

**TELECOMMUNICATIONS
REGULATIONS:**

**INSTITUTIONAL STRUCTURES,
RESPONSIBILITIES AND THE
EUROPEAN EXPERIENCE**

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INTRODUCTION

The rapid technological transformation and the progressive market liberalization of telecommunications sector have resulted in a number of important regulatory developments that can ensure fair competition in the marketplace especially within the European Union. This includes changes in the role of regulatory institutions, the development and implementation of new *sui generis* regulatory rules and the implementation of harmonized regulatory principles¹, although there has been a wide variation in the development, responsibility and degree of structural independence of different regulatory institutions and respective implementation of their political mandate, because of different political ideas and legal traditions among various countries.

In this regard, during the last two decades, there have been three major institutional trends; the establishment of independent regulators-separate both from line ministries and telecommunications operators; the growing involvement of competition authorities- a regulatory body that it is responsible for the supervision of competition rules- in the telecommunications sector regulation, although raising the issue of inconsistent jurisdiction, which creates problems for market participants in making business decisions; and finally the integrated regulatory institutions on telecommunications and broadcasting in the light of convergence, driven by the rapid development and implementation of digital technology, bringing into question the existing service-based regulatory system.

¹ For instance the EC issued the **ONP Framework Directive, Interconnection Directive and Licensing Directive**. Another example is the Reference Paper on the WTO agreement on basic telecommunications services

A.

1.National Regulatory Authority: a brief historical overview

Up until the mid-1980s - with some luminous exceptions²- in most countries the Ministry was responsible not only for telecommunications regulation – in some countries even no *per se* regulation existed, but also the telecommunications services providing operator. On the contrary in the late 1980s a more competitive and liberalized telecommunication market urged for new regulatory requirements and systems. In this context there can be identified two ways to separate a regulatory body from all interested commercial parties. The first is the privatization of the incumbent; the Ministry in this case remains neutral in the regulating process, while it does not have any relationship with any market participant. The second is the establishment of a telecommunication regulator, remote both from the Industry and the Ministry-major incumbent shareholder in many cases - avoiding in the same time conflict of interest and unreasoned protectionism respectively. The catalysts of this regulatory transformation, since the mid-1990s, have been the WTO agreement on basic telecommunications services³ and the EU ONP Framework Directive. Especially the Reference Paper to the WTO agreement refers to the nature of the regulatory body under the title “independent regulators” focusing on its independence

² The **U.S.A**, **Canada** and the **U.K** were pioneers in the regulatory reform of the telecommunications sector, because they separated very early the operational functions from policy functions with the creation of a telecommunication operating entity.

³ The **WTO** agreement was signed on the **15th February 1997** and came into effect the **5th February 1998**.

and impartiality characteristic⁴, linking it with the principle of non-discrimination⁵, not imposing any specific administrative regulatory structure⁶.

On the other hand the ONP Framework Directive defines a National Regulatory Authority (NRA) as legally distinct and functionally independent⁷ from service provider operational bodies.

Regulatory agencies are subordinated bodies, supervised by a ministry; they are responsible for the sector-specific steering of network utilities. Regulatory agencies do not act in a purely executive capacity; instead, they **combine legislative, executive and judicial functions**. They interpret, define and supervise rules, and introduce sanctions if necessary (Baldwin and Cave 1999: 70). They have a proactive approach based on ex-ante regulation. Key arguments for introducing regulatory agencies are that they are, at least theoretically, independent from both political and private interests and they show continuity in making decisions that are not bound by party politics and elections. Additionally, regulatory agencies can build up the expertise needed to make decisions about complex and technical matters; and their decisions are based on a great deal of knowledge (see Majone 1996: 15, 49). However, regulatory agencies are criticised for their lack of accountability, the threat that political intervention will replace formal independence, the fragmentation of functions between competition law and sector-specific regulation, and for having decision-making processes which are often slow and bureaucratic.

⁴ “The regulatory body is separate from, and not accountable to, any supplier of basic telecommunications services. The decisions of and the procedures used by the regulators shall be impartial with respect to all market participants”

⁵ **The principle of non - discrimination** means that the regulator should not have any relationship with any telecommunication operator and be fair to all market players

⁶ As far as there is no direct relationship between an operator and the **Ministry**, even the latter can be considered as regulator for the countries that have adopted the **WTO** agreement.

⁷ “The body or bodies in each Member State, legally distinct and functionally independent of the telecommunications organizations, entrusted by that Member State inter alia, with the regulatory functions addressed in the Directive”

2. The role of a general competition authority in the telecommunications sector

In the wake of market liberalization the majority of countries around the world have established a specific independent regulator⁸ in the telecommunication sector instead of integrating the local competition authorities for two main reasons.

First, in principle, the main responsibility of the competition authority is to react to anti-competitive marketplace behavior⁹, mostly *ex post*, rectifying problems once they become evident with assistance from regulatory safeguards, such as the asymmetric regulation¹⁰, to prevent the dominant carrier from taking advantage of its dominant position. On the other hand it is also considered that a firm competitive telecommunications environment is dependent on the strength of the regulatory institution and the regulator's pro-competitive attitude in implementing regulatory rules. Thus it has been favored a sector specific regulator, which can take proactive action to develop competition *ex ante*, rather than to take *ex post* action.

Moreover telecommunications regulation has both social features such as universal service that are difficult to incorporate in general competition rules and technical characteristics that do not fit well with the regulatory framework of the competition authority. As a result it is viewed that relevant regulation specific technology-oriented regulator to have professional knowledge of the industry.

Although the majority of countries have established an independent regulator, the role of the competition authority has nevertheless grown as competition has developed in the telecommunications market; the role of the competition authority has increased in two different ways.

The first is through the abolition of exemptions applying general competition rules to the

⁸ Latest figures of the International Telecommunications Union (ITU) show that as in 1990 only 12 countries had a regulatory authority in telecommunications; by 2000 the number had increased to 96; and a further 26 countries now plan to create regulatory bodies (see <http://www.itu.int/ITU-D/TREG/index.html>).

⁹ Some forms of anti-competitive market behavior might be mergers, cartels and predatory pricing

¹⁰ This regulatory tool has been viewed as imposing a burden and certain obligations on the dominant carrier and can help new entrants to become competitive

telecommunications sector. Previously, in many countries, general competition rules were not applicable in the areas where sector specific regulation existed. However, many countries now apply general competition rules to the telecommunication sector together with sector specific regulation. The lifting of the exemption from general competition rules results in shared jurisdiction between a sector specific regulator and the competition authority in the telecommunications sector¹¹ and the forbearance of the sector specific regulator resulted in the increase of the role of competition authorities.

In many countries, a sector specific regulator has authority to designate market participants as having “significant market power” and the authority to impose asymmetric regulation on these companies, as described above. In addition, most sector specific regulators have authority to designate services that would be or not subject to price regulation such as price-caps, rate-of-return regulation or uniform tariffs or forbear from regulating¹². In line with the concept of forbearance, a number of countries are also encouraging self-regulation of the industry¹³.

3. Convergence and regulatory structure

The development of digital technology is blurring boundaries between different communication services such as voice telephony, broadcasting and on-line computer services. Traditionally these services were provided through different networks and different platforms. However, digital technology can provide a substantially higher

¹¹ For instance, in the **United States**, the **Telecommunications Act of 1996** expanded the **Department of Justice’s** role in reviewing mergers by removing the ability the **FCC** had to exempt mergers of local phone companies from antitrust review.

¹² For example in the **United States**, where **AT&T** is no longer considered a dominant market player, sector specific regulators can decide that companies or services will no longer be subject to sector specific regulation or in **Canada**, if the **CRTC** deems that the market for specific services is sufficiently competitive, it may forbear from regulating such services.

¹³ In **Australia**, self-regulation is encouraged through the development of voluntary industry codes of practice and technical standards, and the **Australian Communications Industry Forum (ACIF)** was established by the communications industry to support this process. In the **United Kingdom**, **OFTEL** can decide to allow the industry to implement self-regulation in any area it chooses. Premium rate services, Internet content, and the details of pricing policy are examples. In **Canada**, the **CRTC** can decide to allow the industry to implement self-regulation. In the **United States**, self-regulation is being used in a number of areas including equipment certification, service quality, network reliability and Y2K.

bandwidth capacity to deliver all communication services over the same networks and to use integrated consumer devices to deliver a range of existing and new services. Technological and service convergence are progressing rapidly in the marketplace¹⁴, and the changes they are bringing in market structures are raising various challenges for the existing communication regulatory frameworks, it is becoming increasingly arbitrary to designate individual operators and even services as falling into one category or another or less sustainable to designate an infrastructure as being specific to a particular service. However, there still remain sharp regulatory distinctions among different communications services. While Internet services are not regulated in most countries, telecommunications and broadcasting services are subject to service specific regulation. In the majority of Member countries, the institutions traditionally responsible for regulating broadcasting and telecommunications are separate from one another¹⁵. Nevertheless, there have been significant regulatory developments concerning convergence¹⁶. In the EU, the Commission issued the Full Competition Directive that required member countries to allow cable operators to provide voice telephony by 1 January 1998. The lifting of line-of-business restriction on cable operators helped stimulate competition in telecommunications markets and thus increased consumer benefits. In addition, a number of countries have allowed companies to use their fixed infrastructures for all types of communication services. In December 1997, the EC published the “Green Paper on the Convergence of the Telecommunications, Media and Information Technology Sectors” to consult with EU member countries on the future regulatory regime in the communication sector. In the Green Paper, the EC put forward as one proposition for a future regulatory model the

¹⁴ An example is the development of the Internet, which provides a full range of communication services including voice telephony and webcasting.

¹⁵ There is *de facto* separation in terms of laws and regulations even in countries with a single institution such as **Canada, the United States, Japan, Switzerland and Italy**.

¹⁶ The main countries, which allow cable television operators to provide full PSTN services including voice telephony, are **Canada, Finland, Japan, Korea, New Zealand, Sweden, the United Kingdom, the United States, Australia, Austria, Belgium, Denmark, France, Germany, Italy, Luxembourg, Mexico, the Netherlands, Norway, Spain, Portugal, Greece, Ireland and Switzerland**

creation of a new horizontal regulatory model¹⁷ to cover the whole range of existing and new services in the communications sector¹⁸.

Nevertheless, at the moment not many institutional changes have been made to take into account convergence between telecommunications and broadcasting. Along with the political difficulty to integrate separate regulatory institutions, the special role played by media and content policy in some countries makes it delicate to merge broadcasting and telecommunications regulatory institutions. However, there is increasingly strong support being given to treat content and media policy as independent of the technology used to access the consumer.

Some countries have started to examine and revise their existing regulatory structures in the context of convergence¹⁹ and make regulatory bodies more responsive to rapid changes in the communication market by merging the separated regulatory bodies²⁰.

4. Forms of telecommunications regulator-Exceptions

Nowadays most of the OECD countries have an independent regulator that is structurally separate from the Ministry or other parts of the government. Exception to that are Mexico and the Czech Republic that have a functionally separate regulatory body within the Ministry. Moreover in Japan, Korea, Poland and Turkey the Ministry is still

¹⁷The horizontal regulatory approach is being implemented in other industries also, where traditionally separated services have been integrated. For example, in **the United Kingdom, Norway and Korea**, a horizontal regulatory approach has been taken in the financial sector where traditionally there were separate regulators for banking, insurance and securities.

¹⁸ A similar proposition in a paper presented to the **TISP Working Party's Round Table on Convergence** has been put forward by the OECD.

¹⁹ In the **United Kingdom, Media and Sport Select Committee** of the **House of Commons** has proposed to establish a **Department of Communications** with responsibilities for the currently separate telecommunications and broadcasting departments

²⁰ Examples of that trend can be found:

- a) In the **U.K.** the separated sector regulatory bodies have been merged into one Communications Regulation Commission with overall responsibilities for regulation of telecommunications, broadcasting and communications infrastructure (**OFCOM**).
- b) In the **Netherlands**, the independent regulator **OPTA** took the responsibility of regulating the cable television industry from the Media Commission and the dispute resolution policy between cable television companies and programme providers.

responsible for regulatory supervision as well as policy functions while in New Zealand the competition authority is responsible for telecommunications regulation.

Among those countries that have a ministry as regulator, Poland is planning to establish a new independent regulator as set down in the draft of the new telecommunication law.

4.1 The Korean Model

In Korea, while the Ministry of Information and Communication is responsible for telecommunications regulation, it has a semi-independent regulatory body, Korea Communications Commission (KCC), the commissioners of which are nominated by the President and enjoy a guaranteed term of office which can take binding decisions on disputes between telecommunication operators, although not equivalent to an independent regulator because it is a part of the Ministry, which still exercises the most important regulations such as licensing, spectrum/number allocation price regulation.

4.2 The Mexican and Czech Model

While both Mexico and the Czech Republic have a functionally separate regulatory body within the Ministry, their structure and responsibility are quite different.

4.2.1 The Mexican Model

In Mexico, although the *Comisión Federal de Telecomunicaciones* (Cofetel) is located within the Ministry, it acts to some extent like a structurally independent body with autonomy in its budget and functions. Nevertheless, Cofetel does not have a full autonomy in its operations since the degree of independence is decided not by the law but by a Presidential Decree.

4.2.2 The Czech Model

On the other hand, the Czech Telecommunications Office (CTO) in the Czech Republic is an integral part of the Ministry of Transport and Communications. While the CTO enjoys a certain degree of autonomy in its operation, the Ministry retains the power to control CTO.

4.3 The New Zealand Model

In New Zealand, there has been no sector specific regulatory body since the liberalization of the telecommunications market in 1989. The Ministry of Commerce advises the Government on establishing telecommunications regulation, and the competition authority, the Commerce Commission, is responsible for the supervision of the telecommunications market based on the Commerce Act. There is no sector specific regulatory requirement except for special obligations on Telecom New Zealand, called the Kiwi Share Obligations that in effect regulate the price and availability of residential telephone service. The regulatory regime for telecommunications there relies primarily upon competition law to prevent anti-competitive behaviour. In other words, the primary constraint on the conduct of telecommunications firms in New Zealand is the same competition law that applies to all economic enterprises in New Zealand.

Accordingly, in New Zealand, the courts play a greater role in the supervision of telecommunication regulation than in other countries that have sector specific regulations. While the competition law is a major regulatory framework in New Zealand, there are secondary regulatory measures that provide necessary regulatory guidelines in the marketplace.

4.3 The Australian Model

In Australia, regulatory power has been shared between the ACA, the independent regulator, and the ACCC, the competition authority. This model is quite unique in the sense that the Telecommunications Act (1991) gives sector specific regulatory powers to the competition authority.

4.4 The Swiss Model

One other interesting case is Switzerland where there are two regulatory bodies, the Communications Commission (ComCom) and the Federal Office for Communications (OFCOM). ComCom is an independent regulatory body responsible for making fundamental decisions in the telecommunications field. It is aided by the OFCOM, which prepares ComCom's files, submits proposals to it and implements its decisions. The OFCOM carries out these tasks independently, while ComCom's responsibilities and its power to issue directives are taken into account.

5. Administrative structure of the Independent Regulator

Where there is a sector specific independent regulator, countries need to decide how much autonomy should be given to the independent regulator. While 'independence' does not mean independence from government policy but rather means independence to implement regulations and policies without intervention from interested parties, this 'independence' can be ensured only when the regulator has enough strength to implement regulatory rules without unnecessary intervention from the Ministry or other government bodies that are shareholders of the incumbent. If the Ministry or other government bodies retain power to control a newly established independent regulator, there would be a possibility that the independent regulator is unduly influenced by interested parties through the Ministry or other government bodies. Therefore, the administrative structure of the regulatory body is very important.

While the degree of independence is also influenced by factors such as political traditions and the personality of the head of the regulatory body, the single most important factor is the institutional structure of the regulator. In fact, the degree of independence varies from country to country according to the institutional arrangements put in place by laws and regulations.

There are a few indicators, which can be used to measure the degree of independence. It is deemed that the regulator's independence can be strengthened if the regulator is

structurally separate from the Ministry and the head of the regulatory body is appointed by the head of the Government with the approval of the legislative body. Moreover it is believed that the regulator should not be headed by a single person but by a collegiate body, which has several commissioners with guaranteed fixed staggered terms. Furthermore, it is essential that the regulator should report to a body, which does not make policy decisions in the sector. At last but not least, there should be no superintendent body that can overturn the decisions of the regulatory body other than the courts, which will be autonomous to make personnel changes.

However, it is important to bear in mind that the ultimate objective is to have an effective regulatory framework which enables the market to become competitive, stimulate technological diffusion and enhance efficiency, while ensuring that consumers benefit. In fact, close co-operation between the independent regulator and policy maker is essential to guarantee that regulation is more responsive to government policy decisions. Furthermore, there must be administrative measures to oversee the activities of the independent regulator, because the independent regulator remains in any case an administrative body of the government, accountable for its actions, which require to be monitored. Although it is very difficult to say how much autonomy should be given to the independent regulator and each country may have different preferences on this issue, based on its political and economic context, it is basic to ensure a certain degree of structural independence, which is necessary for the regulator to implement its regulatory mandate without any intervention.

5.1 Reporting

It is possible to identify three types of reporting mechanisms for the independent regulators. The most popular type is reporting to the Ministry responsible for telecommunication policy. In some countries, such as Austria, Germany and the United States, the independent regulator is required to report to the legislative body²¹. In addition, there are a few countries that do not impose any statutory reporting obligation on the telecommunication regulator except the publication of an annual report.

²¹ In **Canada**, the **CRTC** reports to Parliament through the **Minister of Canadian Heritage**.

In most cases, the reporting obligation is not very specific. Thus, reporting in many countries is often through a publication of an annual report that covers the activities of the regulator. But, some countries put very specific reporting obligations on the telecommunication regulator²².

5.2 Financing

In most cases, the independent regulator's budget has to be approved or endorsed by the government before the finalization of the national budget by the legislative body. There are two different ways to finance the independent regulator's budget.

5.2.1 Fees and Contribution

One is to allow the regulator to collect money from the industry through fees and contributions. In general, the regulators receive licence fees, spectrum fees, and fees from the sale of numbers. Four countries -- Ireland, Spain, Luxembourg and Sweden -- receive a levy from operators in relation to an operator's turnover²³.

Austria is the only country that uses both fees and telecommunication operator's contributions as a financial source. TKC is partly financed through licence fees and partly through proportional financial contributions made by all service providers, which do business in the Austrian market.

In those countries where both government appropriation and fees are used as financial resources for the regulator, the government appropriation is made only when there is insufficient revenue from fees²⁴. Thus the majority of regulators' budgets come from fees²⁵.

²² For example in **Australia**, **ACA** reports each year to the Minister on significant matters relating to the "*performance*" of carriers and carriage service providers.

²³ For instance, in **Spain**, any holder of a general authorisation or individual licence for the provision of services to third parties is obliged to pay a charge of 0.15% of revenue on an annual basis

²⁴ In the **United States**, in Fiscal Year 1999 (1 October 1998 to 30 September 1999), the **FCC's** total budget was USD 192 000 000, and of this amount, USD 172 500 000 was financed by **regulatory fees** from regulated entities and USD 19 500 000 was from **US Treasury** appropriations.

²⁵ For example, in **Denmark**, 95% of the regulator's budget is financed directly by the telecommunications sector

5.2.2 The Direct Financing

The second system of financing-although not very popular- is the direct support from the national budget. Only two regulators -- the ACC in Australia and ART in France – are following this system. In Australia, the cost of operations is provided by the national budget and all ACA’s revenue is returned to the national budget.

5.3 *Appointment of the head of the regulatory body*

The degree of independence of the regulatory body is partly dependent on how the head of the regulatory body is appointed and under what conditions he or she can be replaced. If the decision making body is composed of the commissioners who are appointed by different branches of the government, the regulator can be more independent as a result of its diverse membership. A guaranteed term of office for the head of the regulatory body is another indispensable element to ensure the independence of the regulator. With a guaranteed term of office, the head of the regulatory body can exercise regulatory power without considering political interests that may influence his office. Conversely, if the head of the regulatory body is a civil servant, who can be replaced by the Minister at any time, the regulator’s independence can be weakened.

In most countries, the head(s) of the independent regulator is (are) appointed by the Minister or the President based on the recommendation of the cabinet or the Minister²⁶. The decision-making authority of independent regulators in the majority of countries is headed either by a single person²⁷ or by a collegiate body where the decision is often made by simple majority. The independent regulators that have a collegiate body usually have a secretariat, which assists the collegiate body.

²⁶ For example, in **Germany** the President and two vice-presidents of the **Reg TP** are nominated by the federal government upon the proposal of the Advisory Council to the Reg TP. Then, they are appointed by the Federal President. The responsibilities of the President of the Reg TP are stipulated in a contract between the **Federal Ministry of Economics and Technology** and the **President of Reg TP**. This contract is subject to approval by the federal government.

²⁷ **Belgium, the Czech Republic, Denmark, Germany, Hungary, Iceland, Ireland, Luxembourg, Norway, and the United Kingdom** have a telecommunication regulator headed by a single person.

In many countries that have a collegiate decision making body, the legislature is involved in the selection of the head of the regulatory body, following different mix of procedures;

- a) In the United States, the FCC's commissioners are appointed by the President and confirmed by the Senate for staggered five-year terms. No more than three can be members of the same political party.
- b) In France, three of the five Executive Board members, including the Chairman, are appointed by presidential decree. The other two are chosen by the Chairman of the Senate and by the Chairman of the National Assembly respectively.
- c) In Italy, the Prime Minister appoints the President of the AGC while the eight commissioners are nominated by the Parliament.
- d) In Spain, the chairman of CMT is appointed by the government, subject to parliamentary approval, with other members appointed by the Minister of Development for five years, with removal only for "exceptional and well established reasons".

5.2 Jurisdiction

It is very important to ensure the authority of the independent regulator's decision within the government body because independence could be hampered if other government institutions can overturn decisions. In the majority of countries, the independent regulator's decision cannot be overruled except through a court decision. In addition, in many countries, while the court can nullify the decisions of the independent regulator it cannot impose a new decision on the issue.

However, there are countries²⁸, that give the Minister or the cabinet power to make changes to the decisions of the independent regulator either based on appeals or on their own discretion.

In addition, in other countries there are special appeals boards that can overturn the decisions of the independent regulator;

- a) In Denmark, there are two appeals boards, which can overturn NTA's decision. As well as resorting to the courts, complaints concerning NTA's decisions and

²⁸ For instance **Canada, Mexico** and **Hungary**

administration on individual cases can be appealed to the Telecommunications Consumer Board and the Telecommunications Complaints Board.

- b) In Norway, the Norwegian Telecommunications Appeals Board is the competent authority to deal with complaints on NPT's decisions. Although some Member countries have an organization for consumer complaints, the existence of the special appeals boards where operators can file complaints against the regulator's decisions is a unique feature of the telecommunications sector in Denmark and Norway.

6. Relationship between the sector specific regulator and the general competition authority

As the telecommunications market shifts from monopoly to competition, there has been increasing involvement of the competition authority in the telecommunications sector. In general, the telecommunication regulator is responsible for technical regulation as well as telecommunication specific economic and social regulation.

On the other hand, in most countries the competition authority is responsible for anti-competitive behaviour and mergers. In contrast, in a few countries such as the United States, Japan and Korea, both the competition authority and the telecommunication regulator have a certain responsibility over anticompetitive behaviour and mergers.

As the role of the competition authority has grown in the telecommunications sector, the possibility of inconsistent regulatory rulings between the competition authority and the telecommunication regulator has increased. While the principle of *lex specialis* usually applies when there is a conflict between telecommunications regulation and general competition rules, there are increasing grey areas where both regulators can take regulatory actions as competition develops. For this reason, telecommunication operators demand regulatory predictability from the government in order to reduce the risk of making wrong business decisions or delaying business activities because of conflicting jurisdiction of regulatory bodies.

There are principally three models to ensure concurrent jurisdiction in the telecommunication sector;

- a) The first is to give full regulatory power to the competition authority to supervise competition issues in the market place as in New Zealand, which uses general competition laws enforced by the courts. This model has an advantage that it can ensure consistent regulatory supervision across industries. However, for industries in transition from monopoly to competition, this model may have a problem in promoting competition due to problems posed by access to essential facilities, which characterise this sector.
- b) The second model is to give authority to the telecommunication regulator to apply competition rules to the telecommunication sector. Except in specific cases where general competition rule is included within telecommunications laws, in most cases, the telecommunications regulator is not entitled to apply competition rules in the telecommunications sector.

However, the United Kingdom gives powers to the telecommunications regulator to apply competition rules in the sector. Indeed, OFTEL is allowed to apply competition rules in the sector by issuing a determination against a telecommunication operator for infringing its licence. Furthermore, from 2000, OFTEL has taken on new powers to deal with anticompetitive behaviour in the telecommunications market based on the Competition Act. This model helps the telecommunications regulator to choose the most appropriate regime between telecommunications regulation and competition rule, to tackle a particular problem. The downside of this model is that there might be inconsistent interpretation and implementation of competition law among different sector specific regulators if there are no guidelines to apply competition law. In the United Kingdom, in order to prevent inconsistent interpretation and implementation among sector specific regulators, all regulators, including OFTEL, have participated into the Concurrency Working Party, to co-ordinate the application of the Competition Act of 1998.

- c) The third model is to establish a co-ordination mechanism, which helps to resolve competition issues in the telecommunications sector. A number of countries have a formal co-ordination mechanism. A comparative study shows the following;
 - i) In Switzerland, there is a formal co-ordination mechanism between the OFCOM and the Competition Commission for issues of interconnection.

- ii) In Germany, the Telecommunications Act stipulates specific cases, which should be administered by co-operation between the Reg TP and the Federal Cartel office.
- iii) In France, the chairman of ART must notify the Competition Council of any abuse of dominant position or anti-competitive behaviour in the telecommunications sector.
- iv) In Portugal, in the area of interconnection, before designating entities with significant market power, the independent regulator must have the competition authority's opinion. In addition, the independent regulator and the competition authority have joint responsibility to monitor compliance with price regulation such as price caps. The price agreements are made among ICP, the competition authority, and Portugal Telecom.
- v) In Denmark, when approving interconnection agreements or maximum prices of Tele Denmark's universal service, the NTA needs to obtain a binding opinion from the Competition Council on whether the agreement or price is in breach of the Competition Act.
- vi) In the Netherlands, in spite of the lack of an official co-ordination mechanism, the sector specific regulator and the competition authority have agreed upon, and published a co-operation protocol. This protocol describes the mechanism, which will determine the regulatory institution in charge of specific cases and questions. In principle, OPTA functions as a first port of call for cases related to the telecommunications sector. Formal and informal consultation is also widely used by Member countries to maintain regulatory consistency.
- vii) In Germany, before the Reg TP takes decisions on price regulation, open access to networks and interconnection, and on additional rules on licences in order to guarantee regulation objectives, the Federal Cartel Authority must first be given the opportunity to state its opinion.
- viii) In Sweden, the independent regulator (NPTA) has a responsibility to bring to the attention of the competition authority any competition issues within the field of telecommunications.
- ix) In Mexico, the competition law stipulates that entities of the public administration, such as Cofetel, can consult the competition authority on any matter related to competition or free markets.

x) In Spain, the regulator reports its views regarding the desirability of mergers and take-overs to the Competition Defence Service.

xi) There has been no formal co-ordination mechanism in the United States, Canada and Japan where the telecommunications regulator and the competition authority make independent judgements based on their legal authority.

xii) In Canada, while there is no formal co-ordination mechanism between the sector specific regulator and the general competition authority, it has been the practice of the competition authority to submit formal comments on competition issues in the context of CRTC proceedings.

7.Division of regulatory responsibilities in the telecommunications sector

Where an independent regulator has been established, in principle, the establishment of the regulatory framework is the responsibility of the Ministry and the implementation and administration of this regulatory framework is the responsibility of the independent regulator. Nevertheless, in practice, there is a wide difference in how countries divide regulatory responsibilities between the Ministry and the independent regulator. This is in part due to the lack of a clear-cut standard that can be used to distinguish regulatory functions from policy functions. Indeed, policy and regulatory functions are highly interrelated in that regulation is a means to achieve policy objectives.

However, despite the difficulties in distinguishing regulatory functions from policy functions, it is necessary to give sufficient regulatory power to the independent regulator to enable it to function as a competent ‘industry watch-dog’. If the Ministry retains regulatory power, in spite of the presence of an independent regulator, industry will have to deal with two sector specific regulators in addition to the competition authority. Moreover, the Ministry’s involvement in regulation may raise a question of regulatory neutrality where the Ministry as a shareholder of the incumbent is also responsible for regulating the incumbent.

Below, the issue of how the regulatory responsibilities are shared among regulatory institutions in the telecommunications sector is examined.

7.1 Licensing

While oversight of licence obligations is clearly a regulatory matter, the question of which body should issue a licence is less clear.

7.1.1 Fixed telecommunications services

In a fully liberalised market, the issue of licence is no more than a means to verify if minimum requirements to enter the market have been met. In this context, many countries have granted power to issue a fixed telecommunications licence to the independent regulator after market liberalisation. However, there are a few countries that still give licensing power to the Ministry. In the United Kingdom, while the Secretary of State for Trade and Industry issues new licences, OFTEL initiates the modification of licence conditions.

7.1.2 Mobile Market

The mobile market has a limited number of market players because of the scarcity of frequencies. In this case, it could be argued that the Ministry should decide on how many (regional/national) licences would be granted for specific mobile services. Such an argument is based on the fact that spectrum is considered as a national asset and, therefore, a mobile licensee only receives a right to provide services by leasing spectrum from the government for a definite period.

However, another perspective would be to argue that the independent regulator is responsible for ensuring the development of competition in the telecommunication sector and, as such, is better placed to determine how many licences should be provided given existing spectrum plans.

Canada, the Netherlands and Spain have given the authority to issue a mobile licence to the Ministry while the independent regulator is responsible for issuing a fixed licence or registering of fixed telecommunications operators. In the meantime, some countries have given the responsibility to issue licences to the independent regulator while the Ministry decides how many licences will be issued.

7.1.3 Mergers

In the context of merger reviews between telecommunication companies, the majority of countries give this responsibility to the competition authority. But some countries give exclusive authority to the Ministry or the independent regulator to control mergers in the telecommunications sector on the basis that a merger changes a licensee's legal status. In countries²⁹, both the telecommunication regulator and the competition authority exercise the regulatory power over mergers.

7.2 Interconnection

In general, interconnection rules are laid down in the telecommunications law, which usually requires that all telecommunications operators negotiate with parties who request to interconnect to their networks. In most cases, while interconnection agreements between operators with no market power are regarded as a commercial matter in which the telecommunication regulator may intervene only in the case of a dispute between two parties, the interconnection charges of operators with 'significant market power' are subject to the authorisation of the regulator.

A survey of various countries clearly shows that the function of dispute resolution in interconnection is considered a regulatory function in the domain of the independent regulator. In addition, in most countries where authorisation is required for interconnection charges of operators with 'significant market power', the independent regulator is the responsible body. One can also remark that:

- a) In Korea has given responsibility for dispute resolution to KCC while the Ministry keeps the power to authorise interconnection charges of the incumbent. In spite of the fact that KCC is an advisory board attached to the Ministry, the Telecommunication Basic Law gives it full authority to deal with disputes on interconnection.
- b) In Australia, the competition authority (ACCC) has exclusive authority on the access regime in telecommunications in spite of the presence of the sector specific regulator (ACA).

²⁹ For example, **the United States, Japan, Germany and Canada**

c) In the Czech Republic, the Ministry of Finance is involved in dispute resolution when the issue is related with interconnection charges. In the meantime, CTO is responsible for technical aspects of dispute resolution in interconnection.

7.3 Spectrum management

Due to the scarcity of spectrum, the government needs to decide which bandwidth will be used for specific services. Since radio spectrum is used both for broadcasting and telecommunications purposes, spectrum planning needs to incorporate the needs of broadcasting services. Public ownership of spectrum, and the need to incorporate broadcasting demands has led to Ministries or other government institutions to take a major role in establishing spectrum planning in many countries. Even countries where the independent regulator has the authority for spectrum planning, it is not difficult to find that the Ministry or other government institutions reserve a right to ask or make changes to the spectrum plan.

The allocation of spectrum is to some extent a policy implementation issue. If the spectrum plan decides to use a certain bandwidth for a specific telecommunication service, the regulatory body only needs to issue a licence according to a chosen spectrum allocation method.

It is very important to have a competitive neutral spectrum allocation method, which does facilitate fair competition in the marketplace. While the Ministry needs to be a major participant to set up a spectrum plan, it may be more effective if the independent regulator is in charge of spectrum allocation.

7.4 Numbering

As competition develops, the importance of number management has been emphasised in order to ensure equal access to new entrants. In this regard, in the Interconnection Directive, the EC required its member states to guarantee that national telecommunications numbering plans are controlled by the national regulatory authority, in order to guarantee independence from organisations providing telecommunications networks or telecommunications services and facilitate number portability.

In most countries, the independent regulator has the authority in number allocation. In terms of number planning, there are a several countries where the Ministry has an authority on number planning. Among them, the Netherlands and Denmark have given authority to the independent regulator to participate in the process of number planning.

7.5 Price regulation

Since general competition rules apply to the telecommunication sector in most countries in the lack of specific price regulation, the competition authority has competence to deal with predatory pricing in telecommunications. Where there is telecommunication specific price regulation, the telecommunication regulator is responsible for special price regulation, which is often imposed only on the incumbent in the context of asymmetric regulation.

However, there are a number of countries where the competition authority is involved in price regulation in spite of the presence of telecommunication specific regulation.

A relevant comparative study indicates that:

- a) In Australia, except for directory assistance charges, the ACCC is responsible for price regulation.
- b) In Portugal, price-caps are negotiated between the independent regulator, the competition authority and Portugal Telecom. Then, the price-cap agreement needs to be approved by the Ministers who are in charge of communications, and competition.
- c) It is interesting to note that the Ministry of Finance is involved in price regulation in the Czech Republic. The Ministry of Finance approves prices of domestic telecommunication services while CTO is responsible for price regulation in international voice telephony services.

7.6 Universal service

In countries that have a universal service provision³⁰, it is required to determine the coverage of universal service as well as the funding mechanism.

³⁰ Exceptionally there are some countries, such as the **Czech Republic, Hungary, Finland, New Zealand** and **Ireland** that have no universal service definition in their specific sector legislation.

Since the determination of the coverage of universal service is a policy matter, which requires social consideration rather than economic analysis, the Ministry and the legislature determine the coverage of universal service. As a result, in most cases, the telecommunications law or the ministerial decree defines the coverage of universal service.

In general, if a country has a universal funding mechanism, the way to calculate and allocate the cost is also stipulated in the telecommunications law. In this regard, in contrast to the determination of the coverage of universal service, the cost finding and allocation of universal service is understood as a regulatory function in the majority of countries.

There are different approaches to ensure universal service provision. In some countries³¹, the incumbent operator bears the responsibility for universal service provision. In other countries this responsibility is spread across the industry. Where telecommunications operators share responsibilities, in most cases, the independent regulator determines the cost of universal service as well as the cost allocation among telecommunications operators.

7.7 Service quality

As competition develops in the telecommunications market, consumers can choose the operator from which they will buy telecommunications services. Along with price, service quality is one of the key factors for consumers to make such choices. In fact, changes in quality are tantamount to a real change in prices. However, unlike price, it is extremely difficult for consumers to compare service quality of different operators.

In order to help consumers to get information on service quality of telecommunications services, in many countries, the telecommunications regulator monitors quality of telecommunication services.

Since the monitoring of service quality can best be done by the body that has the information on the marketplace, this role is usually granted to the independent regulator in the countries, in which there is one. There is a great diversity of the data they gather;

³¹ Such as the **United Kingdom, Norway, Spain, Iceland, Mexico** and **Sweden**

- a) In the United States, the FCC publishes the percentage of installation commitments met for business and residential users, as well as the average installation interval. The same statistics are also published for access services provided from local exchange carriers to other carriers.
- b) In Canada, PTOs report separately measures such as the average time for a user to receive a connection to the network and fault repairs for urban and rural areas to the CRTC.

While the majority of regulators monitors service quality based on operators' reports, the telecommunication regulators in the United Kingdom and Korea make a survey on the quality of different telecommunication services;

- a) In the United Kingdom, the telecommunications companies and several consumer organisations, with support from OFTEL, have developed a set of comparable performance indicators for a range of fixed telecommunications services.
- b) In Korea, the Ministry surveys the quality of fixed and mobile services, and publishes the results of survey.

8. Convergence and regulatory institutions in the communications sector

In many countries, the regulatory responsibilities are split across a number of different institutions in the broadcasting sector. Many Member countries have separate regulatory bodies for network regulation, spectrum allocation, content regulation, and advertising regulation. In addition, countries have a body that is responsible for audio-visual policy. Furthermore, the broadcasting sector has traditionally been regulated on a network/service specific regulatory basis where separate regulations have applied to services according to the means of transmission -- terrestrial, cable or satellite. As a result, in many countries there are different laws and regulators for each broadcasting service³².

On top of these regulatory complexities within the broadcasting sector, there is a clear regulatory distinction between telecommunications and broadcasting. As a result, most of

³² For example, it is quite common for local governments to have regulatory power on cable television because of the widely used franchising system.

the countries³³ have till now different regulators for broadcasting and for telecommunications.

Convergence in communications calls into question the Convergence in the industry taking place between broadcasting, content and communications technologies and services- due to phenomenal increases in Internet, data and wireless traffic- dominate the market structure making the old service-based vertical regulatory system inappropriate for carriers that operate in a multinetwork, multiprovider, multiservice digital and broadband-based environment.

It is true that the majority of countries are still in the process of establishing a new “next generation regulation” that can be characterised by the horizontal regulatory system covering all communications services, inducing closer co-operation between regulatory institutions, which will reflect in laws, policy initiatives and regulations up to an extent. In this way, this will prevent regulatory distortion in the marketplace optimizing customer satisfaction by exploiting research and technology development.

B.

A comparative study of NRA’s in the European Union

1. An in- depth structural and institutional analysis of OFTEL and RegTp

In Britain, with the Office of Telecommunications (OFTEL), the first European sector-specific regulatory agency was established in 1984. The German Regulatory Authority for Telecommunications and Posts (RegTP) was set in 1998. The cases of Germany and Britain are worth being cross-examined in macro and micro level, because Great Britain established with OFTEL the first European sector-specific regulatory agency. The German regulator stays as an example for the “wave” of regulators being set up by

³³ The **United States, Canada, Japan, Switzerland** and **Italy**, have a unique regulator for broadcasting and telecommunications

member states under pressure of EU new regulatory regime³⁴ during the mid 1990s (Schneider 2001 (i.E.)-b).

However, since there are many conceptual approaches for distinguishing between macro and micro levels³⁵, it should be defined what is within this **two-level approach** meant by “macro” and “micro”.

The **micro-organisational level** refers to the **intra-organisational procedures**. In this level regulators are being analysed “on the spot” (Knill and Lenschow 2001:8) with internal administrative structures as well as the decision-making procedures. The goal is to “dive into the regulator” and to give an account on the **intra-organisational structure** of regulatory agencies.

On the other hand the **macro-organisational level** is defined as the regulator’s **organisational framework**.

The macro level includes research on the **framework of an organisation and an inter organisational perspective**. With a 'bird's eye view' of institutions (Knill and Lenschow 2001: 8), the macro level points to the overall structure of the central regulatory institution.

2. Public Sector Policies and the Regulatory Agencies in Telecommunications in Britain and Germany

As a central development of the liberalisation of the telecommunications sector, the former PTT model, operative and regulative functions – service, net and equipment - were linked together in the post, telegraph and telecommunications utilities: it was transformed and new regulatory agencies (NRA) were set up (Eyre and Sitter 1999). Both Britain and Germany opted for the **regulatory agency model**.

³⁴ The term ‘regulatory regime’ is often used for different purposes. E.g. Thatcher utilizes the term to describe the OF-type regulators in different sectors such as gas, energy, rail or telecommunications (Thatcher 1998). In their concept of the regulatory regime in British Telecommunications from 1982 up to 1992, Hall, Scott and Hood include the former monopolist and analyse a ‘ménage à trois’ between the ministry (DTI), the regulator OFTEL and the former incumbent British Telecom (BT) (Hall, Scott, and Hood 2000: 17, 25ff). Otherwise under this term –also in this analysis- there are described the core administrative bodies on the national level involved in the regulation of the sector, i.e. the ministry (parent department), competition authority, and the sector-specific regulatory authority (NRA).

³⁵ For macro-micro distinctions see e.g. (Döhler 2001: 9; Moe 1990: 122; Peters 1998: 111ff.; Wollmann 2000 i.E.: 8).

Comparing Britain and Germany, regulatory reform has not been parallel. Whereas Britain, as the European "forerunner", introduced its telecommunications' regulator OFTEL in 1984, Germany was a "late-comer", only establishing its RegTP in 1998. The transformation of the **British telecommunications sector** started with the Telecommunications Act of 1981, whereby the Post Office (PO) was split into two public corporations, the PO and British Telecom (BT). The separation prepared the ground for the second Telecommunications Act in 1984, which privatised the British Telecom (BT) and created an **independent regulatory body, the Office of Telecommunications (OFTEL)**, as a non-ministerial department within the ambit of the Department of Trade and Industry (DTI); OFTEL is DTI's sponsoring and supervisory department. Additionally, OFTEL shares competencies with the Office of Fair Trading (OFT) in the area of competition policies ("concurrency rules" (see Riley 2000)). The office is headed by a single **Director General of Telecommunications (DGT)**, who has the core regulatory functions. OFTEL was the first network and utility regulatory body in Britain (DTI: 1982 #380). As OFTEL core responsibility is to enhance competition within the telecommunications sector, it has social regulatory objectives such as the protection of users, too.

In the case of the **German telecommunications sectors**, the transformation from PTT to NRA took place in three steps (see e.g. Grande 1999; Mette 1999): With the Post Reform 1 (1989/1990), three separate operational units for telecommunications, the postal service and post banking were established as public corporations. The Ministry for Postal and Telecommunications (BMPT) still holds the steering competencies for the sector, including ownership and regulation. In 1994, with the Post Reform 2, ownership was separated from regulatory competencies. While the competencies were left with the BMPT, a new administrative agency, the Agency for Postal and Telecommunications (BAPT), was institutionalised for ownership. The three public corporations were transformed into stock companies, one of which was the Deutsche Telekom AG (DTAG). With the Post Reform 3 in 1994, the decision was made to open telecommunications to full competition by the 1 January 1998. With the new 1996 Telecommunications law (TKG), **sector-specific regulation was set up with a new regulator**, the Regulatory

Authority for Telecommunications and Posts (RegTP), an institution under the supervision of the Federal Ministry of Economics (BMW).³⁶

As the RegTP is headed by a president and decisions are made by five ruling chambers to ensure independence, the RegTP shares responsibilities with the German Federal Competition Authority (BKArtA) (see Schneider 2001 (i.E.)-a). In contrast to OFTEL, the RegTP has a wider range of competencies. It is responsible for the regulation of the telecommunications sector as well as for the post, and it deals with economic and social as well as technical regulatory issues. With respect to economic regulation, the central functions of the RegTP are to safeguard fair competition and to prevent discrimination, to promote the development and growth of markets and to ensure the full regional coverage of services. With respect to social regulation, the RegTP supervises the provision of universal service, and it is involved in consumer protection. Additionally, the RegTP deals with technical regulatory issues, e.g. on frequency management or numbering³⁶.

3. The Lean Public Sector Reform Model and Regulatory Agencies

The policy of implementation of the lean public sector model has been the reduction of the scope of government (macro-organisational level) and the establishment of new management techniques (micro-organisational level).

With respect to the **reduction of the scope of government**, in **Britain** the government was mainly interested in privatisation matters and setting up the new duopoly structure. The design of OFTEL was not regarded as a major policy issue (Moon, Richardson, and Smart 1986). Striving for 'lean government', the conservative government did not initially intend to set up a new institution for regulatory issues in order to avoid the paradoxical situation to set up new regulatory body although opting for a clear deregulation policy. On basis of a civil service proposal from the DTI, first there were debates to transfer the regulatory function to the **Office of Fair Trading** (OFT). However, the OFT refused to do the job; that is why "a specialist look-alike was

³⁶ The German RegTP has 2400 members. From this figure, only 250 are responsible for issues on economic and social regulation (Interview RegTP, March 2001). For more details on the design of the RegTP (see Leo and Schellenberg 1997; Müller-Terpitz 1997; Ulmen and Gump 1997).

invented” (quoted in Prosser 1997: 46). The British competition authority was used to design a new model, a **sector-specific regulatory agency model**³⁷.

Before OFTEL was created, there was only a “shadow OFTEL” in the DTI; it was then merged with the new regulator (Hall, Scott, and Hood 2000: 25). Because of the close link to politics and the accompanying threat of constant politicisation, the design of a **ministry** was rejected (Prosser 1997: 46).

As in the case of Britain, in **Germany**, the lean state policy did not include a coherent vision on how to design a “regulatory state”. The Kohl government merely set the privatisation and deregulation of former nationalised industries as central tasks (König and Füchtner 2000: 344). The lean state policy tended to prefer “privatisation to modernisation” (Jann and Wewer 1998:231ff.)³⁸.

For the **creation of the RegTP**, institutional history played an important role. In contrast to Britain, before liberalisation, there were two institutions in place: the Ministry for Postal and Telecommunications (BMPT) and a subordinated Agency for Postal and Telecommunications (BAPT). As the BMPT was disbanded, most of the civil servants moved either to the Ministry for Economics (BMW_i) to supervise the new regulatory body, or to the treasury (BMF), now responsible for the ownership of the DTAG. The new RegTP is a merger of the BAPT, which was in charge for technical regulatory solutions, and the civil servants of the BMPT, which was responsible for economic regulation.

As there were a variety of institutional designs for the new regulator, such as a that of a ministry, an administrative agency, to transfer to the competition authority, the government opted to establish a regulatory agency. The lean state policy of the government played a central role, because it was the core reason not to keep the ministry (BMPT) as a regulatory institution (Interview BMW_i, February 2001).

³⁷ The model was new for Great Britain. In general, with the US Federal Communications Commission (FCC), established in 1934, there have been sector-specific regulators before. It can even be argued that the American influence was a central reasons for opting for the regulatory agency model. Policy transfer occurred between the US and Great Britain in the 1980s very frequently (Wolman 1992). As the US telecommunications policy influenced the British debate on how to liberalise and privatise the sector, it also guided the design of the regulatory body. Because of its long tradition of sector-specific regulatory bodies, the FCC stood as a model for the British regulatory agency (see Thatcher 1999a: 95).

³⁸ However, Jann und Wewer did not define how such a ”modernisation“ of the public sector after the privatisation could look like

With the establishment of a regulatory agency, the government described telecommunications liberalisation as a **successful example of the lean state**. In its “general calendar on the lean state”, the establishment of the RegTP was presented as an initiative in which a ministry was disbanded and an agency was merged with a new regulator (BMI 1998: 43). Here, the RegTP stood as an example for the reduction of the state.

In conclusion, in both **Britain and Germany** establishing a sector-specific regulatory agency model (NRA) proved to be an **example of institutional reform** and a **new, innovative solution**. However, for the macro-organisational design of NRAs, historical institutional solutions were significant. From a ‘lean state’ perspective the creation of a new body was only **the second best solution**. Especially in Germany, it could have been opted for the cartel office as a “leaner solution”.

A second central task of the lean public sector reform model – referring to the macroorganisational level - was to establish **new management techniques in administrative bodies** in order to enhance their efficiency and effectiveness. As with the British and German regulatory agency, where two new institutions were established, it could be assumed that this was used as a ‘window of opportunity’ to create institutions on basis of actual ‘lean state’ concepts. Reform policies defined in accord with the original “institutional choice” could have also had an impact on the institutional change of NRAs.

With respect to **OFTEL**, the DGT does have much discretion for decision-making on regulatory policies (Thatcher 1998: 125ff.). Additionally, he is the key decision-maker on the design and institutional change of the internal administration of OFTEL³⁹.

However, the initial administrative structure was "partly inherited from the DTI and partly copied from the OFT" (Hall, Scott, and Hood 2000: 44). It was opted for a traditional Whitehall solution: there were sections and functional branches, each headed by a director, who had to report to the DGT. It was not until 1993 that – with a change of

³⁹ § 1V **Telecommunications Act 1984** points out that the DGT “may appoint such staff as he may think fit (...)

the DGT – a new internal design was instigated. In line with New Public Management techniques, a project management structure was set up.

With the duopoly review in 1992, OFTEL had to cope with new challenges and had to deal not with two, but with even more companies. Here, a more flexible and faster structure for interdisciplinary decision-making was set up. Sections were abolished and a project management structure was created instead, “to break the rigidity of the branch structure and modify the civil service culture” (Hall, Scott, and Hood 2000: 45). Branches were still responsible for policy making, legal, technical and economic advice as well as administrative issues.

In 1998, OFTEL was further reorganised: an advanced project organisation was set up that abolished branches. An Operations Board was made responsible for covering issues on both policy and compliance. The intention is to ensure the coherence of operational and strategic decision-making. It identifies the central policy issues and supervises and monitors all new projects. Two core directorates were defined as responsible for policy and compliance.

With respect to its **internal organisation**, the **RegTP** combines a departmental structure with a system of decision chambers. For economic regulatory issues, five formally independent **decision chambers** have been made responsible for decisions on licensing, discriminatory practices, net access and interconnection, and on price regulation for telecommunication and postal issues. These chambers, which are chaired by a president and two vice presidents, who make decisions via administrative acts, have been newly created for the RegTP. The design was diffused from the cartel office, which to ensure jury-like and independent judgments, has had a similar system since its foundation in 1958 (Ortwein 1998: 87ff.)⁴⁰.

The six **departments** are responsible for general administration, information technologies, telecommunications regulation, postal regulation, technical regulation and the co-ordination of external branches responsible for technical issues. The departmental system is a traditional administrative design-principle, as could be found in the BAPT.

⁴⁰ For a detailed analysis of the chamber system and their independence (see Oertel 2000: 382ff.).

For the German central government, combining the departmental structure with a system of jury-like decision chambers is a unique design. While traditional administrative agencies merely include departments; the cartel office only has a chamber system. In general, the RegTP does **not exercise much discretion in developing their internal institutional designs**. The overall designing principles for the RegTP are defined by law. E.g. in Article 73 of the 1996 Telecommunications law, that chambers to be set up are clearly defined. Additionally, the RegTP is free in making its day-to-day organisational decisions, but the BMWi has an “organisational oversight”, which does not leave much room for innovations⁴¹.

However, influenced by lean state policies, the RegTP changed the internal design to optimize its decision-making processes. The internal organisation, especially that of the former BAPT, has been streamlined to reach a “organisational concentration”. On basis of proposals of a consultancy report⁴², the number of external branches has been reduced⁴³ as well as that of sub-department⁴⁴. As a consequence, today the former parts of BAPT and BMPT are merged and have a close and efficient working relationship (Interview RegTP, March 2001).

In conclusion, Britain is more advanced in implementing enabling public sector reform policies than Germany. With respect to the micro-organisational implications of the enabling public sector reform policies such as “join-up government” and procedures guaranteeing transparent decision-making Britain two core instruments to ensure and even increase the optimal regulatory decision-making capacity of NRAs. Here, Germany shows only minor signs of a move in similar directions.

However, enabling state policies had a stabilising effect on the regulatory frameworks in both Britain and Germany in so far as they – from the macro-organisational perspective –

⁴¹ Departments have an oversight on the structure, division of labour and overall planning of sub-ordinated institutions (Schröder 1986)

⁴² The consultancy firm A.T. Kearny was asked by the BMWi to write in 1998 a report in advance of the set in of the RegTP on the future institutional design of the RegTP until 2008. Within the RegTP, the report caused controversies, however it is still used as a guiding principle for a leaner administration.

⁴³ As there was a ‘heritage’ of the BAPT with 50 external branches, they have been reduced to 30 within 10 regions.

⁴⁴ Although the report on the lean state recommended the abolition of sub-departments, in the RegTP there are still seven in place

agree on the necessity for regulation and ensure the long-term existence of NRAs instead of fading them out. As in Britain with OFCOM, a new framework is now also being debated, Germany still has to consolidate and develop the existing design of the RegTP.

2. The Greek Telecommunications Regulator: “EETT”

The current regulatory framework follows the laws 2246/1994, 2257/1994 and the Presidential decree 437/1995. The first law defines the general regulatory framework by establishing the General Secretariat of Communications (a body belonging to the Ministry of Transportation and Communications) and the National Regulatory Authority, an independent body supervised directly by the Minister of Transportation and Communications. At the same time the above law sets the general rules of pricing policy that are, in effect, those suggested by the ONP directive 90/387. Law 2254/1994 is concerned with the general organisational and operational structure of OTE and sets price caps as follows: For the year 1995 the weighted average increase of prices should not exceed the change in CPI from March 1, 1993 to December 31, 1994. For the year 1996 the weighted average increase of prices should not exceed the change in CPI of the previous year plus 2% and for 1997 the weighted average increase of prices should not exceed the change in CPI of the previous year plus 3%. There wasn't any mention with regard to quality levels. It should be noted that the price caps that were imposed were in some sense arbitrary since they didn't take into account such factors as expected productivity growth, the value of existing assets, the level of expected demand and the upcoming competition⁴⁵. Furthermore, no separate sub-caps were imposed (for example in the long-distance and international telephony) where markets are more competitive and prices in these markets are extremely high. As a consequence, prices in the long-distance and international telephony are still very high and prices in the local telephony very low without any contribution towards rebalancing.

It is evident that the prices in the local telephony have increased substantially from 1991-1995 and only moderately thereafter. However, the prices in the long distance

⁴⁵ See **Armstrong, Cowan and Vickers (1994)** for theoretical and practical issues on price regulation and **Xavier (1997)** for the effects of price-caps on rebalancing and economic performance.

have also increased (though at slower rates), something that does not contribute to the rebalancing of prices. On the other hand, the prices in the international telephony have fallen in 1992 and 1993 but this fall did not continue in the later years, so that these prices are very high compared to prices charged by other operators in EU as we mentioned earlier. The price caps imposed by the NRA. The weighted average price increases imposed by OTE were much lower than the rates set by the price caps. It is clear that the price cap formula didn't help OTE in either rebalancing its prices or reducing its costs. Needless to say that the price caps were set much higher than the change in the CPI, so that regulatory capture was actually in effect. One of the reasons for that was the need for the government to raise profit levels to attract investors for the privatisation of OTE (8% of its share was sold in 1994 and 12% in 1997). The other reason is that part of the profits of OTE would be used to cover the "black hole" of the Greek economy i.e. to cover part of the public debt. So the regulator has not so far being independent and acts in the interest of the incumbent rather than the interest of the society⁴⁶. On the other hand, the commitment of the government to meet one of the goals of the Maastricht treaty i.e., to reduce inflation, forced OTE not to exhaust the price increases to the upper limits set by the price caps. It is not an exaggeration to note that most of the NRA's current personnel have been transferred from OTE and that it has only recently started to employ permanent personnel and to provide new openings for hiring 119 special scientists.

Currently the NRA is preparing the new regulatory framework for the upcoming competition. Even though the bill is not publicly known it will follow the directives of EU⁴⁷. The basic concern of the government is to create a truly independent NRA that will accelerate competition, ensure non-discriminatory interconnection terms and conditions, allocate scarce frequency spectrum resources as well as numbering and number portability, establish transparent, non-discriminatory and competitively neutral procedures for funding universal service and allocate licenses so as to achieve the maximum benefit for the society. The government plans to award one more GSM

⁴⁶ See **Melody (1997)** on the meaning of independence and **Laffont and Tirole (1993)** for theoretical issues.

⁴⁷ For a critical analysis of the EU framework see **Kiessling and Blondeel (1998)**.

license by the end of 2000 through the procedure of “beauty contest”. Up to now, nine companies have expressed an interest but it is unclear whether they will finally participate since the government will start the procedure for awarding four UMTS licenses in mid 2001 that will be available to the Greek users at the end of 2002. Moreover, the government plans to award, an unspecified yet, number of (FHW) licenses and about four to six LMDS licenses. The number of licenses regarding deployment of fixed networks through fibre optics will be unlimited.

It is shown that the NRA has not been independent and its actions show regulatory capture. Currently, the NRA is preparing the new regulatory framework, which will follow exactly the directives of the EU for the liberalization of the voice telephony. The government has committed itself in establishing a truly independent NRA that will enforce competition in a non-discriminatory basis. For this reason, the NRA is, for the first time, seeking to hire permanent specialized personnel and it remains to be seen whether the NRA will act to the interest of the society or the incumbent as it has done up to now.

C.

A pan-European Telecommunications Regulator: a feasible scenario?

In recent years, extensive liberalisation and internationalisation has transformed the telecommunications sector from national monopoly organisation. This has brought demands for new regulatory structures, which can foster competition. The network has been a monopoly and remains a near monopoly with the traditional providers dominant. Regulation of network access and interconnection of networks is therefore required for the promotion of competition and new market entrants. As markets are likely to be dominated by one or a small number of incumbents wishing to retain their domination, new regulation is required 'to create conditions of competitive equity' (Swann, 1989, p.12).

Although there were in the past several thoughts for a common pan-European telecommunications regulator, there is also a lot of skepticism among EU Member states;

Imbalance has been argued to be one of the key features of the EU institutional system (Peters, 1994). One end of the imbalanced spectrum is the agenda-setting process, which is open and creative involving a multiple of actors and institutional processes. At the other end of the spectrum there are extreme difficulties in implementation, which can reduce to the 'lowest common denominator' accepted by the member states.

The case study presented in this paper, a possible pan-European regulator for telecommunications, provides evidence of an open and creative agenda setting process. It has been shown that a variety of actors within European institutions and industry have been able to exploit the EU's supranational institutional system and promulgate a variety of possibilities for greater pan-European regulation.

The Commission and European parliament have exploited their institutional resources to give the issue greater saliency. The competence, for example, of the Commission to propose legislation has been important. This has been seen directly with Commissioner Bangemann making calls for a pan-European regulator. More indirectly, the Commission has exploited its competence in other matters to raise a pan-European regulator on the agenda. In 1994 in the Commission's report on the global information society a pan-European regulator was recommended. Later legislation on other matters was also used to put the matter on the agenda: supranational cross-border dispute resolution and a pan-European regulator were included (though rejected by the member states), for example, in the interconnection directive which was part of the 1998 full liberalisation package. The European Parliament has also used its increased role in the co-decision making procedure to put a pan-European regulator in the agenda. In the conciliation procedure with the Council in 1997 on the interconnection directive a pan-European regulator was agreed to be part of the 1999 review of telecommunications. Supranational institutional resources are not the only reason why the issue has developed a saliency. The changing industry has also led some industry interests to lobby European institutions for a pan-European regulator. New market entry, market integration in Europe and globalisation, though each is not sufficient reason for industry to call for a pan-European regulator, are important contextual factors.

There are several possibilities for increased pan-European regulation outlined in a report by NERA (1997). The most limited proposals do not involve the creation of new

institutions but increase the role of existing institutions, particularly the Commission. Proposals include firstly, the Commission having the role of coordination of national regulatory authorities (NRAs). Secondly, the limited creation of new institutions such as bringing together the existing EU telecommunications committees and the other wider pan European bodies. Thirdly, a body could be created which coordinates NRAs and carries out specific mandates of the Commission. Fourthly, a new body could have day-to-day management of technical issues but under the control of the Commission. Fifthly, an independent regulator with powers to specify the regulatory framework could be created, but this would require a treaty amendment.

Strong member state opposition can be invoked as clear evidence of the 'imbalance' of the EU institutional system. Whilst clearly legislation and implementation provide policy outputs and require more time than agenda setting, agenda setting does have an impact on policy change. It has been argued that agenda setting in the EU institutional system is a fertile arena for policy learning. There are some nascent trends that this process has already strengthened supranational regulation. The Commission's recommendations on interconnection pricing, for example, are beginning to influence the develop interconnection regimes at national level. Clearly there are still many uncertainties and the outcome is unclear, but the process of agenda-setting and policy learning in the multi-level EU system may lead to some form of strengthening of European level regulation in future years.

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