financial strength
 - its access to supply or sale markets
 - its links with other companies
 - the existence of barriers to the entry of other companies into the market

More generally, market positions presuming dominance can refer to one company or to more companies linked together in a merger. On this basis, the following criteria can be used to presume the existence of a dominant position:

- a company has a market share of at least one third of a certain market and its turnover was at least DM 250 million in the last business year;
- three or less “non-substantially competing” companies or mergers, have a combined market share of at least 50%, or five or less such companies or mergers have a combined market share of at least two thirds; companies with a turnover below DM 100 million shall not be taken into account.

¹⁶ In articles dealing with obligations applicable to companies having a dominant position, “Telecommunications Act of 1996” refers to §22 of “Law against Restraints of Competition”.

Obligations specific to operators with significant market power and not applicable to other operators

Companies having a dominant position according to §22 of the “Law against Restraints of Competition” (§22 LRC) in markets other than telecommunications, shall carry on telecommunications services through one or more **legally independent companies**.

Companies having a dominant position according to §22 LRC in a telecommunications market, shall guarantee the **transparency** of financial relations between and among telecommunications services in the licensed sector and between and among such services and telecommunications services in the non-licensed sector by establishing a **segregated accounting system**.

Companies having a dominant position according to §22 LRC in a telecommunications market or achieving a share of at least 4% of the total sales of this market, shall undertake to **contribute to providing Universal Service**, where a universal service is not appropriately and adequately provided or where there is reason to believe that such provision will not be ensured. These same companies shall contribute to compensation for universal service by means of a universal service levy, where the regulatory authority grants such a compensation to companies providing universal services.

When an operator holding a Class 3 or Class 4 Licence has a dominant position according to §22 LRC in a telecommunications market, its **rates and rate-related components** of the general terms and conditions for the provision of transmission lines and voice telephony, shall be **subject to approval** by the regulatory authority.

Any provider having a dominant position according to §22 LRC in a market of telecommunications services for the public, shall enable competitors in such a market to **access, on a non-discriminatory basis, the services** he uses internally and those he provides to the market, to the extent that they are essential, upon the same conditions he applies to himself for the use of such services to provide other telecommunications services.

A telecommunications carrier providing telecommunications services to the public and having a dominant position according to §22 LRC in such a market, shall allow other users to **access its telecommunications network** or parts thereof.

Obligations specific to Deutsche Telekom

Deutsche Telekom is the telecommunications organisation responsible for the provision of **Universal Service** and is subject to the obligations of **mandatory services** imposed on licensees providing voice communications services for the public.

Where Deutsche Telekom does not intend to provide the services specified in the Universal Service Ordinance to the full extent or intends to provide them under less favourable conditions than those specified in such ordinance, it shall notify the NRA accordingly, one year before this comes into effect.

4 -Italy

Definition of operator with significant market power

The Italian Parliament is in the process of adopting a ministerial regulation, based on a mandate of the Parliament, with the aim of implementing those Directives which are not yet implemented. In parallel, two Bills have been submitted to the Parliament to review the regulatory framework and to establish a National Regulatory Authority for Communications.

The draft regulation covers the basic principles of the “1998 package”, including interconnection, universal service, licensing, data protection.

In accordance with Article 1 am) of the ministerial regulation implementing the community directives on telecommunications:

“significant market power” is the position of an organisation which has a share of more than 25% of a particular telecommunications market on a national level or in the geographical area within which it is authorised to operate; the NRA, after consulting with the Competition Authority, may nevertheless determine that an organisation which has, in the relevant market, a market share of less than or equal to 25% has significant market power or that an organisation with a market share of more than 25% in the relevant market does not have significant market power. In either case, the determination shall take into account:

1. the organisation’s ability to influence market conditions
2. its turnover relative to the size of the market
3. its control of the means of access to end-users
4. its access to financial resources
5. its experience in providing products and services in the market.

Obligations specific to operators with significant market power and not applicable to other operators

Operators notified as having a significant market power have to:

(a) adhere to the principle of **non-discrimination with regard to interconnection** offered to others; they shall apply similar conditions in similar circumstances to interconnected organisations providing similar services, and shall provide them with interconnection facilities and information guaranteeing the same quality as they provide for their own services, or those of their subsidiaries or partners;

(b) **make available all necessary information and specifications on request to organisations considering interconnection**, in order to facilitate conclusion of an agreement; the information provided should include technical and economical changes planned for implementation within the next six months, unless agreed otherwise by the NRA;

(c) **communicate to the NRA interconnection agreements**, which, in any case, have to be made available on request to interested parties, with the exception of those parts which deal with the commercial strategy of the parties. In every case, details of

interconnection charges, interconnection terms and conditions and any contributions to universal service obligations shall be made available on request to interested parties;

(d) **define interconnection charges following the principle of cost-orientation**: the organisations concerned have to demonstrate in an analytical and disaggregated manner, also on request of the NRA and within a fixed date, that interconnection charges are based on actual costs;

(e) publish a **reference interconnection offer**;

Each organisation providing telecommunications networks and services notified as having significant market power,

- has the obligation to negotiate, on request of another telecommunications organisation, agreements relating to **special access** to its network and to conditions responding to specific requirements. In the case the organisation considers it not reasonable to supply the requested special access to the network, it has to request the NRA, within 30 days, the authorisation to limit or refuse the access.

Each telecommunications organisation notified as having significant market power must provide for the implementation of a **detailed accounting system** within 1 July 1997 and has to make available, on request from the NRA, a description and specific information (if any) on the accounting system used, which specifies the main categories under which costs are grouped and the criteria used for their allocation, in particular for voice telephony.

The **annual budget** of organisations having significant market power has to be audited by an independent body.

Each organisation managing and supplying public telecommunications networks and offering telecommunications services publicly available or interconnection services or other services, notified as having significant market power, is obliged to implement **separate accounting systems** for each activity performed, both with regard to interconnection (including interconnection services offered within the same organisation and to other organisations) and in order to make available separate accounts for, on one hand, activities of installation and operation of networks and on the other hand, for the supply of single services.

Each organisation supplying public telecommunications networks and offering publicly available telecommunications services, notified as having significant market power, must **communicate economic and financial information to the NRA**.

Obligations specific to Telecom Italia

Telecom Italia is the telecommunications organisation responsible for the provision of **Universal Service**. From 1 January 1998 other organisations can also be entrusted with the provision of Universal Service.

Telecom Italia must publish, within 1 July 1997, a **reference interconnection offer** with the description of basic functional components of voice telephony service and of public telephone network, including points of interconnection, available interfaces in accordance with market requirements and access conditions.

5 -Spain

Definition of operator with significant market power

The Spanish regulatory system provides different criteria for determining whether an operator has significant market power in different telecommunications areas:

Provision of Leased Lines¹⁷ - The criteria for determining whether an operator has significant market power in the leased line market are the following:

- leased line operators holding more than 25% of the total gross turnover of leased lines services in a relevant market are presumed to be dominant;
- the relevant market is the geographical area within the area assigned under the authorisation when at least two operators are in competition. For Telefonica the relevant market is nation-wide;
- the assessment of turnover takes into account leased lines with both ends within the relevant territory, or with at least one end in Spain for nation-wide operators;
- the effective qualification is decided every two years by the Ministry.

Cable TV operators¹⁸ - Cable TV operators are authorised to provide telecommunications services according to a recently issued decree. They are subject to conditions which refer essentially to the market they are operating in. With regard to the criteria for determining whether operators have significant market power in their market, the same provisions mentioned above for leased line providers also apply to cable TV operators.

Providers of voice services to Closed Users Groups¹⁹ - The Decree regulating the provision of voice services to CUGs provides specific rules for:

- those entities that, because of their special position in the telecommunications market, because they hold some special or exclusive rights or because of any other reason, may enjoy a dominant position in the national or international telecommunications services market.

Even though the above provision appears in the Decree on CUGs, it does not contain a definition of significant market power in this specific area, but refers to dominance in telecommunications services in general.

¹⁷ “Real Decreto 1558/1995, de 21 septiembre, por lo que se aprueba el reglamento tecnico y de prestacion de servicio portador de alquilar circuitos”

¹⁸ “Real Decreto 2066/1966, de 13 septiembre, por lo que se aprueba el reglamento tecnico y de prestacion de servicios de telecomunicaciones por cable”

¹⁹ “Real Decreto 2031/1995 de 22 de diciembre, por lo que se regula el servicio de valor anadido de telefonía vocal en grupo cerrado de usuarios”

Obligations specific to operators with significant market power and not applicable to other operators

Dominant providers of leased lines

Dominant providers of leased lines **have to offer a minimum set of products fixed by Order**. Products within this minimum set are subject to special supply terms and conditions:

- compliance, to be controlled by the Ministry, with quality criteria;
- preparation of a standard contract-form to be approved by the Ministry

The **tariffs** of dominant providers of leased lines must be **approved by the government** on the Ministry's proposal:

- maximum tariffs will be usually set out;
- for new products, maximum tariffs will be set by the Ministry until a proposal is approved by the government;
- tariffs may be fixed for leased lines within a metropolitan area or a local telephone area;
- minimum tariffs may be fixed by the Ministry at 80% of the ceiling rate or at another value in the case of abuse of a dominant position or anti-competitive practice.

The Ministry can fix special interconnection conditions for certain types of leased lines, in order to ensure real competition; this concerns in particular the provision of metropolitan-urban leased lines by dominant operators to other operators (such conditions are not yet detailed in the text).

Cable TV operators

Dominant cable TV operators providing leased lines may be subject to the following condition:

- **tariffs may be fixed for leased lines within a metropolitan area or a local telephone area.**

The Ministry may set maximum tariffs for telecommunications services provided by cable TV operators beyond three years after the concession, in the case of an abuse of dominant position or anti-competitive practice.

The provision mentioned above is not actually an obligation of cable TV **dominant operators**, but rather a clause which allows the Ministry to intervene a posteriori, in the case of abuse of a dominant position or anti -competitive practice.

Finally, **all dominant operators** are obliged to keep a **separate accounting system** for their activities.

Obligations specific to Telefonica

Telefonica is considered for a pre-defined period of time an operator with significant market power and it is therefore subject to all the obligations mentioned above.

6 – Sweden

Definition of operator with significant market power

The Telecommunications Act of 1993, revised in 1997, at present regulates the telecommunications sector, which has been liberalised since 1993.

In accordance with the Act, an operator wishing to provide, within a public network, fixed or mobile telephony or leased line services, is only obliged to notify the NRA of its intention to do so. A licence is only required in order to be entitled to provide telephony services or mobile telecommunications services within a public telecommunications network, if the activity is of “an extent that is considerable”, concerning area covered, the number of users or other comparable circumstances.

With regard to the expression “considerable extent”, it must be stressed that the obligation to obtain a licence is not based on competition law and that there is no causality between “considerable extent” and “dominant position” (though a “dominant operator” de facto also necessarily runs an activity of “a considerable extent”). “Considerable extent” means that the activity is of significant importance to the feasibility and proper functioning of telecommunications in Sweden and this could certainly be the case even if the operator does not have a dominant position. The licence obligation is not an obligation imposed on dominant operators only and is therefore not a criteria for assessing dominance in a market.

The Telecommunications Act of 1993, revised a first time in 1995, has been recently amended and a new Telecommunications Act was enacted and entered into force on 1 July 1997. The revision of the Telecommunications Act, before being implemented, was explained in a consultation document, the “Green Paper on a revised Swedish telecommunications regulation”.

The following analysis of the regulation of operators with significant market power is based on the Green Paper mentioned above.

The Green Paper refers to operators with significant market power as those with a market share of around 25% of the relevant market.

Obligations specific to operators with significant market power and not applicable to other operators

The Green Paper states that “the report from the Expert Group on Public Finance (ESO) describes the two main ways of regulating competition in a market with a dominant network operator. Either the operator’s network activities may be separated from its other activities, or regulation may be applied to the price and other conditions governing the use of the dominant operator’s network”.

The solution proposed in the Green Paper is a combination of accounting separation and a stricter regulation of pricing and other terms of interconnection and proposes amendments to the Telecommunications Act on these issues in line with the EC proposed Interconnection Directive.

Accordingly, operators with a significant market power supplying, within a public telecommunications network, telephony services or leased lines shall:

- **meet every reasonable demand for access** to the telecommunications network for the purpose of interconnection

- **publish tariffs for interconnection**
- offer **equivalent terms for equivalent services** to everybody who request interconnection
- **provide all information necessary to promote agreements on interconnection**
- in their **accounts** keep receipts and costs related to interconnection **separated** from other operations
- If the tariffs for interconnection are not in accordance with regulation, the supervisory authority may decide that the tariff should be changed in a certain way.

Obligations specific to Telia

In addition to being obliged to respect the conditions mentioned above for dominant operators, Telia will be responsible for the provision of **Universal Service**. At present, no funding mechanism exists for Universal Service, but the Green Paper foresees the possibility of introducing a funding mechanism in the future in line with the Universal Service Fund proposed by the European Commission.

Telia is also obliged to supply network capacity to those who request it.

7 -The Netherlands

Definition of operator with significant market power

The Telecommunications Act of 1989 in force in the Netherlands is in the process of being amended in order to adapt it to the full liberalisation of the sector. The following analysis of how dominant operators will probably be regulated in the Netherlands is based on the Consultation Document "A New Look for Telecommunications in the Netherlands - Basic Principles for a Review of the Telecommunications Act" prepared by the Ministry of Transport, Public Works and Water Management.

The Consultation Document provides some rules to be temporarily applied to the telecommunications sector in order to supplement market rules in the transitional period towards competition, with particular reference to those operators holding a dominant position on the market.

The criteria for determining whether an operator has significant market power in the market are its share of the relevant market, with a reference to the 25% threshold, and control of end-user access means.

Obligations specific to operators with significant market power and not applicable to other operators

The Consultation Document provides regulation on interconnection applicable to all providers of public services and networks, with special conditions based on ONP provisions to be respected by operators with significant market power.

The specific interconnection obligations for dominant providers of public services and networks are the following:

- **refusal of interconnection requests must be justified** on the basis of specific arguments (essential requirements)
- **obligation to publish a standard list of interconnection** services and prices
- interconnection agreement must be **non-discriminatory and at cost-oriented tariffs**
- **information on interconnection agreements must be provided to the NRA** on request
- **accounting separation** between
 1. interconnection services provided for own use
 2. interconnection services provided to other operators
 3. other services

Dominant operators also have the obligation to provide:

- **a minimum set of leased lines and fixed voice telephony services** at transparent and non-discriminatory supply conditions

Obligations specific to KPN

KPN has to respect all the obligations mentioned above with regard to dominant operators, but it is also subject to specific conditions related to Universal Service Obligations.

Universal Service Obligations shall be applied to KPN for the sake of continuity and will include:

- voice telephony services, meeting specified quality requirements
- public call boxes
- free emergency numbers

8 -Finland

Definition of operator with significant market power

Operators of public telecommunications networks or services shall be presumed to have significant market power when they have a share of more than 25% of a particular telecommunications market in the geographical areas within which they are providing telecommunications networks or services.

The Ministry of Transport and Communications may nevertheless decide that public telecommunications operators or service operators with a market share of 25% or less shall be regarded as operators with significant market power, and that network operators or service operators with a market share of more than 25% shall not be regarded as operators with significant market power. In making such a decision, the Ministry of Transport and Communications shall take into account the operator's:

- ability to influence market conditions
- turnover relative to the size of the market
- control of means of access to end-users
- access to financial resources
- experience with regard to providing telecommunications services

Obligations specific to operators with significant market power and not applicable to other operators

Public telecommunications network operators and service operators who have significant market power shall **meet all reasonable requests for establishing interconnection agreements**. The above-mentioned interconnection agreements shall give access to interconnection on **objective, transparent and not discriminatory terms at cost-based prices with the addition of a reasonable profit**.

All telecommunications companies shall arrange for separate accounts to be kept for network operations and service operations as well as for activities other than telecommunications. This does not apply for a telecommunications company whose telecommunications business is seen as of minor importance. Telecommunications companies having significant market power in more than one business area of network operations or service operations shall **arrange separate accounts** to be kept for all determined business areas.

Obligations specific to the ex-monopolist

None

9 -The United Kingdom

Definition of operator with significant market power

The trigger for consideration of SMP is set initially in terms of market share. A share of 25% activity in the relevant sector gives rise to a presumption of SMP. This can be supported or rebutted by taking into account the following factors:

- market power (judged by an operator's ability to influence market conditions)
- turnover relative to the size of the market
- control of the means of access to end-users
- access to financial resources; and
- experience in providing products and services in the market.

This definition of SMP is based on Article 4(3) of the Interconnection Directive.

Obligations specific to operators with significant market power and not applicable to other operators

Operators who have SMP will be subject to the obligations set out in Articles 4(2), 6, 7 and 8(2) of the Interconnection Directive (although most of the obligations set out in Article 7 and 8(2) do not apply to mobile operators). Briefly these obligations are as follows:

- all reasonable requests for access to their networks must be met (Article 4(2))
- operators must adhere to the principle of non-discrimination with regard to interconnection offered to others and must offer the same terms for the use of the network to other operators as they provide to themselves (Article 6)
- charges for interconnection must be cost orientated and unbundled, based on information drawn from cost accounting systems which are approved by OFTEL for the purpose (Article 7). Operators with significant market power must also publish a Reference Interconnection Offer (RIO). The Article 7 rules on cost orientation only apply to mobile operators when they have SMP in the national market for interconnection. The national market for interconnection means all interconnection services on fixed and mobile networks. The rest of Article 7, such as the requirements for a RIO, does not apply to mobile operators
- separate accounts must be kept for interconnection activities and other activities and they must be independently audited and published (Article 8(2)). This provision does not apply to mobile operators.

Operators specific to BT

A number of specific conditions are included in BT's licence that do not appear in the licences of most other domestic Public Telecommunications Operators.

10 -Switzerland

Definition of operator with significant market power

The Swiss legislation does not refer to "significant market power", but to "enterprises having a dominant position in the market", which means one or more enterprises being

able, as regards supply or demand, to behave in a substantially independent manner with regard to the other participants in the market.

Obligations specific to operators with significant market power and not applicable to other operators

According to the information from the Swiss NRA, the future legislation on telecommunications, which should enter into force with the liberalisation of the sector on 1 January 1998, is likely to include the following EU legislation's provisions on operators with significant market power:

- obligation to meet all reasonable requests for access to network;
- obligation to adhere to the principle of non-discrimination with regard to interconnection;
- obligation to make available all necessary information and specifications on request to organisations considering interconnection;
- obligation to make available details on agreements for special network access to the NRA upon request;
- obligation to communicate interconnection agreements to the NRA and make them available on request to interested parties;
- obligations to follow the principles of transparency and cost-orientation in determining interconnection charges;
- interconnection charges shall be sufficiently unbundled;
- the cost accounting system must be documented to a sufficient level of detail and must be suitable for the implementation of the requirements on interconnection;
- charges related to the sharing of USO obligations shall be unbundled and identified separately;
- obligation to keep separate accounts for different activities.

Obligations specific to Swiss PTT

Swiss PTT is responsible for the provision of Universal Service during 5 years from 1.1.1998 and subject to the obligations imposed on other licensed providers of Universal Service.

11 –Portugal

Portugal requested additional implementation periods for the EU telecommunications packages on the basis of the Commission Directives 96/2/Eec and 96/19/EC. By Decision adopted on 12 February 1997, Portugal was authorised to postpone until 1 January 2000 the abolition of the exclusive rights currently granted to Portugal Telecom as regard the provision of voice telephony and the establishment and provision of public telecommunications networks.

Definition of operator with significant market power

According to general law against restraints of competition -Decree-Law 371/93 of 29 October- (also applicable, but not specific to telecommunications operators), an enterprise or a group of enterprises are market-dominating, for a certain type of goods or commercial services, insofar as:

- 1) the enterprise acts on a market without being exposed to substantial competition or assumes predominance relatively to its competitors. In this case, a company with a at least 30% market share is presumed to be dominant.
- 2) two or more enterprises acting jointly on the market without being exposed to substantial competition or assuming predominance relatively to their competitors.
The following criteria can be used to presume the existence of a dominant position:
 - a- three or less enterprises have a combined market share of at least 50%;
 - b- five or less enterprises have a combined market share of at least 65%.

Obligations specific to Portugal Telecom

Some of the provisions contained in the Interconnection Directive and Licensing Directive were already introduced into national legislation, namely by means of the following set of obligations included in the Portugal Telecom Concession contract.

Portugal Telecom currently has the exclusive right under the Concession to provide public switched voice telephony services and public telecommunications networks in Portugal, although it provides such services in an increasingly competitive environment and is subject to indirect competition from a number of sources.

The company is already subject to direct competition in a number of other business areas. Portugal Telecom's complementary networks and related services, with minor exceptions, are provided through separate subsidiaries that are subject to separate financial reporting requirements and other safeguards to ensure fair competition.

The Portuguese Government granted the Concession to Portugal Telecom in 1995. The Concession confers exclusive rights with respect to the provision of transmission infrastructure and leased lines services as well as fixed telephone, telex and telegraphy services in Portugal. The Concession provides that this exclusivity is to remain in effect until the Portuguese Government liberalises all or parts of the activities provided under the Concession in conformity with the EU legislation.

The Concession imposes on Portugal Telecom Universal Service Obligations in respect of the provision of fixed telephone, telex, telegraphy and data transmission services.

-Interoperability of services

Portugal Telecom is required to ensure the provision of services under the Concession, ensuring interconnection and interoperability with public telecommunications services provided by other operators upon request, whenever technically feasible and whenever the technical access specifications are met.

Portugal Telecom undertakes the obligation to make available, in fully equal conditions, the leased lines needed for the provision of other public telecommunications services, in accordance with the different types, technical features and provision conditions.

Any technical restriction to the interconnection of leased lines between themselves or with public telecommunications services provided exclusively by Portugal Telecom, when those comply with adequate technical specifications of interoperability, are forbidden.

All other licensed operators are empowered with the right to have access to the public telecommunications network under conditions of full equality with the assurance of having specified technical interfaces as well as the guarantee of having defined and published conditions of access and pricing regime.

-Cost accounting

Portugal Telecom undertakes the obligation to implement an annual analytical accounting system which should enable the direct and indirect costs computation for each of the provided services, as well as, for each one of them, the costs associated to each way of provision. Until 1998, the analytical accounting system should additionally enable the split between costs associated to service provision and costs associated to infrastructure management and exploitation.

The methodology to be used in implementing the analytical accounting system must be approved by the NRA.

-Tariffs

In accordance with the requirements in the Concession, Portugal Telecom, the central administration and the NRA are parties in a three-year Pricing Convention which establishes principles and procedures for determining the prices of fixed telephone services and certain other exclusive services. The Pricing Convention also establishes a framework for determining the prices applicable to leased lines and to interconnection between the fixed telephone service and complementary telecommunications services.

In effect, the Pricing Convention requires Portugal Telecom to enter into negotiations with operators of complementary services to establish charges and other arrangements for the interconnection of complementary and fixed telephone services. In the event that the negotiation fails to produce an agreement, the NRA is authorised to set price ceilings for interconnection.

Furthermore, the Pricing Convention requires that any increase in the nominal prices of specific categories of leased lines in 1996 and 1997 be based on information derived from a separate cost accounting system maintained by Portugal Telecom for its leased line services.

As part of the overall framework for price regulation under the Pricing Convention, Portugal Telecom must comply with a number of obligations including, inter alia, the implementation of a cost accounting system acceptable to the NRA, the submission of periodic reports to the NRA and adherence to specified indicators of quality of service. Portugal Telecom's non-compliance with obligations relating to accounting systems and quality of service may result in a reduction of Portugal Telecom's otherwise permissible percentage price increases.

ANNEX 5 – DETAILED RESULTS OF THE SURVEY

1 – Denmark

–Criteria for determining the relevant market

The “Comments on the draft Bill for the Act on Competitive Conditions and Interconnection in the Telecommunications Sector” contain the following explanatory note with regard to the determination of the relevant market.

With a regulation presuming the existence of market power chiefly based on the market shares of individual providers (although other aspects may be included in the evaluation of whether significant combined market power is in existence) it is of decisive importance what definition of the market concept is used as a basis for the rules in question. The market definition has a **geographical dimension** as well as a **service- or product-oriented dimension**.

In assessing which market it would be relevant to subject to an overall evaluation, the general starting point in terms of competition law will be the **demand-oriented** evaluation as to whether the products in question may substitute each other mutually in the same geographical market.

The final definition as to what products may substitute each other mutually, and should therefore be evaluated as an aggregate market, is dynamic and will have to be adjusted on an ongoing basis via the practice evolving in regard to interpretation of interconnection rules. Consequently, there must be a **case-by-case evaluation** as to what market definition is relevant. This should also include what the providers and end-users involved perceive as the relevant market. The providers own evaluation may be expressed, for instance, through their market effort (what customer groups are being addressed by the providers, what are the possible applications of the service, what other service is the product compared with, etc.).

Initially, it would seem natural for the telecommunications sector, as far as the service market is concerned, to take the following groups of services as a starting point:

- telephony networks and basic telephony services;
- data communication networks and basic data communication services;
- mobile communication networks and basic mobile communication services;
- other cable- or radio-based telecommunications infrastructure, except satellite communication.

This means, for example, that in assessing whether a provider of basic mobile communication services has significant market power, it would be necessary as a starting point, to look at his share of the overall market for NMT, GSM and DCS1800 services collectively.

With regard to the **market for fixed telecommunications networks**, it will be especially relevant to consider the **geographic extent of the network** in question, while **mobile networks** and their capability of substituting each other mutually, should

be considered in relation to the **area covered according to the licence and the stipulated coverage percentage.**

As for the question of significant market power in the **geographical area** served, as a starting point, the lower limit serving as an indicator for assessing whether one or more providers have significant market power, will be a geographical area corresponding to a medium-sized provincial town. This means that "town networks" as such with an extension corresponding to a market share of more than 25% will be initially regarded as having significant market power.

–Application of the criteria for determining whether an operator has significant market power

The criteria of 25% market share of a telecommunications provider, its ability to influence market conditions, its turnover relative to the size of the market, its control of the means of access to end-users, its access to financial resources and its experience in providing services, will be applied on a **case-by-case basis** by the NRA, which will follow the procedure described below.

On the basis of the relevant statistical and other information available, the NRA will assess whether a provider of telecommunications networks or services must be presumed to have significant market power; if so, the NRA will contact the provider for the purpose of obtaining further information about the provider's activities, to serve as a basis for deciding more precisely whether the provider should be regarded as having significant market power.

From providers of telecommunications networks or services, the NRA may request all information deemed relevant for determining what market share the provider in question has in one or more sub-markets.

A provider of telecommunications networks or services may request the NRA to make a binding decision on whether the provider in question has significant market power at the time of the request.

–Reference interconnection offer

Providers of telecommunications networks or services who have a significant market power in the combined markets of fixed networks and mobile communications, in the market of leased lines or in the market of fixed networks, shall draw up and release standard interconnection offers.

The standard interconnection offers shall be submitted to the NRA simultaneously with the release.

The Minister responsible for telecommunications (Minister of Research and Information Technology) shall lay down more specific rules on the standard interconnection offers which have to be drawn up. These rules have not been drawn up yet.

-Interconnection charges

Obligations concerning interconnection charges only apply to providers of telecommunications networks or services who have a significant market power in the combined markets of fixed networks and mobile communications, in the market of leased lines or in the market of fixed networks. These providers have to provide interconnection at a price based on the **Long Run Average Incremental Costs** method²⁰ with the addition of a reasonable profit.

The NRA may lower the interconnection tariffs calculated according to the above mentioned method if documentation is presented that shows that the tariff level for corresponding interconnection services in corresponding Danish or foreign interconnection agreements are lower than the tariffs calculated according to the above mentioned method.

-Interconnection agreements

Interconnection agreements where at least one of the parties falls within the scope of the regulation shall be submitted to the NRA directly after establishment of such agreements. This obligation also applies to sub-agreements in connection with an interconnection agreement.

The NRA shall make arrangements to ensure that the interconnection agreements submitted to the NRA itself and the terms for interconnection laid down are made available to the public.

If a party to an agreement so requests when the agreement is submitted, the NRA may decide that parts of an agreement containing information of essential commercial significance to the party shall not be made available to the public. However, prices for interconnection and other terms of general importance shall always be made available to the public.

-Accounting separation and Accounting systems suitable for the implementation of provisions on interconnection

Providers of public telecommunications or services who have a significant market power shall arrange for separate accounts to be kept for, as a minimum, the following specific business areas:

1. provision of telecommunications networks and associated basic services;
2. provision of telephony services to end-users;
3. provision of data communication services to end-users;
4. GSM networks and associated services;
5. NMT networks and associated services;
6. DCS1800 networks and associated services;
7. OPS networks and associated services;
8. ERMES networks and associated services;

²⁰ In a transitional period the calculation of the prices will be based on a method which is more straightforward than the long-run-incremental-cost.

9. mobile communication services not included under 4.;
10. other telecommunications activities, including provisions as specified under 1. & 2., where commercial discounts are used.

Accounts of the individual business areas shall be prepared in accordance with the principles of the Danish Company Accounts Act, and opening balances shall be drawn up for the individual business areas.

In connection with separation of business areas, the following cost allocation principles shall be used:

1. direct costs incurred in setting up, operating and maintaining the activity in question, and in marketing and billing the activity shall be allocated directly;
2. common costs, i.e. costs that cannot be linked uniquely to an individual activity, shall be allocated, as far as possible, on the basis of an analysis of the origin of the costs;
3. if the analysis mentioned in 2. is not possible, common costs shall be allocated on the basis of an indirect linkage between these and another cost category or group of cost categories for which a direct assignment or allocation is possible. Such indirect linkage shall be based on comparable cost structures;
4. when neither direct or indirect measures of cost allocation can be found in respect of common costs, such costs shall be allocated on the basis of a general allocator computed by using the ratio of all expenses directly or indirectly assigned or allocated, on the one hand, to the activity in question and, on the other hand, to other activities;
5. revenues obtained as an element in the provider's handling of activities in a business area shall be allocated according to the principles mentioned under 1.-4. for allocation of costs;
6. revenues not obtained as an element in the provider's handling of activities in a business area must not be allocated to accounts for that business area.

2 –France

As of today (October 1997), the NRA has not yet drawn up the list of operators having significant market power in a relevant market in the telecommunications sector. However, article 2 of the Decree on Interconnection (n.97-188 of 3 March 1997) states that France Télécom is subject to the provisions applicable to operators with significant market power until the publication of the above-mentioned list. The Decree also provides for France Télécom to publish a technical offer and its price list for interconnection within 1 July 1997.

–Criteria for determining the relevant market

The relevant market will be determined on a case by case basis.

–Application of the criteria for determining whether an operator has significant market power

The criteria for determining whether an operator has significant market power will be applied on a case by case basis and a decision will be taken every year in consultation with the Competition Authority.

-Reference interconnection offer

For services intended for public network operators, France Télécom reference interconnection offer, approved by the NRA in July 1997 includes:

-For services intended for public network operators:

- I. offer of the main switched traffic routing services;
- II. offer of supplementary services and functions;
- III. arrangements for implementing carrier selection;
- IV. description of the physical points of interconnection and the access conditions at these points when it is a third party operator supplying the interconnection link;
- V. offer of interconnection links to the points of interconnection of a third party operator, and should the third party operator wish to supply this link, the conditions for physical and virtual access to France Télécom points of interconnection;
- VI. description of the interconnection interfaces and, in particular, the signalling protocol used at these interfaces with the conditions for its implementation;
- VII. offer of leased lines connection services.
- VIII. supplementary and advanced services and functions, and the associated contractual arrangements, based on a pre-established list drawn up by NRA, after consulting the Interconnection Committee;
- IX. tariffs for routing international calls and calls to overseas departments, as well as arrangements for revising these tariffs to keep them in line with the accounting rates negotiated by France Télécom with operators from other countries;
- X. arrangements for implementing number portability.

-For public telephone service providers:

- I. the same services and components included in the reference interconnection offer for public network operators, taking into account the rights enjoyed by and the obligations incumbent upon these providers.

Moreover, the reference interconnection offer also has to include the provisional timetable according to which local exchanges where interconnection is currently technical impossible will be opened up to interconnection. In order to respect this provision, France Télécom has added to the list of local exchanges not functionally opened to interconnection the timetable according to which the subscribers concerned will be connected to technically opened exchanges.

-Interconnection charges

PRINCIPLES AND METHODOLOGY:

The NRA has established the 1998 interconnection tariffs on the following principle: “interconnection tariffs for a given year shall be based on the forecast relevant average historic costs for the year in question, evaluated by the NRA taking into account:

- the efficiency of new investments made or forecast by the operator in view of industrial-available state of the art technology;
- international benchmarks for interconnection tariffs and costs.”²¹

In a second step, interconnection charges shall be based on Long Run Incremental Costs. The NRA will introduce this method for the determination of 1999 interconnection tariffs.

EXAMINATION OF FRANCE TÉLÉCOM’S FORECAST COSTS:

France Télécom costs which have to be charged to interconnection services include:

- **general network costs**, which are shared between interconnection services and other services, on the basis of the actual use of the general network by each of these services;
- **cost specific to the interconnection services**, which are fully allocated to interconnection services;
- **relevant common costs**, which are relevant with regard to the telecommunications operator’s activity, and which are charged both to interconnection services and to other services.

General network costs

France Télécom’s forecast general network costs were established:

- on the one hand, using general network costs from 1994;
- on the other hand, in relation to estimated changes in costs and volume over the 1994-1998 period.

To estimate costs for 1998, based on 1994 costs, the NRA examined France Télécom’s forecasts, notably with regard to the perspectives of traffic volume; it has taken into account the effect that the change in the operator’s legal status will have on the costs for 1997 and the following years.

On these two points, the NRA used the evaluations provided by France Télécom and the auditor’s report:

- it examined France Télécom’s traffic forecasts and increased the estimated growth rate for the 1994-1998 period by four points; it accepted France Télécom’s analysis whereby such an increase in traffic would result in a 2.2% reduction in unit costs;

²¹ Article D.99-19 of the Post and Telecommunications Code.

- it took into account the reduction in general network costs resulting from the depreciation of France Télécom's assets in 1996, notably with regard to plant and technical network equipment.

With regard to the efficiency of the operator's investments, the NRA studied the auditor's positive observations on France Télécom's investment process; it noted the investment decisions taken by the operator for the period in question.

Costs specific to interconnection services

The NRA noted the importance of the costs specific to interconnection services on the tariffs for routing switched traffic. To determine the specific unit costs, it used France Télécom's forecast charges and estimated interconnection traffic volume. These unit costs will be revised, if appropriate, to set the tariffs applicable in 1999.

Relevant common costs

The NRA considered that the relevant common costs for 1998 include:

- the operator's operating overheads and head office costs;
- common research and development costs, excluding general research;
- costs for retirement benefits, that the NRA included for 1998 in the cost base for interconnection; in France Télécom's cost accounting system, these costs are an effective charge;
- the net cost for France Télécom of the one-off cash payment to the Government: based on the auditor's analysis, the NRA set the one-off cash payment, minus the provisions constituted by the operator until 1996.

The relevant common costs thus defined led the NRA to increase the general network costs and the costs specific to interconnection for 1998 by a 7.72% mark up.

The rate of return of capital employed

The rate of return of the capital employed is used in the evaluation of the various cost categories. In the light of study carried out by an independent consultant and after having interviewed France Télécom, the NRA decided to set this rate at 11.75%.

SETTING TARIFFS FOR INTERCONNECTION SERVICES:

With regard to **tariffs for routing switched traffic**, two factors come into play in the passage from costs to tariffs:

- the division between capacity charges and usage charges;
- the weighting of tariffs with time and duration variants.

The costs of an exchange or of a point of interconnection are shared between capacity charges (French francs per access to 2 Mbit/s and per annum) and usage charges

(centimes per minute); based on studies carried out by France Télécom and the new operators, the NRA determined the following share of these costs for 1998:

- 40% capacity charges
- 60% usage charges.

With regard to time variants, the NRA considered that the approach proposed by France Télécom, which applies time variants to the interconnection tariffs it expects to implement for retail tariffs from October 1997, could be accepted for the first version of the reference interconnection offer.

With regard to **tariffs for interconnection links**, the NRA wished to establish a solution including:

- an offer of a flat tariff for a limited area around France Télécom's points of interconnection;
- beyond this boundary, a cost-oriented distance related tariff offer.

With regard to **co-location tariffs**, the NRA used a specific study provided by an auditor on France Télécom's pricing proposals.

INTERNATIONAL BENCHMARKING FOR EVALUATING INTERCONNECTION TARIFFS AND COSTS:

The NRA compared the interconnection tariffs charged in various countries, based on a benchmarking method developed with France Télécom and other operators. It noted that this approach is limited, as it refers to tariffs established for each country according to different regulatory environments and only taking into account published data; therefore, it cannot take costs fully into consideration.

INTERCONNECTION TARIFFS LISTED IN THE REFERENCE INTERCONNECTION OFFER:

After conducting the studies described above, the NRA approved the tariffs which are included in France Télécom's reference interconnection offer: These tariffs are presented in the table below.

Tariffs for routing switched traffic:

Centimes per minute	Average price for a new entrant
Intra-local exchanges (approx. 30000 subscribers)	6.09
Single transit from POI (approx. 2 million subscribers)	12.78
Dual transit from POI (access to the whole France)	17.50

These average prices, in centimes per minute, include:

- usage charges (centimes per minute), for both peak (65%) and off-peak (35%) traffic;
- access charges for the 2 Mbit/s capacity used by new entrants (similar to an annual subscription), on the basis of 1.8 million minutes per annum and per connection.

–Interconnection agreements

In accordance with the Decree on Interconnection (n.97-188 of 3 March 1997), interconnection shall be subject to an agreement between parties covered by private law. This agreement shall conform to the provisions of article L.34-8, of the Post and Telecommunications Code, to the provisions of the decree on Interconnection and to the licences of the two operators concerned. The agreement shall be communicated to the NRA less than ten days after its conclusion. The NRA may make available to interested parties, on request, the information contained therein, without prejudice to information covered by commercial confidentiality.

When essential for the purpose of fair competition and interoperability of services, the NRA may ask for the agreement to be modified, after consultation with the Competition Authority.

Interconnection agreements should specify as a minimum, unless agreed otherwise with the NRA:

- **general principles**
 - commercial and financial relations, and notably the terms of payment and the billing and collection procedures;
 - requirements concerning the exchange of information between the two operators and the corresponding periodicity or notice;
 - procedures to be followed in the event of alterations being proposed to the interconnection offer of one of the parties;
 - definition and limitation of liability and indemnity between operators;
 - intellectual property rights, where appropriate;
 - duration and conditions of re-negotiation of agreements.

- **the description of the interconnection services provided and the corresponding remuneration:**
 - conditions governing access to basic services: switching and, for public network operators, leased lines;
 - conditions governing access to supplementary services;
 - billing services for third parties;
 - conditions governing co-location;

- **the technical characteristics of interconnection services:**
 - measures implemented to allow users equal access to the various networks and services, equivalent formats, and number portability;
 - measures to ensure compliance with the essential requirements;
 - comprehensive description of the interconnect interface;
 - billing information supplied at the interconnect interface;
 - the quality of the services provided: availability, security, efficiency, synchronisation;
 - traffic routing arrangements.

- **arrangements for the establishment of interconnection:**

- conditions governing service provision: traffic forecast arrangements and the implementation of interconnect interfaces, procedures concerning the identification of the termination points of leased lines, the time-frame for provision;
- the designation of the points of interconnection, and the description of the physical arrangements for interconnection;
- arrangements for the reciprocal sizing of interface equipment and the systems common to each network so as to maintain the quality of service provided for in the interconnection agreement as well as compliance with essential requirements;
- arrangements for testing the operation of interfaces and the interoperability of services;
- arrangements for clearing and recording faults.

-Accounting separation and Accounting systems suitable for the implementation of provisions on interconnection

In accordance with article D99-12 of the Decree on Interconnection, operators with significant market power shall keep a separate accounting system for their interconnection activities. The purpose of this system is to identify external transfer price of the activities, services and network components used by these operators or, in the absence of such data, to identify the cost by reference to the tariffs that these operators charge users or operators to interconnect to their networks.

The NRA shall establish and publish the specifications and the description of the cost accounting systems of these operators, adapted so that compliance may be ascertained with regard to the principle of non-discrimination, and with regard to the principles concerning pricing and relevance.

The cost accounting systems of these operators shall be audited periodically by an independent entity. The entity shall be designated by the NRA for a period of three years. The audit shall be carried out at the expense of each public network operator designated as having significant market power. The cost incurred shall be added to the costs specific to interconnection services.

The designated entity shall publish a statement of compliance annually.

The separate accounting system of operators with significant market power described above shall allow in particular for the identification of the following costs:

- general network costs, that is, the costs of the network components used both by the operator to provide services to its own users and interconnection services; network components include notably the switching facilities and conveyance systems necessary for the provision of all services;
- costs specific to interconnection services, that is, costs directly caused only by interconnection services;
- costs specific to the operator's services other than interconnection, that is, costs caused only by these services;
- common costs, that is, costs which do not come under one of the above categories.

The relevant elements of the information system and the accounting data shall be furnished to the NRA at the request of the latter.

3 –Germany

–Criteria for determining the relevant market

The relevant telecommunication markets are defined, as a rule, according to the approach of “demand substitutability” on the basis of the Law against Restraints of Competition in co-operation with the Federal Cartel Office.

Accordingly, all goods and services which, in their characteristics, economic use and price are sufficiently similar (for the informed consumer) to be regarded as suitable to meet a specific demand, and as substitutable, are considered equivalent in the market. It is the functional substitutability which is crucial, rather than the physical and technical identity (Immenga/Mestmäcker, Comments on the Cartel Law).

–Application of the criteria for determining whether an operator has significant market power

The provisions of §22 of the Law against Restraints of Competition apply to the definition of a market-dominating position in the telecommunication sector (as explained in Chapter 2, paragraph 2.3 of this report).

As regards the calculation of the market share and turnover, Section 23 (1)²² of the Law against Restraints of Competition sentences 2 to 10 shall apply, as appropriate.

As the application of regulatory mechanisms to the special features of the telecommunication sector is something new in Germany, experience in practical application can solely be gained, for the time being, through decisions taken on a case-by-case basis.

–Reference interconnection offer

The publication of a standard interconnection offer is foreseen in §6(5) of the Ordinance concerning Special Network Access. Deutsche Telekom has prepared a standard agreement for the interconnection of its public telecommunications network and the telecommunications networks of other operators. Such a standard agreement can be obtained from Deutsche Telekom.

–Interconnection charges

²² Section 23(1) of the Law against Restraints of Competition contains detailed provisions on how to calculate, in practical cases, market shares and turnovers of companies in case of mergers and acquisitions.

The interconnection charges set out below were established on the basis of §37(1) of the Telecommunications Act. An action against this decision has been brought before the administrative court.

The following rates established by the market dominant company for call origination and call termination will enter into force on 1 January 1998:

Rates per minute	Standard tariff daily 09.00 - 21.00	Off-peak tariff daily 21.00 – 09.00
City	0.0197 DM	0.0124 DM
Region -50	0.0336 DM	0.0202 DM
Region -200	0.0425 DM	0.0235 DM
Long-distance	0.0514 DM	0.0316 DM

-Interconnection agreements

A standard interconnection agreement can be obtained from Deutsche Telekom.

-Accounting separation and Accounting systems suitable for the implementation of provisions on interconnection

The principles governing cost accounting for interconnection will be examined as part of the examination of rates on the basis of the procedures described in §27 and §27(1) of the Telecommunications Act.

4 -Italy

Law 287/90 (Competition and Fair Trading Act, 10 October 1990) introduced in the national legislation a general regulation for the protection of free competition and market conditions. Such regulation, in line with Community principles on competition issues, is applicable without distinction to all sectors of the national economy, including those sectors which are characterised by "general interest requirements" and are therefore sometimes indicated as "sectors deserving a specific regulation". The aim of Law 287/90 is to provide a unitary regulation for the protection of the principles of free competition, thus avoiding the fragmentation of the pursuit of this aim which would occur when regulation is scattered among different sectors. Laws creating the two regulatory authorities for energy and for telecommunications have not introduced any special regulation for the protection of competition in the sectors under the control of these two regulatory authorities, but directly refer to the general regulation on competition (Law 287/90). In particular, the draft Decree on the creation of an independent Communications Regulatory Authority, states that one of the tasks of the Communications Regulatory Authority is to inform the Competition Authority of any breaches of the provisions of Law 287/90 made by operators in the communications sector.

Law 287/90 does not contain any criteria for determining what dominant position/significant market power means, but it does give clear indications on what is the “abuse of dominant position”.

–Criteria for determining the relevant market

Articles 2 and 3 of Law 287/90 on Competition and Fair Trading do not specifically require to determine the relevant market when evaluating the presumption of an abuse of dominant position. They both refer to restriction of competition “within the national market or within a relevant part of it”, but this refers only to the scope of applicability of the regulation, not to the definition of the relevant market.

However, the need to determine a relevant market occurs with reference to the determination of whether an agreement can “consistently alter competition” and, in the case of a presumed breach of Article 3, in order to ascertain the existence of a dominant position and the abusive characteristics of a certain behaviour, if any.

In other words, the determination of a relevant market is functional to the determination of the restrictions to competition prohibited in accordance with Articles 2 and 3 of the law.

In summary, the regulation does not explicitly provide for the determination of a relevant market as a separate step in the evaluation-process of an agreement or a presumed abusive behaviour; however, many indirect references exist to the opportunity of referring to a clearly defined notion of relevant market when analysing concrete cases. In particular, structural indicators as market shares of an organisation or the level of concentration of the offer, are necessarily determined “with respect to a market”. Where it is considered important to analyse these variables in the evaluation of a case, it is absolutely necessary to determine the relevant economic context.

Therefore, in order to determine the theoretical model to be followed in determining the relevant market, it is important to recall that the “relevant market” is a concept useful to identify the context in which anti-competitive behaviour is possible.

If it is assumed that an organisation enjoying a significant market power is an organisation which behaves in an anti-competitive way, and that significant market power is the ability of an organisation to profitably raise the price above the competitive price, then to identify the relevant market means to identify those products which are significantly substitutable from an economic point of view.

In this perspective, the Italian Competition Authority has defined the relevant market as²³:

the smallest context (in terms of products and geographical area) in which, if monopoly conditions were created, the monopolist could profitably fix a price significantly above the competition price and maintain it at that level for a relevant period of time.

This is the origin of the “price tests”, often used as references when determining the relevant market in competition regulation.

²³ Annual reports presented in 1992 and 1993.

Such a criterion identifies at the same time the product and geographical market, using a notion of relevant market based on the possibility of the enjoyment of a small but significant degree of market power.

In determining the relevant market as the context where the enjoyment of a significant market power is possible, the approach used is that of **demand substitutability**.

The Competition Authority clearly stated that, with reference to the determination of the relevant market, the analysis of supply substitutability has to be logically distinguished from the analysis of demand substitutability: "In a second step of the evaluation-process, the definition of relevant market (seen as a concept useful to the following analysis of market power) is qualified with reference to organisations' supply capabilities".

–Application of the criteria for determining whether an operator has significant market power

In order to determine whether an operator had a dominant position in a relevant market in the telecommunications sector, the Competition Authority, in some law-cases, followed a **case-by-case** approach which can be expected to be followed in the future as well for determining the presumption of a significant market power.

Such an approach consists of a structural analysis of the relevant market in question and of a detailed collection of information, also through direct discussions with the operator involved, with the aim of making available data on criteria such as:

- Market share
- Changing patterns of market shares over time
- Vertical integration
- Barriers to entry into the market
- Company's capability to influence the competitive structure of the market
- Company's ability to respond to competitors initiatives
- Company's ability to behave independently
- Company's competitive advantages:
 - ownership of essential resources, e.g. information on customers' preferences and, consequently, ability to capture new customers;
 - capability of offering a wide variety of products;
 - ownership of a well known brand;
 - availability of well established commercial networks;
 - availability of economical and financial resources.

The criteria listed above are only some of the possible criteria which can be used in determining whether an operator has SMP. As said before, the analysis is done on a **case-by-case basis** and therefore, depending on the case in question, all criteria listed or only some of them might be used, as well as different other criteria.

–Reference interconnection offer

The reference interconnection offer to be published by operators with significant market power has to include

- the description of the interconnection offerings broken down into components, according to market needs, and the associated terms and conditions.

Different tariffs, terms and conditions for interconnection may be set for different categories of organisations, where such differences can be objectively justified on the basis of the type of interconnection provided and/or the relevant national licensing conditions.

Telecom Italia published its reference interconnection offer within the prescribed deadline of 1 July 1997.

Telecom Italia's reference interconnection offer describes interconnection services and the associated economic conditions offered by Telecom Italia to operators holding an individual licence for the establishment and supply of a public telecommunications network.

The reference interconnection offer is applicable from 1 January 1998.

The reference interconnection offer foresees three different interconnection typologies:

- **Termination** - This traffic arises when another operator's customer calls one of Telecom Italia's customers. Telecom Italia conveys the call on behalf of the other operator from the Point of Interconnection (PoI);
- **Collection** – It consists of the collection of calls originating from Telecom Italia's customers and the delivery of the same calls to the point of interconnection of another operator with the aim of allowing Telecom Italia's customers to become users of the interconnected operator's services. The interconnected operator, which offers services on its own network, provides for the determination of prices to the public and for billing the subscribers;
- **International interconnection** – It consists of conveying abroad call originating in Italy from other operators' subscribers.

Economic terms and conditions provided for in the reference interconnection offer for the conveyance of switched traffic are not applied to calls originating from Telecom Italia's subscribers and terminating at the interconnected operator's subscribers.

The reference interconnection offer, being in fact a "reference", is without prejudice to the possibility for the parties to negotiate, within a bilateral agreement, different interconnection procedures, terms and conditions.

Telecom Italia's reference interconnection offer includes the following:

1. Levels of interconnection with Telecom Italia's network
 - Interconnection at the level of International Switches for the traffic directed abroad
 - Interconnection at the level of the Transit Group of Telecom Italia's network
 - Interconnection at the level of the Metropolitan Group of Telecom Italia's network
2. Forms of interconnection to Telecom Italia's network
 - Access to Telecom Italia's network with Point of Interconnection at the node of the operator requesting interconnection

- Access to Telecom Italia's network with Point of Interconnection at a site adjoining Telecom Italia's network
3. Interconnection interfaces
 - Quality of the interconnected traffic
 4. Basic services offered at the interconnection interface
 5. Supplementary services offered at the interconnection interface
 6. Services conveying switched traffic usable from each point of interconnection
 - Link at the level of the International Switch for the traffic directed abroad
 - Link at the level of the Transit Group of Telecom Italia's network
 - Link at the level of the Metropolitan Group of Telecom Italia's network
 7. Ancillary services (description)
 8. Carrier Selection
 9. Planning and programming of interconnections
 10. Tariffs of Telecom Italia's reference interconnection offer
 - Tariffs related to the forms of interconnection to Telecom Italia's network
 - Tariffs of the conveyance services of national switched traffic
 - Tariffs of the conveyance services of international switched traffic
 - Tariffs of ancillary services
 - Tariffs related to Carrier Selection

-Interconnection charges

Interconnection charges are established by the parts in a specific agreement and have to be based on **actual costs** determined in accordance with the accounting system described below in the paragraph on "Accounting separation and Accounting systems suitable for the implementation of provisions on interconnection".

In order to take into account the effects of competition's development in the telecommunications service market, the NRA, after consultation with the telecommunications organisations, may establish a methodology to determine the above-mentioned charges which differs from the one described in the paragraph on "Accounting separation and Accounting systems suitable for the implementation of provisions on interconnection". This different methodology will take into account the **Long Run Incremental Costs** and will include the normal rate of return of the capital invested for that purpose. The rate of return is fixed by the NRA taking into account the average cost of capital paid by the operator and the cost of capital paid by an investor in the telecommunications sector in Italy.

The charges structure refers to the broad categories into which interconnection charges are divided in:

- initial implementation of the physical interconnection, that is the provision of the specific interconnection requested, e.g. provision of specific equipment and resources; compatibility testing;
- renting of equipment and physical and instrumental resources
- ancillary and supplementary services (e.g. access to directory services; operator assistance; data collection; charging; billing; switch-based and advanced services),
- conveyance of traffic to and from the interconnected network and the costs, e.g. of switching and transmission which may be on a per minute basis, and/or on the basis of additional network capacity required.

Charges for interconnection consist of single prices established for each network's section or structure provided to the interconnected party.

Interconnection charges include a fair share, according to the principle of proportionality, of joint and common costs and the costs incurred in providing equal access, and number portability, and the costs of ensuring essential requirements.

INTERCONNECTION TARIFFS LISTED IN THE REFERENCE INTERCONNECTION OFFER:

Telecom Italia's reference interconnection offer lists the following interconnection tariffs:

1. Tariffs related to the forms of interconnection with Telecom Italia

- **Table 1** -Tariffs of services/resources necessary for the access to Telecom Italia's network with PoI at the node of the operator requesting interconnection

Interconnection kit: -Installation -Annual subscription	-Lit. 2mil for 2* 2Mbit/s -Lit. 30mil for 2* 2Mbit/s
Interconnection Transmission Link at 2Mbit/s: -Installation -Annual junction subscription -Annual fixed transmission subscription	-Lit. 1.77mil for 2* 2Mbit/s -Lit. 8.4mil for 2* 2Mbit/s -Lit. 3.6mil for 2* 2Mbit/s from 10 to 50 Km -Lit. 19.8mil for 2* 2Mbit/s from 50 to 150 Km -Lit. 55.8mil for 2* 2Mbit/s over 150 Km
Annual transmission subscription per Km or fraction	Lit. 944,000 for 2* 2Mbit/s up to 10 Km Lit. 524,000 for 2* 2Mbit/s from 10 to 50 Km Lit 300,000 for 2* 2Mbit/s from 50 to 150 Km Lit. 60,000 for 2* 2Mbit/s over 150 Km
Phonic channels enlarging existing bundles	Lit. 1mil for 2* 2Mbit/s Lit. 14.3mil for 2* 2Mbit/s

- **Table 2** -Tariffs of services/resources necessary for access to Telecom Italia's network with a PoI at a site adjoining Telecom Italia node

Interconnection kit: -Installation -Annual subscription	-Lit. 2mil for 2* 2Mbit/s -Lit. 30mil for 2* 2Mbit/s
Transmission Link PoI-Telecom Italia node in PDH -Installation -Annual subscription	-Lit. 850,000 for 2* 2Mbit/s -Lit. 625,000 for 2* 2Mbit/s
Transmission Link PoI-Telecom Italia node in SDH -Installation -Annual subscription	-Lit. 850,000 for 2* 2Mbit/s -Lit. 625,000 for 2* 2Mbit/s
Phonic channels enlarging existing bundles -Installation -Annual subscription	-Lit. 1mil for 2* 2Mbit/s -Lit. 14.3mil for 2* 2Mbit/s
EXTENSION OF INTERCONNECTION:	
Transmission link extending interconnection: -Installation -Annual fixed transmission subscription	-Lit. 1.77mil for 2* 2Mbit/s -Lit. 3.6mil for 2* 2Mbit/s from 10 to 50 Km -Lit. 19.8mil for 2* 2Mbit/s from 50 to 150 Km -Lit. 55.8mil for 2* 2Mbit/s over 150 Km
Annual transmission subscription per Km or fraction	Lit. 984,000 for 2* 2Mbit/s up to 10 Km Lit. 624,000 for 2* 2Mbit/s from 10 to 50 Km Lit 300,000 for 2* 2Mbit/s from 50 to 150 Km Lit. 60,000 for 2* 2Mbit/s over 150 Km

2. **Table 3** -Interconnection tariffs for conveyance of national switched traffic (Lit./minute):

	Peak Lit./minute	Off Peak Lit./minute
Termination/Collection of calls via single Transit Group	48.4	27.4
Termination/Collection of calls via Metropolitan Group	29.6	16.8

3. **Table 4** -Interconnection tariffs for conveyance of international traffic from International Switched

Call's destination	Peak Lit./minute	Off Peak Lit./minute
All possible countries of destination are listed with the corresponding interconnection tariffs expressed in Italian Lira per minute		

4. Tariffs for ancillary services

-For emergency services: same tariffs as access charges in **Table 3** above.

-For the access to information in the national telephone directory, the tariff shall consist of a share remunerating the service offered per each transaction of the database:

	Lira per transaction
Access to information in the national subscriber database	280

5. Tariffs related to "Carrier selection"

For the collection and routing of calls destined to Gateway Areas different from the one of origin over the Telecom Italia's network, the long distance carrier will be subject to interconnection tariffs for the collection service through the Transit Group or the Metropolitan Group as in **Table 3** above.

-Interconnection agreements

Operators with significant market power have to submit their interconnection agreements to the NRA directly after establishment of such agreements, which, in any case, have to be made available to interested parties on request, with the exception of those parts of the agreement containing information of essential commercial significance to the party. However, prices for interconnection and other terms of general importance shall always be made available to interested parties.

The NRA shall make public all details about offices and hours in which the interested parties, on request and without payment, can have access to the above-mentioned information.

The NRA can set in advance the following elements of interconnection agreements:

- a. dispute resolution procedures;
- b. access and publication of interconnection agreements, also periodic;
- c. equal access and number portability;
- d. facility sharing, including collocation;
- e. maintenance of essential requirements;
- f. allocation and use of numbers, including access to directory services, emergency services and pan-European numbers;
- g. maintenance of end-to-end quality of services;

- h. where applicable, determination of the unbundled part of interconnection charges which represents a contribution to the net cost of universal service obligations.

Interconnection agreements between the parties contain the following elements:

- a. description of interconnection services to be provided;
- b. terms of payment, including billing procedures;
- c. locations of the points of interconnection;
- d. technical standards for interconnection;
- e. interoperability tests;
- f. measures to comply with essential requirements;
- g. intellectual property rights;
- h. definition and limitation of liability and indemnity;
- i. definition of interconnection charges and their evolution over time;
- j. dispute resolution procedure between parties before requesting NRA intervention;
- k. duration and re-negotiation of agreements;
- l. procedures in the event of alterations being proposed to the network or service offerings of one of the parties;
- m. achievement of equal access;
- n. provision of facility sharing;
- o. access to ancillary, supplementary and advanced services;
- p. traffic/network management;
- q. maintenance and quality of interconnection services;
- r. confidentiality of non-public parts of the agreements;
- s. training of staff.

–Accounting separation and Accounting systems suitable for the implementation of provisions on interconnection

The accounting system which has to be implemented by operators with significant market power must allow, at least, the break down of the following elements:

- a. direct costs borne by the telecommunications organisation for the installation, functioning, maintenance and commercialisation of public networks and telecommunications services publicly available;
- b. common costs, that is those which cannot be directly allocated; these costs are attributed as follows:
 - 1. on the basis of the direct analysis of their origin, whenever that is possible;
 - 2. when a direct analysis is not possible, on the basis of an indirect link to another category or group of categories of costs directly allocable or attributable; such an indirect link is based on similar structures of common costs;
 - 3. when it is not possible to attribute the cost category either directly or indirectly, a general attribution parameter is applied. Such a parameter is determined on the basis of the relation between the expenses directly attributed to the prevailing service and those related to other services; in such a case, the impossibility of direct and indirect attribution has to be proved.

Other cost accounting systems may be applied, in particular the system of **Long Run Incremental Costs**.

The following elements can be included in the cost accounting system, in particular in order to determine the interconnection charges list:

1. the standard cost used: e.g. fully distributed costs, long-run average incremental costs, marginal costs, stand-alone costs, embedded direct costs, including the cost bases used, i.e. historic costs (based on actual expenditure incurred) or forward-looking costs (based on estimated costs);
2. the cost elements included in the interconnection tariff, including a reasonable profit margin;
3. the degrees and methods of cost allocation, in particular the treatment of joint and common costs
4. accounting conventions concerning: the time-scale for depreciation of major categories of fixed asset; the treatment, in terms of revenue versus capital cost, of other major expenditure items, e.g. computer software and systems, research and development, new business development, direct and indirect construction, repairs and maintenance, finance charges.

5 – Spain

Spain has established its own schedule in the process towards liberalisation, consisting in opening up the market gradually.

Retevisión has already been granted a licence for becoming the second national operator for voice telephony and by 1 January 1998 the cable operators will also be authorised to provide voice telephony. A third licence will be granted in early 1998.

Full liberalisation will be set up by December 1998.

In order to allow the entrance of Retevisión and the cable operators into the market, the Spanish Government has approved a Ministerial Order on Interconnection²⁴ which will be the legal framework in force until full liberalisation in December 1998.

–Criteria for determining the relevant market

For the purposes of the above-mentioned Ministerial Order, the term “dominant operator” will be applicable to the operator or the operators of basic telephony at a national level who have obtained, within the determined territorial limits, an authorisation and, during the immediately previous year, more than 25% market share in terms of gross income from the service in question.

–Application of the criteria for determining whether an operator has significant market power

²⁴ 6430 –Orden de 18 de marzo de 1997 por la que se determinan las tarifas y condiciones de interconexión a la red adscrita al servicio público de telefonía básica que explota el operador dominante para la prestación del servicio final de telefonía básica y el servicio portador soporte del mismo.

Until 1 December 1998, the date of full liberalisation, dominant operators are only those falling within the criteria described above.

-Reference interconnection offer

All provisions about interconnection services and interconnection terms and conditions, including tariffs, for interconnection between the dominant operator and other authorised operators, are included in the above-mentioned Ministerial Order on Interconnection.

-Interconnection charges

The charges for traffic interchanges between the organisations interconnected according to the above-mentioned Ministerial Order on Interconnection shall always be calculated on the basis of the traffic actually carried out, meaning the traffic terminated at the destination wished by the user. The duration of a call shall be calculated in rounded up minutes.

The interconnected organisations shall economically compensate each other only for the traffic exchanged between them and in accordance with the following interconnection tariffs, expressed in pesetas per minute, which have to be considered as maximum levels.

-Tariffs for access and termination of the automatic basic telephony services:

Traffic	Peak tariff	Normal tariff	Reduced tariff
Metropolitan	2.50	2.50	2.30
Provincial	4.25	3.87	2.38
Inter-provincial	7.00	4.97	3.01

-Tariffs for access to international calls through operator, access to reverse charge services and access to Inmarsat:

- the same tariffs as for the access to the automatic basic telephony services apply (see table above).

-Tariffs for access to Intelligent Network services:

Peak tariff	Normal tariff	Reduced tariff
2.50	2.50	2.30

-Tariffs for access to Ibertex and access to Infovia:

Peak tariff	Normal tariff	Reduced tariff
2.50	2.50	2.30

-Interconnection agreements

Technical and operational conditions, conditions related to quality, information interchange, security and risk, as well as all other conditions applicable to interconnection, shall be agreed upon between the authorised organisation in question and the dominant operator within two months from the formal request of interconnection.

If, after the above-mentioned two month period, an agreement is not reached on all or some of the issues mentioned above, the conditions included in the Annex to the Ministerial Order on Interconnection shall apply.

In any case, the conditions included in the Annex in question, shall be considered as the minimum level of conditions to be applied in an interconnection agreement.

These conditions are:

1. Interconnection technical conditions
 - Physical and electrical interfaces
 - Transmission interface
 - Synchronisation
 - Signalling interface
2. Operational conditions
 - Operation and maintenance
 - Numbering
 - Tariffs and payment
3. Conditions related to quality
4. Conditions related to information interchange
5. Conditions related to security
6. Conditions related to risk

–Accounting separation and Accounting systems suitable for the implementation of provisions on interconnection

No information available at the moment.

6 –Sweden

–Criteria for determining the relevant market

The criteria used for determining the relevant market are those used in competition law and correspond to the EU-definitions:

The relevant “**product market**” comprises all those products or services which are regarded as **substitutable** by the potential partners, by reason of their products’ characteristics and their intended use.

The relevant “**geographic market**” comprises the area in which the potential partners of the exchange are involved in the supply or demand of products or service which make up the product market.

These criteria are applied by the NRA on a **case-by-case basis** in co-ordination with the competition authority.

–Application of the criteria for determining whether an operator has significant market power

The criteria used for determining whether an operator has significant market power are those used in **competition rules** and are applied on a **case-by-case basis**.

–Reference interconnection offer

Telia has a model interconnection agreement that is a publicly available reference interconnection offer.

–Interconnection charges

The interconnection charges as agreed in interconnection agreements are not in the public domain. However, Telia has published a price-list that serves as a basis for negotiation. This means that in reality there could be deviations from the published tariffs.

No contribution for Universal Service is included in the interconnection tariffs.

Telia's basic interconnection services are:

- **Termination** – This traffic arises when another operator's customer calls one of Telia's customers. Telia conveys the call on behalf of the other operator from the point of interconnection to Telia's customer
- **Access** – A customer who is connected to Telia's network can also have a subscription with another operator. This traffic case arises each time the customer chooses to use the other operator, who then also determines the price and invoices the customer for the actual call. Telia conveys the call on behalf of the operator from the customer who is connected to Telia up to the point of interconnection.
- **Transit** – Telia transits, on behalf of operator A, traffic from operator A network to operator B network.

Prices are in öre per successful call (call with B-answer) and in öre/minute, where a minute is the conversation time according to ITU (CCITT) Rek. D.150.

Termination and Access

	Price per call	Peak	Off-peak
Local segment	7 öre	12 öre	6 öre
Single segment	7 öre	16 öre	8 öre
Double segment	7 öre	23 öre	11.5 öre

Transit

	Peak	Off-peak
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Single transit	6 öre	3 öre
Double transit	15.6 öre	7.8 öre

All calls, except Local segment calls, are provided via Regional access point. Local segment calls are provided via Local access point.

Current prices can be found in Telia's price-list, and include payment for the actual connection. The operator's costs for the line between his own and Telia's network are thus not included in the connection price.

Payment for the connection includes:

- a non-recurrent fee and an annual charge for the point of interconnection. The price is the same, whether one or two points of interconnection need to be provided within the interconnection area;
- a non-recurrent fee and an annual charge for each PCM system inlet used at Telia's telephone exchange.

-Interconnection agreements

Interconnection agreements are not published and therefore not in the public domain.

-Accounting separation and Accounting systems suitable for the implementation of provisions on interconnection

The present regulation regarding accounting separation has been outlined in the licences under the heading "cost accounting requirements":

- a. The licensee shall keep a separate accounting system which admits control of whether tariffs for the services are cost-oriented. This shall be done in accordance with b) and d) below.
- b. The licensee shall account for relevant costs and revenues in a documented and transparent calculation model according to generally accepted business economic principles. The full costs shall be calculated for each service distinguished in the tariffs.

A transparent calculation model is a model in which costs and revenues are openly accounted for in different rows in a model. The total amount to be divided must be evident from the model, as must also the index used for distributing overheads and the amounts that, accordingly, have been allocated to separate services. The costs shall be reconcilable with financial statements. Calculated adjustments shall be openly accounted for.

- c. The licensee shall at first account for the direct costs attributable to each separate service to be distinguished. Direct costs shall be specified and separated in the following categories:

- establishment of the telephony services
- operation and maintenance of the telephony service
- billing and marketing of the telephony services and
- other direct costs with specification.

Thereafter costs that cannot be directly attributed to a separate service, indirect costs, shall be accounted for. Indirect costs shall be accounted for according to a defined cost apportionment basis.

The sum of direct and indirect costs shall be accounted for the service.

- d. The licensee shall annually upon request hand in reports to the NRA in accordance with the stipulated accounting principles in c) above.
- e. The licensee shall provide the NRA with the documentation of the calculation model and its basic data.

7 –The Netherlands

On 29 May 1997 the Minister in charge of telecommunications published a guideline with regard to interconnection-conflicts between fixed infrastructure licensees and the incumbent operator. Before publishing these guidelines, the Minister had prepared a consultation-document in which the opinion of all interested parties was sought with regard to all aspects related to interconnection.

The consultation-document had two objectives: 1) to establish the guidelines to regulate disputes and 2) to receive opinions on ‘principles related to interconnection’ (in order to see whether the way issues are interpreted by the Minister is supported by the market).

–Criteria for determining the relevant market

The independent Telecommunications Agency (OPTA) is responsible for classifying operators with a significant market position. These operators can be providers of fixed or mobile public infrastructure, fixed or mobile public telephony services or leased lines.

A provider who has a market share of 25% of the relevant market is seen as having a significant market position. However, OPTA always has the possibility of deciding otherwise, taking into account the criteria proposed in Community law in the Interconnection Directive.

Because of the close relation between these provisions and the competition law, OPTA has agreed to consult the Ministry of Economic Affairs when classifying an operator as having a significant market position in a relevant market.

In the explanatory memorandum, the only explicit reference to the “relevant market” is the following:

“The market share of a provider is of eminent importance. The criteria refer to a market-share of 25% of the relevant telecommunications market in the specific geographical area of the Netherlands in which this provider offers the service concerned”.

–Application of the criteria for determining whether an operator has significant market power

In the explanatory memorandum mentioned above, an analysis of the relation between the EU and national competition law and the telecommunications regulation can be found. However, this does not help in answering more precisely the question of the practical application of the criteria for determining whether an operator has significant market power.

It can be concluded that the Dutch legislation does not specify further the concept of “operator having significant market position” and this is more or less on purpose. The regulators are of the opinion that the incumbent ex-monopolist (KPN) will continue to have a significant market position in the market for years to come. If in the future either the regulators or KPN feel that the situation has changed, a decision will be taken on a case by case basis. Because of the close relation between these provisions and the competition law, OPTA has agreed to consult the Ministry of Economic Affairs when classifying an operator as having a significant market position in a relevant market.

–Reference interconnection offer

KPN has a standard interconnection offer, but it has not been officially approved by the Ministry. Whenever a complaint is received with regard to the interconnection offer, including interconnection charges, the Minister will analyse the part of the standard offer subject to the complaint and could oblige KPN to modify the parts of the offer which are under discussion.

–Interconnection charges

The consultation-document mentioned above also asked for opinions with regard to ‘reasonable’ tariffs, mainly an answer to the question: how to define ‘reasonable’? It was suggested that it might be necessary to have an international benchmarking to get further knowledge. Parties were invited to submit their ideas about benchmarking and they were asked to give comments on the relationship between interconnection-tariffs and the possibility to compete with the incumbent operator.

In order to implement ‘cost-orientation’, several ways of defining costs were proposed: incremental versus integral, bottom up versus top down, forward looking versus historic, incidental versus structural, capacity based versus traffic based. The Minister expressed her preference for the Australian method of ‘embedded direct costs’ (EDC): a system which is incremental, based on historical costs and is top-down. Parties could give their opinion.

Comments were also asked with regard to the following issues: which costs are relevant to interconnection, what is seen as a reasonable profit, what is the relation

between interconnection tariffs and retail tariffs, and whether there is a need to allow peak- and off-peak tariffs for interconnection.

Some considerations were also given to the question whether tariffs for interconnection and for special access should be related to terminating access or to originating access.

As explained above, for the time being whenever there is a complaint about KPN interconnection charges, the Minister analyses the part of the standard offer subject to the complaint and can oblige KPN to introduce modifications. On 26 June 1997 a decision from the Ministry was taken with regard to a complaint from Telfort which believed that KPN interconnection charges were too high. The verdict of the Ministry was that KPN had to decrease its interconnection termination charges from 4 to 3.6 cents per minute. The charges for call originating did not have to be changed for the time being. The Ministry is of the opinion that with regard to terminating charges KPN has mistakenly incorporated certain costs in determining the interconnection price, for instance costs of marketing and overheads.

The Ministry's decision specifies an interim rate, as more time is needed before the definitive rates can be established.

-Interconnection agreements

National regulation on the subject is not ready yet.

-Accounting separation and Accounting systems suitable for the implementation of provisions on interconnection

National regulation on the subject is not ready yet, but the above-mentioned Ministry's decision on the KPN-Telfort dispute contains the statement that KPN is obliged to cooperate in the establishment of a cost-accounting/cost-allocation system for the purpose of fixing the definitive interconnection charges which have to be published before 1 July 1998.

In order to judge the cost-allocation system which will be developed by KPN, OPTA published another consultation-document. The idea is that besides the work done by KPN, a 'bottom-up model' will be developed by OPTA which will help to get a better understanding of all different issues and difficulties and which must be used to judge the KPN-model at the beginning of next year.

The consultation-document therefore identifies all different elements related to cost-accounting and interconnection and special access-services. Other players on the market will be closely involved in this procedure and will be informed on the process at two different stages: this first consultation, during Autumn 1997, concerns the general principles; in February 1998 a consultation will start on cost-accounting methodologies and their consequences on interconnection rates.

8 – Finland

–Criteria for determining the relevant market

In Finland the relevant markets are defined according to the following criteria:

Type of telecommunications	Geographical areas
<u>1.Mobile</u> -all technologies -local & long distance -excluding international	Finland including Ahvenanmaa
<u>2.Fixed local telecommunications</u>	Local areas on 31.12.1993 (48 companies)
<u>3.Long distance</u> -excluding mobile	Telecom districts (13)
<u>4.International telecommunications</u> -all telecommunications	Finland including Ahvenanmaa

–Application of the criteria for determining whether an operator has significant market power

An operator is normally considered as having significant market power in one of the above-mentioned markets when it has a share exceeding 25% of such a market. In addition to the market share criteria, the following issues also have to be taken into account when determining whether an operator has significant market power:

1. Resources
2. Mother company's power to influence Finnish markets
3. Pricing practices that bind the customers
4. Daughter companies which can use the mother company's customer base
5. Experience in providing telecommunication services.

A decision on which operators have significant market power is usually taken every year in consultation with the operators.

The decision made for 1998 concerns 51 operators.

–Reference interconnection offer

Operators with significant market power must publish the conditions for interconnection including specifications.

-Interconnection charges

Interconnection charges must be public, broken down into components and in relation to costs (including profit on investments).

Operators shall publish a price list including conditions.

-Interconnection agreements

Interconnection agreements shall be communicated to the Ministry where they are publicly available, except those parts, decided by the Ministry, that concern the commercial strategy of the company.

-Accounting separation and Accounting systems suitable for the implementation of provisions on interconnection

Operators shall use a cost accounting system and a description of it should be sent to the Ministry. Such a description has to include the standard costs used, the book-keeping methods, the division of costs in categories and the distribution rules. The cost accounting system is considered as approved if the Ministry does not notify otherwise within one month from receipt. The operator shall keep the description available for interested parties.

9 –The United Kingdom

-Criteria for determining the relevant market

The Interconnection Directive sets out provisions for identifying the markets, or activities which are relevant for the purposes of identifying SMP. The Interconnection Directive adopts a high level approach, concentrating on the activities considered to be of major importance at the European level and defining the relevant geographic market for the calculation of market shares.

The relevant “geographic market”

For the purpose of identifying whether an operator has SMP, this is the geographical area within which an organisation is authorised to operate. This means that the limits of an organisation’s licence authorisation define the limits of the geographic market which the NRA must look at when considering whether an operator has SMP. This is not necessarily the same as the geographic market identified for the purposes of competition investigations, which is defined according to demand and supply conditions.

The relevant “product market”

The Commission has indicated that the relevant markets for determining SMP under the Directive are set out in Annex 1 of the Interconnection Directive. They are:

- fixed networks and services
- mobile networks and services
- leased lines services.

It is these three categories of services which must be looked at for the purposes of identifying SMP. The Directive makes no provision for sub-dividing these markets into specific products or services. SMP obligations could not therefore be imposed on operators who have market power in some individual product markets but do not meet the SMP test, which must be determined across one or more of the broad sectors set out in Annex 1 of the Interconnection Directive (e.g. the entire fixed market).

The relevant market for fixed public telephone networks and services

The network market is defined in Annex 1 of the Directive as the public switched telecommunications network which supports the transfer between network termination points at fixed locations of speech and 3.1 kHz bandwidth audio information. Access to the end-user's network termination points is via a number or numbers in the national numbering plan.

The relevant market for fixed public telephone services is defined by reference to the Voice Telephony Directive (95/62/EC), as the provision to end-users at fixed locations of a service for the originating and receiving of national and international calls, and may include access to emergency (999/112) services, the provision of operator assistance, directory services, provision of public pay-phones, provision of services under special terms and/or provision of special facilities for customers with disabilities or with special social needs. Access to the end-user is via a number or numbers in the national numbering plan.

The relevant market for leased lines services

Leased lines, as defined in Annex 1 of the Interconnection Directive, means the telecommunications facilities which provide for transparent transmission capacity between network termination points, and which do not include on-demand switching (switching functions which the user can control as part of the leased line provision). They may include systems which allow flexible use of the leased line bandwidth, including certain routing and management capabilities.

The relevant market for public mobile networks and services

A public mobile telephony network is defined by Annex 1 of the Interconnection Directive as a public telephone network where the network termination points are not at fixed locations.

Public mobile telephone service is defined as a telephony service whose provision consists wholly or partly in the establishment of radio-communications to one mobile user and makes use wholly or partly of a public mobile telephone network.

- Application of the criteria for determining whether an operator has SMP

In November 1997 OFTEL published a Consultative Document ("Identification of SMP for the purposes of the EU Interconnection Directive") setting out the UK approach to identifying SMP and explaining which operators it proposes to determine as having SMP, in compliance with Article 18 of the Interconnection Directive. A follow-up Statement, with the same title, was published in February 1998. Full details

on the application of the criteria for determining whether an operator has SMP are contained in these publications. The following paragraphs contain a summary.

Consistent with the UK government's implementation of other EU Directives to date, OFTEL proposes to take an "organisation" to be the licensee (defined as "public operator" in the Regulations which implement the Interconnection Directive).

The UK markets for networks and services have been liberalised for some considerable time and there is now a multiplicity of operators, great diversity of services, and developing re-distribution of market shares. One feature of the UK market is the tendency of the smaller operators to extend the area of their operations, either by network roll-out under licences covering wider areas (often including a national licence), or by mergers with other licensees. Operators deemed to be "public operators" for the purposes of implementation of the Interconnection Directive may in fact hold several licences, some of which overlap – with the result that a single organisation may in fact exist as several different licensees.

Where a licensee reaches or approaches 25% market share within the geographic limits of its licence, OFTEL would consider whether it should be deemed to have SMP. OFTEL considers that in such cases, the relevant geographic area would have to be decided on a licence by licence basis. Where a single organisation has more than one licence, the geographic area to be considered will be decided on a case by case basis. This exercise would include consideration of which licences may be relevant in defining the relevant geographic market.

In any such exercise, OFTEL would look closely at all factors set out in Article 4(3) and where several factors were compelling – particularly the operator's ability to control access to end-users or its economic market power – OFTEL would consider exercising its discretion under the Directive to determine an operator as having SMP even though they had a market share in the relevant licensed area or areas which was less than 25%.

Similarly, where a licensee had more than 25% of the market within the geographic area within which it is licensed to operate, OFTEL would consider the other factors in the Directive when deciding whether a determination of SMP was justified in all the circumstances.

Following consultation the Director General of OFTEL determined that the following operators currently have SMP in the UK: in the fixed and leased lines markets, BT and Kingston Communications (Hull) Ltd; and in the mobile market, Cellnet and Vodafone.

-Reference interconnection offer

Operators with SMP in the fixed network and services market are required to offer to enter into agreements, to observe the principle of non-discrimination (including non-discrimination in such agreements) and to make offers that meet the Interconnection Directive requirements for a Reference Interconnection Offer.

-Interconnection charges

Fixed services operators with SMP are required to publish a list of standard interconnection services detailing the charges for each individual service. Such operators must give 28 days notice of any changes to the list where competitive

services are concerned and 90 days notice of any changes where non-competitive services are concerned.

-Interconnection agreements

Operators with SMP in the fixed network and services market are required to offer a standard interconnection agreement.

-Accounting separation and Accounting systems suitable for the implementation of provisions on interconnection

BT has been required to provide separate regulatory accounts for Access, Network, Retail, Apparatus Supply, Supplemental (enhanced) Services and Residual Businesses. These regulatory accounts are supported by detailed requirements for the cost attribution, valuation and other methodologies needed to produce them – set out in documents agreed with or scrutinised by OFTEL. A similar separation into regulatory accounts will apply to the UK's regional SMP operator (Kingston).

10 –Switzerland

The definitions and principles used for determining the relevant market and whether an operator has significant market power are those used in competition law.

In the present situation of monopoly in the telecommunications sector, the Swiss Federal Act on Cartels and Other Restraints of competition can of course only apply partially. In such a framework it is quite difficult to refer to case-law dealing with telecommunications, since the sole practical examples are related to cross-subsidies or discrimination from the monopolist.

–Criteria for determining the relevant market

The relevant “product market” comprises all those products or services which are regarded as substitutable by the potential partners, by reason of their products' characteristics and their intended use.

The relevant “geographic market” comprises the area in which the potential partners of the exchange are involved in the supply or demand of products or services which make up the product market.

The definitions given above are very close to the EU-definitions.

–Application of the criteria for determining whether an operator has significant market power

As explained in Chapter 2 (par. 2.10) of this report, the Swiss legislation does not refer to “significant market power”, but to “enterprises having a dominant position in the market”, which means one or more enterprises being able, as regards supply or demand, to behave in a substantially independent manner with regard to the other participants in the market.

The important criteria to be considered are number, quality and position of potential competitors, barriers to entry (official and de facto) and market share.

-Reference interconnection offer

No information is available at the moment on the subject: a new regulation is under preparation.

-Interconnection charges

No information is available at the moment on the subject: a new regulation is under preparation.

-Interconnection agreements

No information is available at the moment on the subject: a new regulation is under preparation.

-Accounting separation and Accounting systems suitable for the implementation of provisions on interconnection

No information is available at the moment on the subject: a new regulation is under preparation.

11 –Portugal

-Criteria for determining the relevant market

The NRA does not interfere in determining what are the relevant markets. The determination of a relevant market is included in the Basic law on the Establishment, Management and Exploitation of Telecommunications Infrastructure and Services and in the legislation that followed that law in order to regulate the specific markets. Accordingly, definitions are given of a public telecommunications service, a complementary service and a value added service.

-Application of the criteria for determining whether an operator has significant market power

Article 3 of Decree-Law 371/93 of 29 October, forbids the abusive exploitation of a dominant position in the national market or in a significant part of it, by one or more companies, with the aim of restricting, obstructing or distorting competition. It is understood that a company (or two or more companies in a combined way) has a dominant position when it acts in a market where it has no effective competition or it assumes predominance over the other companies in the relevant market.

The criteria used to determine whether a company or a group of companies have a dominant position are related to the market shares. In the case of a single company the

threshold is 30%. Concerning up to three companies the threshold is 50% and, between three and five companies, the threshold is 65%.

ANNEX 6 - COMMENTS ON THE STUDY ON “REGULATING OPERATORS WITH SIGNIFICANT MARKET POWER” EXPRESSED DURING A WORKSHOP HELD IN BRUSSELS ON 21 OCTOBER 1997

I- Comments on ETO’s proposals

1) Criteria for determining whether an operator has SMP

- ETNO supported the conclusions made by ETO that it is recommendable to develop common guidelines on how to apply the basic principles regarding the criteria for determining whether an operator has SMP.
- A manufacturer pointed out that it is not at all surprising that, as illustrated by ETO, the approach used by NRAs in implementing the ONP-Interconnection rules is combined and strictly interfused with the concept of dominant position in accordance with competition rules. It is maybe too early to draw real conclusions about this issue because, as demonstrated in the ETO study, one group of countries interprets the criteria in one way, a second group in another way and a third group has not decided yet how to interpret the rules. Nevertheless, a study like the current one by ETO and a forum of discussion like the one where this study was presented are absolutely necessary in order to clarify the present situation and the future developments.

2) Definition of the relevant market

- ETNO supported the conclusions made by ETO that it is recommendable to develop common guidelines on how to apply the basic principles regarding relevant markets. ETNO also supported the proposal that the pan-European dimension has to be taken into account when the relevant market is defined.
- An incumbent operator pointed out that the rules for defining the relevant market are not different from country to country: what is actually different are the markets. Of course the market is different from country to country and of course, for example, the relative market power of mobile and fixed operators is different from country to country. Nevertheless, a common trend has to be defined because very soon Europe will have a single harmonised market, with harmonised market conditions.
In order to define such a common trend for defining the relevant market it is important to take into account the two following considerations:
 - 1) In the near future there will be no distinction between long distance & international mobile communications and long distance & international fixed communications. The market for both mobile and fixed communications has to be considered a single relevant market;
 - 2) With regard to the geographical relevant market, in all papers by the Commission it is stated that, as exclusive rights exist, relevant markets are national. There should be a clear political statement from DG IV of the Commission explaining that the

conditions have changed and now the telecommunications market is European and not national anymore. As a consequence, as ETO proposes in its study, the Pan-European dimension has to be taken into account when defining the relevant geographical market.

- A new entrant identified two different possible dangers in defining the relevant market. One danger is to itemise too much the relevant market, i.e. to break it down into too small units so that in one very small area an operator could have SMP just by having only a few customers. On the other hand, if, as suggested by ETO, the pan-European dimension is taken into account, the danger is that the definition of the relevant market is too large and de facto no one will have SMP.

3) Reference Interconnection Offer

- The only comment received on this point was from a new entrant which would be very happy to see the Reference Interconnection Offers of operators with SMP harmonised and published on a Web site; this would make life easier for new entrants.

4) Interconnection agreements

- ETNO recognised and agreed that the harmonisation of interconnection agreements is carried out very satisfactorily within the framework developed by the EIF.
- Two new entrants, commenting on the fact that NRAs have to decide which parts of an interconnection agreement may be published, expressed the opinion that interconnection agreements are contracts between private parties which very often also reflect business secrets of all sorts and other aspects of strategic importance. It is therefore not easy to understand why a public authority should decide to make public what private companies have decided to be their negotiating results.
- Another new entrant, commenting on the issues related to the publication of the interconnection agreements, pointed out that interconnection agreements where one of the parties involved has SMP, have to be published so that other companies could have an orientation of what is the state of art, but interconnection agreements between two operators with no SMP should not be published.
This proposal is in line with both the Interconnection Directive and the ETO proposal in this study.
- One more new entrant, also commenting on the issues related to the publication of the interconnection agreements, stated that they would not like to publish an interconnection agreement if they think that they have made an advantageous deal with another operator. If the operators with SMP are obliged to behave in accordance with the non-discriminatory principle, the publication of their interconnection agreements with new entrants is not the solution for controlling their behaviour. The only way to ensure that SMP operators behave in a non-discriminatory way is to put considerable energy into ensuring a real harmonised and published reference interconnection offer. And this is not the situation at the moment.

5) Interconnection charges

- The only comment received on this point was the one from ETNO, which supported the conclusions made by ETO -that it is recommendable to develop common guidelines on how to apply the basic principles regarding interconnection charges.

6) Accounting systems

- The only comment received on this point was the one from ETNO, which supported the conclusions made by ETO -that it is recommendable to develop common guidelines on how to apply the basic principles regarding accounting systems.

II- General comments

- ETNO does not agree with the reasoning that there must be specific conditions imposed *a priori* on certain operators. They have questioned this thinking several times and they therefore also do so in their comments on the ETO study.
- ETNO acknowledges that the interconnection regulation is in place and it is extremely important to avoid any distortion of competition. Therefore, ETNO is interested in having an harmonised approach within Europe. It is simply not acceptable for the operators that basic concepts like definitions of dominance, definitions of SMP, definitions of relevant markets and the derived obligations imposed on certain operators can differ significantly among member states.
- The two above-mentioned comments from ETNO were supported by an incumbent operator which was not in favour of telecom-specific regulation, especially in an asymmetric form. Nevertheless, the operator explained, since this kind of regulation has been adopted, it is at least necessary to ensure that there will not be fragmented approaches in the implementation of these rules at the European level.
- A new entrant pointed out that an important issue is missing in the study, that is the scope of organisations entitled to have interconnection. It would be very useful if ETO could include in its report information on who are the operators entitled to make use of the Reference Interconnection Offers of the operators with SMP because this point is not at all clear.
- An incumbent operator expressed some doubts on whether the intention to harmonise regulation is consistent with the need to envisage the phasing out of specific regulation in the near future.
- A new entrant, in reply to the above question, answered that harmonisation and phasing out of specific regulation are not necessarily contradictory. It is very important to limit harmonisation only to really essential issues. Harmonisation does not mean that there would be more regulation.
- An incumbent operator, also responding to the above question, expressed its opinions on whether or not telecommunication-specific regulation is needed and on the possible

political choices, both at a national and Community level, involved in regulating or leaving everything to competition mechanisms.

III – Conclusions of the Workshop

- The results and the recommendations contained in the ETO study were considered generally useful and acceptable, especially with regard to the development of common guidelines on how to apply the basic principles regarding the criteria for determining whether an operator has SMP and for determining the relevant market. In particular, with reference to the definition of the relevant market, the proposal to take into account the pan-European dimension was largely supported.
- The main subject of discussion was the ETO proposal to investigate whether an archive of interconnection agreements available on a Web site was desirable. The publication of interconnection agreements, which is not related to harmonisation of interconnection agreements, aims at reaching a high level of transparency, in the sense that every interested part must have the possibility to look into interconnection agreements concluded by operators with SMP; this relates in particular to the avoidance of discrimination. It is extremely important that operators with SMP do not favour their own subsidiaries or certain companies with whom they have relations. The question for this study was therefore where these interconnection agreements, except for the confidential parts, should be published. This was an open and difficult question to which the participants in the Workshop answered almost unanimously that an archive of interconnection agreements available on a Web site was not at all desirable. This result is reflected in the part of the report presenting the proposal.
- With regard to the Reference Interconnection Offers of operators with SMP, an important result of the Workshop was that such offers should be harmonised and published on a Web site in order to make life easier for new entrants and to make it possible to ensure that SMP operators behave in a non-discriminatory way. It was also pointed out that it would be very useful to make public information on which operators are entitled to make use of the Reference Interconnection Offers of the operators with SMP because this point is not at all clear in any European country.

ANNEX 7 -EU regulatory framework with regard to operators with significant market power

Criteria for determining whether an operator has significant market power

With regard to the most recent developments in EU telecommunications legislation, the “Interconnection Directive”²⁵ and “Licensing Directive”²⁶ include a clear reference to “significant market power”.

According to Article 4 of the Interconnection Directive:

An organisation shall be presumed to have significant market power when it has a share of more than 25% of a particular telecommunications market in the geographical area in a Member State within which it is authorised to operate.

National regulatory authorities may nevertheless determine that an organisation with a market share of less than 25% in the relevant market has significant market power. They may also determine that an organisation with a market share of more than 25% in the relevant market does not have significant market power. In either case, the determination shall take into account:

- the organisation’s ability to influence market conditions
- its turnover relative to the size of the market
- its control of the means of access to end-users
- its access to financial resources
- its experience in providing products and services in the market.

Reference to the above-mentioned Article can be also found in the Licensing Directive.

In Whereas 6 of the Interconnection Directive, in addition to the above-listed factors to be taken into account when determining the significant market power of an organisation, the following is included:

- the organisation’s international links

A similar definition, but more specific to the scope of the Directive is also contained in the proposed new Directive on the application of ONP to voice telephony and universal service replacing Directive 95/62/EC²⁷:

²⁵ “Common position adopted by the Council on 18 June 1996 with a view of adopting Directive 96/.../EC of the European Parliament and the council on interconnection in telecommunications with regard to ensuring universal service and interoperability through application of the principles of open network provision (ONP).

²⁶ “Common position (EC) No /96 adopted by the Council on 9 December 1996 with a view to adopting Directive 96/ /EC of Proposal for the European Parliament and Council on a common framework for general authorisations and individual licences in the field of telecommunications services”

²⁷ Reference is made here to the proposed new Directive on the application of ONP to voice telephony and universal service replacing “Directive 95/62/EC of the European Parliament and of the Council on the application of open network provision (ONP) to voice telephony”,

- “Organisation with significant market power” means an organisation providing fixed public telephone networks and/or publicly available telephone services in a Member State which has been designated by the national regulatory authority in that Member State as having significant market power and notified to the Commission.

For the purpose of this Directive, the “relevant market” in which an organisation enjoys market power is “the relevant voice telephony market in a Member State”.

Another similar definition, but more specific to the scope of the Directive, is also contained in the proposed new Directive revising the ONP Leased Lines Directive. For the purpose of this Directive, the relevant market in which an organisation enjoys market power is the relevant leased lines market in a Member State.

Finally, Article 18 of the Interconnection Directive provides for NRAs to notify to the Commission by 31 January 1997 the names of those organisations which:

- are subject to the provisions of this Directive concerning organisations with significant market power.

Obligations specific to operators with significant market power and not applicable to other operators

The proposed Licensing Directive provides a general framework in the field of telecommunications. The general approach is to require the lightest authorisation regimes possible, with no a priori limitations on the number of licences. The Directive states that, where possible, preference must be given to general authorisations, while individual licences are envisaged as an addition to the general authorisation for issues which cannot be dealt with by general rules. These include the requirement

- to impose specific obligations, in conformity with Community competition rules, where the licensee has significant market power, as defined in Article 4 of the proposed Interconnection Directive in relation to the provision of public telecommunications networks and telecommunications services publicly available.

Among the conditions which may, where justified, be attached to individual licences, there are the following:

- Conditions applied to operators having a significant market power, as notified by Member States under the proposed Interconnection Directive, aiming at **ensuring interconnection** or the **control of significant market power**.

Article 4 of the proposed Interconnection Directive states:

even if the Directive 95/62/EC has not been replaced yet and it is still valid until definitive approval of the new one. The reason why we refer to the proposed new Directive here is that it has the aim of adapting the existing voice telephony Directive to a competitive market with multiple players and it specifies the different categories of organisation to whom the various provisions should apply, including organisations enjoying a significant market power, which is the scope of this report.

- Organisations authorised to provide public telecommunications networks and publicly available telecommunications services as set out in Annex I²⁸ which have significant market power shall **meet all reasonable requests for access to the network** including access at points other than the network termination points offered to the majority of end-users.

Article 6 of the proposed Interconnection Directive states that organisations which have been notified by national regulatory authorities as having significant market power have to:

- adhere to the principle of **non-discrimination with regard to interconnection** offered to others;
- make available all **necessary information and specifications** on request to organisations considering interconnection;
- **communicate interconnection agreements to the relevant national regulatory authorities** and make them available on request to interested parties.

Article 7 of the proposed Interconnection Directive states that organisations which have been notified by national regulatory authorities as having significant market power have to conform to the following provisions:

- charges for interconnection shall follow the principles of **transparency and cost orientation**;
- national regulatory authorities shall ensure the **publication of a reference interconnection offer**;
- charges for interconnection shall, in accordance with Community law, be sufficiently **unbundled**, so that the applicant is not required to pay for anything not strictly related to the service requested;
- the **cost accounting systems** used by the organisations concerned must be suitable for implementation of the requested requirements listed above and must be documented to a sufficient level of detail;
- where they exist, **charges related to the sharing of universal service obligations** shall be unbundled and identified separately.

Article 8 of the proposed Interconnection Directive states that organisations which have been notified by national regulatory authorities as having significant market power have to:

- **keep separate accounts** for, on the one hand, their activities related to interconnection -covering both interconnection services provided internally and interconnection services provided to others- and, on the other hand, other activities.

Directive 95/62/EC on the application of ONP provisions to voice telephony contains conditions for open and efficient access to and use of fixed public telephone networks and public telephony services that apply to providers of fixed public telephone networks and public telephony services. The Directive states that Member States which have abolished exclusive rights for voice telephony may apply these provisions to

²⁸ Annex I of the Directive contains the list of “Specific public telecommunications networks and publicly available telecommunications services” referred to in Article 3 (2) of the Directive.

organisations defined on the basis of a significant market share or on the basis of a dominant position.

Directive 95/62/EC is now being adapted for full liberalisation of public telecommunications networks and voice telephony services and a new Directive on the application of ONP provisions to voice telephony is under discussion. This new proposal aims at adapting the existing ONP/voice telephony Directive to a competitive market with multiple players and it specifies the different categories of organisation to which the various provisions should apply. In the new Directive the following provisions, also contained in Directive 95/62/EC, specifically apply to organisations having significant market power:

- provision of the advance facilities listed below:
 1. *Calling-line identification*
 2. *Direct dialling-in (or facilities offering equivalent functionality)*
 3. *Call forwarding*
- response to reasonable requests for access to the fixed public telephone network at termination points other than the commonly provided network termination points
- adherence to the principle of non-discrimination when making use of the fixed public telephone network for providing publicly available telecommunications services
- making available details on agreements for special network access to the national regulatory authority upon request
- tariffs for use of the fixed public telephone network and publicly available telephone services shall follow the basic principles of transparency and cost orientation set in Directive 90/387/EEC
- tariffs for access to and use of the fixed public telephone network shall be independent of the type of application which the users implement
- tariffs for facilities additional to the provision of connection to the fixed public telephone network and publicly available telephone services shall be sufficiently unbundled, so that the user is not required to pay for facilities which are not necessary for the services requested
- tariffs changes shall be implemented only after an appropriate public notice period
- the cost accounting system operated by such an organisation shall be suitable for the implementation of the provisions on tariffs mentioned above and compliance with such a system must be verified by a competent independent body
- the cost accounting system has to be detailed, described and include those elements listed in the Directive itself.

-Table of conditions imposed on operators with significant market power in EU regulatory framework

Definition:

Definition of “operator with significant market power” or other similar concepts

According to Article 4 of the proposed “Interconnection Directive”:

- An organisation shall be presumed to have significant market power when it has a share of more than 25% of a particular telecommunications market in the geographical area in a Member State within which it is authorised to operate.

NRAs may nevertheless determine that an organisation with a market share of less than 25% in the relevant market has significant market power or that an organisation with a market share of more than 25% in the relevant market does not have significant market power. In either case, the determination shall take into account:

1. the organisation’s ability to influence market conditions
2. its turnover relative to the size of the market
3. its control of the means of access to end-users
4. its access to financial resources
5. its experience in providing products and services in the market.

Licensing: Individual licence

The proposed Licensing Directive states that individual licences are envisaged as an addition to the general authorisation, for issues which cannot be dealt with by general rules, including the requirement:

- to impose specific obligations, in conformity with Community competition rules, where the licensee has significant market power, as defined in Article 4 of the proposed Interconnection Directive in relation to the provision of public telecommunications networks and telecommunications services publicly available.

Among the conditions which may, where justified, be attached to individual licences, there are the following:

- Conditions applied to operators having a significant market power, as notified by Member States under the proposed Interconnection Directive, aiming at **ensuring interconnection** or the **control of significant market power**.

Interconnection:

“meet all requests for access to network”

Article 4 of the proposed Interconnection Directive states:

- Organisations authorised to provide public telecommunications networks and publicly available telecommunications services as set out in Annex I which have significant market power shall **meet all reasonable requests for access to the network**, including access at points other than the network termination points offered to the majority of end-users.

In the new ONP-voice telephony Directive the following provision, also contained in Directive 95/62/EC, specifically applies to organisations having significant market power (Art. 16):

- response to reasonable requests for access to the fixed public network at termination points other than the commonly provided termination points.

“non-discrimination in interconnection”

Article 6 of the proposed Interconnection Directive states that organisations which have been notified by national regulatory authorities as having significant market power have to:

- adhere to the principle of **non-discrimination with regard to interconnection** offered to others.

“make available all information on interconnection”

Article 6 of the proposed Interconnection Directive states that organisations which have been notified by national regulatory authorities as having significant market power have to:

- make available all **necessary information and specifications** on request to organisations considering interconnection.

“make public all details on agreements for special network access”

In the new ONP-voice telephony Directive the following provision, also contained in Directive 95/62/EC, specifically applies to organisations having significant market power (Art. 16):

- making available details on agreements for special network access to the national regulatory authority upon request.

“communicate interconnection agreements to NRA”

Article 6 of the proposed Interconnection Directive states that organisations which have been notified by national regulatory authorities as having significant market power have to:

- **communicate interconnection agreements to the relevant national regulatory authorities** and make them available on request to interested parties.

Interconnection:

“interconnect charges: transparency and cost-orientation”

Article 7 of the proposed Interconnection Directive states that organisations which have been notified by national regulatory authorities as having significant market power have to conform to the following provision:

- charges for interconnection shall follow the principles of **transparency and cost orientation**.

“unbundled charges for interconnection”

Article 7 of the proposed Interconnection Directive states that organisations which have been notified by national regulatory authorities as having significant market power have to conform to the following provision:

- charges for interconnection shall, in accordance with Community law, be sufficiently **unbundled**, so that the applicant is not required to pay for anything not strictly related to the service requested.

“publication of a reference interconnection offer”

According to article 7(2) of the proposed Interconnection Directive, which applies to organisations which have been notified by national regulatory authorities as having significant market power :

- NRAs shall ensure the publication of a reference interconnection offer. The reference interconnection offer shall include a description of the interconnection offerings broken down into components according to market needs, and the associated terms and conditions including tariffs.

Cost accounting:

“cost accounting system suitable for implementation of the above requirement”

Article 7 of the proposed Interconnection Directive states that organisations which have been notified by national regulatory authorities as having significant market power have to conform to the following provision:

- the cost accounting systems used by the organisations concerned must be **suitable for implementation of the requested requirements** listed above and must be documented to a sufficient level of detail.

“detailed cost accounting system”

Article 7 of the proposed Interconnection Directive states that organisations which have been notified by national regulatory authorities as having significant market power have to conform to the following provision:

- the cost accounting systems used by the organisations concerned must be suitable for implementation of the requested requirements listed above and must be **documented to a sufficient level of detail**.

Accounting separation:

“unbundled charges related to USO”

Article 7 of the proposed Interconnection Directive states that organisations which have been notified by national regulatory authorities as having significant market power have to conform to the following provision:

- where they exist, charges related to the sharing of universal service obligations **shall be unbundled and identified separately.**

“accounting separation”

Article 8 of the proposed Interconnection Directive states that organisations which have been notified by national regulatory authorities as having significant market power have to:

- **keep separate accounts** for, on the one hand, their activities related to interconnection - covering both interconnection services provided internally and interconnection services provided to others- and, on the other hand, other activities.

Tariffs:

“unbundled tariffs for additional facilities”

In the new ONP-voice telephony Directive (Art. 17) the following provision, also contained in Directive 95/62/EC, specifically applies to organisations having significant market power:

- tariffs for facilities additional to the provision of connection to the fixed public telephone network and publicly available telephone services shall be sufficiently unbundled, so that the user is not required to pay for facilities which are not necessary for the services requested.

“transparency and cost-orientation of tariffs”

In the new ONP-voice telephony Directive (Art. 17) the following provision, also contained in Directive 95/62/EC, specifically applies to organisations having significant market power:

- tariffs for use of the fixed public telephone network and publicly available telephone services shall follow the basic principles of transparency and cost orientation set in Directive 90/387/EEC.

“tariffs for access and use of network independent of use”

In the new ONP-voice telephony Directive (Art. 17) the following provision, also contained in Directive 95/62/EC, specifically applies to organisations having significant market power:

- tariffs for access to and use of the fixed public telephone network shall be independent of the type of application which the users implement

“access tariff changes only after appropriate public notice”

In the new ONP-voice telephony Directive (Art. 17) the following provision, also contained in Directive 95/62/EC, specifically applies to organisations having significant market power:

- tariff changes shall be implemented only after an appropriate public notice period.

“cost accounting system suitable for implementation of provisions on tariffs”

In the new ONP-voice telephony Directive (Art. 18) the following provision, also contained in Directive 95/62/EC, specifically applies to organisations having significant market power:

- the cost accounting system operated by such an organisation shall be suitable for the implementation of the provision on tariffs mentioned above and compliance with such a system must be verified by a competent independent body.

Other:

“provision of advanced facilities”

In the new ONP-voice telephony Directive (Art. 15) the following provision, also contained in Directive 95/62/EC, specifically applies to organisations having significant market power:

- provision of the advance facilities listed below:
 1. *Calling-line identification*
 2. *Direct dialling-in (or facilities offering equivalent functionality)*
 3. *Call forwarding*

“non-discrimination in the provision of telephone services”

In the new ONP-voice telephony Directive (Art. 16) the following provision, also contained in Directive 95/62/EC, specifically applies to organisations having significant market power:

- adherence to the principle of non-discrimination when making use of the fixed public telephone network for providing publicly available telecommunications services.