

# Germany

## 1. Country facts

### 1.1 Political background

The Federal Republic of Germany is composed of 16 states, of which 5 belong to the former RDA. The executive powers are concentrated in the hands of the President and the Chancellor, presently Gerard Schroeder (re-elected in September 2002). The German legislative power is represented by a bicameral parliament composed of the Federal Assembly (*Bundestag*) with 598 deputies and the Federal Council (*Bundesrat*) representing the federal states with a total of 69 deputies (from 3 to 6 deputies per state depending on the state's population).

Federalism and the division of powers are firmly anchored in the German Constitution (*Grundgesetz*), but the federal states have no powers in the field of telecommunication regulation, which is carried out from Bonn on a nation-wide basis. Although, Berlin has become the official federal capital again in 1999, telecommunication regulation authorities have remained in Bonn for reasons of geographic proximity with the headquarters of the incumbent operator Deutsche Telekom AG (DTAG). The German regulator, the *Regulierungsbehörde für Telekommunikation und Post (RegTP)* has its offices in Bonn, and so does the division VII (Telecommunication and Post) of the German Ministry for Economics and Labor, *Bundesministerium für Wirtschaft und Arbeit (BMWA)*<sup>1</sup>.

### 1.2 Demography

- **Population:** 82,518,000 inhabitants in October 2002<sup>2</sup> (most populated country in Europe).
- **Average population density:** 230 inhabitants/km<sup>2</sup> (high in European comparison)

There is a significant difference of population density between former Eastern and Western Germany. Four of the five former Eastern states have a population density well below the national average (except Berlin). Germany's most populated states per km<sup>2</sup> are the city-states of Berlin, Hamburg and Bremen.

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<sup>1</sup> Formerly *Bundesministerium für Wirtschaft und Technologie BMWi*. The new organization of the Ministry became effective on November 11, 2002.

<sup>2</sup> Source: Federal Statistics Office, last update November 2002

**Table 1: Most populated states per km<sup>2</sup> in Germany**

State capitals	Number of inhabitants	Inhab./km <sup>2</sup>	Date of census
Berlin city	3,389,500	3,793	July 2002
Hamburg city	1,726,363	2,271	December 2001
Bremen city	541,143	1,633	December 2001

*Source: Federal Statistics Office, several dates as mentioned*

Furthermore, the region of the Ruhr is also a very densely populated area, with the major cities of Bonn, Cologne, Dortmund, Essen, and Duisberg etc. totaling a population of more than 5.5 million.

Germany has a considerable amount of big cities, 30 of which have more than 250,000 inhabitants<sup>3</sup>. The size of the country and the presence of many medium sized cities accounts for the high number of telecommunication companies (telcos) operating at local or regional level. Most medium and large cities in Germany have their own local carrier.

**Table 2: Ranking of the 20 biggest cities in Germany**

More than 500'000	Between 500'000 and 290'000		
1. Berlin	6. Essen	11. Duisberg	16. Bochum
2. Hamburg	7. Dortmund	12. Hanover	17. Wuppental
3. Munich	8. Stuttgart	13. Nuremberg	18. Bielefeld
4. Cologne	9. Düsseldorf	14. Leipzig	19. Mannheim
5. Frankfurt/Main	10. Bremen	15. Dresden	20. Bonn

*Source: skyscraper.com*

### **1.3 Telecom consumption habits<sup>4</sup>**

Fixed voice telephony	Dec. 1998	Dec. 2000	Dec. 2001
Main lines in operation (in 1,000)	46,530	50,220	52,280
Main lines per 100 inhabitants	56.72	61.05	63.42
Call minutes per capita**	2,387.4	3,429.6	3,817.4
Mobile telephony	Dec. 1998	Dec. 2000	Dec. 2001
Number of subscribers	13,913,310	48,145,000	56,245,000
Penetration rate %	17%	58.8%	68.6%

*ITU, \*\* RegTP*

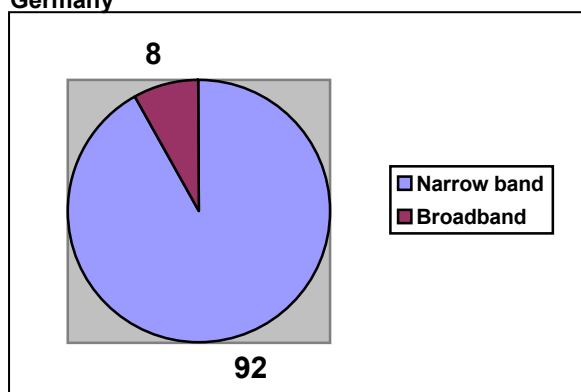
<sup>3</sup> Source: Federal Statistics Office, last update May 2002.

<sup>4</sup> Source for Statistics: BMWi, ITU, RegTP

Internet	Dec. 1998	Dec. 2000	Dec. 2001
PC per 100 inhabitants*	27.91	33.61	38.22
Penetration rate Internet*	9.9%	29.2%	36.4%
Surfing time (h) per month/capita	n.d.	n.d.	10.57 (06/2002)*

\* Nielsen Net ratings

Figure 1: Narrow band and broadband penetration in December 2001 (% users online at home) in Germany



Source: ITU

## 2. Brief telecom history

### 2.1 Historical background and liberalization process

Liberalization and privatization of the national PTT took place in several steps in Germany. Up to July 1, 1989 the *Deutsche Bundespost (DBP)* was a largely autonomous administration on the federal level providing postal, telecommunication and banking services. The Federal Ministry of Posts and Telecommunications (*BMPT*) exercised regulatory functions for German telecommunications and simultaneously management functions for the enterprise DBP.

On July 1, 1989, the first level of liberalization of the telecommunications market was implemented, through the Law for Restructuring the Postal Services and Telecommunications (Post Reform 1). The DBP was divided into three public enterprises that would provide the services of the former DBP: *Deutsche Bundespost Telekom*, *Deutsche Bundespost Postdienst*, *Deutsche Bundespost Postbank*. Most of the technically skilled employees in the field of telecommunications left the DBP to join the newly created Deutsche Bundespost Telekom.

In the same year, competition in the mobile market was introduced with the first license granted to the operator Mannesmann on February 15, 1990.

The second wave of liberalization came in 1995, with the Post Reform 2 and resulted in Deutsche Bundespost Telekom being transformed into a publicly traded corporation with a first initial offering of 2 million shares in the fall of 1996. Its name changed to Deutsche Telekom AG (DTAG).

Further steps of liberalization were taken on July 31, 1996 with the Telecommunications Act TKG (Post Reform 3). The Act provided the basis for the transformation of the German telecommunications market from a former state monopoly into a competitive environment. Real competition in all telephony markets was not introduced until January 1, 1998, the European deadline for liberalization of the telecommunications market. From that date, the RegTP superseded the former BMTP and competition entered in all telecommunications markets including the unbundling of the local loop.

## **2.2 Incumbent operator**

DTAG is the world fifth largest<sup>5</sup> and Europe's largest telecommunications operator with a revenue of 39.2 billion € in 2001. Over the past years, DTAG has transformed itself into a global telecommunications operator with one of the most modern infrastructures in the world. DTAG is currently divided into four business lines including:

- T-Com: Wireline network services in Germany and in some central European countries.
- T-Online: DTAG's Internet service provider (ISP) which is the largest in Germany
- T-Mobile: DTAG's mobile telephone division with 67 million customers in Germany, the US, the UK, Austria and the Czech Republic.
- T-Systems: Europe's second largest provider of integrated IT and telecommunications services. T-systems operates in over 20 countries and was acquired from Daimler-Chrysler in 2002.

The majority of DTAG's shares are now privately owned. However, the Ministry of Finance still owns 38% and the government bank 5%. A government controlled investment vehicle holds another 22%. Further privatization is planned as soon as market conditions permit it e.g. when the valuation of the DTAG share on the market improves.

Although DTAG boasts a very impressive market share, it also has a large debt burden, like many other incumbent operators in the EU. DTAG's current debt burden approaches 64 billion € and has 4 main origins.

- Modernization of its network in 1998 to remain competitive with new market entrants.
- Acquisition of foreign telecom operators such as Voicestream in the US and participation in the main Croatian telecommunications operator.
- Acquisition of 3G licenses in Germany, Austria, the Netherlands and the UK.
- Global economic slowdown of the German economy since 2001 and of the telecommunications sector worldwide.

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<sup>5</sup> In decreasing order: NTT, Verizon, AT & T and SBC.

To reduce its debt, DTAG's strategy is to lay off a large number of employees in 2003 and to continue restructuring and streamlining its four lines of businesses. The new CEO of Deutsche Telekom, Kai-Uwe Ricke was elected on November 14. On the same date the company's strategy review and 3Q figures were also announced.

**Table 3: Deutsche Telekom AG profile**

<b>Name</b>	<b>DTAG</b>		
<b>Services</b>	<b>Full service: Fixed, mobile and Internet</b>		
<b>Date of entry</b>	1881		
<b>Ownership %</b>	43% German government (Federal MoF and Deutsche Bundesbank) 22% Government controlled investment vehicle (Reconstruction Loan Corp.) 2% France Telecom 31% Investors		
<b>Market share %</b>	<b>Subscribers</b>	<b>Call minutes</b>	<b>Revenues</b>
<b>Fixed lines</b>			
Subscriber line	97%		
Local calls		97 %	80%
Long-distance		70 %	n.d.
International		67 %	n.d.
<b>Mobile</b>	39%	37%	40%
<b>Internet</b>			
Dial-up	n.d.	n.d.	n.d.
DSL	97%	N/A	n.d.

*Source: RegTP , November 2002.*

### **2.3 Competing Operators**

Germany counts an impressive number of telcos who are all registered with the RegTP (requirement, section 4 of the TKG). By August 21, 2002, 2,007 telcos were registered by RegTP.

- In the mobile market, competition was introduced in 1990 and there are currently 4 operators. Nearly 80% of the market is equally split between the incumbent-owned T-Mobile and Vodafone/Mannesmann. 14% is owned by E-plus and 7% by O<sup>2</sup> (former Viag Interkom). Those four operators received 3G licenses and they will operate on the UMTS market with two other operators, Group 3G and Mobilcom Multimedia<sup>6</sup>.
- In the fixed voice telephony market, open to competition since 1998, there is a large number of telcos, operating on national or regional/local level. It is important to differentiate between local, regional and international calls in Germany, as the quasi-monopoly of DTAG in the local calls market (97%) is much lower in the long-distance and international calls market. Mannesmann/Arcor, BT Ignite/Viag Interkom, Colt and

<sup>6</sup> If Mobilcom survives its actual severe crisis and is not taken over by E-plus as expected.

Tele2 Germany are some of the main German fixed telephony operators, together with other local and regional operators. Many regional/local operators have succeeded to win over respectable market shares within their geographic zone of activity (between 12 and 20% for NetCologne, Versatel-Dortmund, Berlikomm-Berlin, HanseNet-Hamburg etc.). Within their zones, they can constitute a real alternative to the incumbent operator DTAG for the German customer, as they offer the whole range of services from subscriber line to local and long-distance calls. Most of these regional operators still depend on DTAG's raw copper to provide their services. The quasi-monopoly of DTAG on the local calls market will undergo a tough test in the spring of 2003 with the introduction of carrier selection in this market segment.

- The Internet market is still dominated by DTAG, both for slow speed and broadband access. Germany's main internet providers are T-Online (DTAG), Tiscali, Arcor, AOL, freenet, BT Ignite, QSC, Mediaways, Talkline and NGI. The market shares of the respective companies are not publicly available. In the broadband market however, DTAG is said to possess a market share over 90%, as a matter of fact; it celebrated its 3 millionth subscriber in December 2002 (out of 3.3 million broadband connections)<sup>7</sup>. Cable modem access could constitute an alternative in the future but up to now, it has a very low impact on the broadband market. First of all, the percentage of households effectively connected with CATV is low, although in theory 70% could be connected. Secondly, Internet over cable is not a real alternative to DTAG yet, as the company still holds minority stakes in 3 of the 9 so-called German Cable Regions (Kabelregionen) and is a full owner of the other 6 regions. This situation could change soon, with the sale of the 6 regions to a consortium of private companies announced to be in the end of January 2003. The deal still has to receive approval by the European Union but if the European Union authorizes it all cable regions will be owned in majority by other companies than DTAG. A particularity of the German cable network is that it is divided into 4 levels, from level 1, Content Provider, to level 4, the 'local loop' of the cable network. In total there are around 20 cable operators in Germany operating on different levels of the cable network.

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<sup>7</sup> RegTP, *Annual report 2003, February 2003*

Table 4: Ownership and market shares of main telcos in Germany

Name	Ownership	Nationwide market share
Fixed telephony		
<b>T-Com</b>	100% DTAG	97 % subscriber line and local 70% long-distance, 67% Internet.
<b>Mannesmann/Arcor</b>	74% Vodafone 26% Deutsche Bahn and Deutsche Bank	n.d.
<b>BT Ignite/Viag</b>	100% British Telecom	n.d.
<b>Colt</b>	100% British COLT Telecom Group plc.	Essentially business and government customers
<b>Tele2 Germany</b>	100% Tele 2 Sweden	n.d.
Mobile telephony		
<b>T-Mobile</b>	100% DTAG	40%
<b>Vodafone/Mannesmann</b>	99.1% Vodafone group	39%
<b>E-plus</b>	77.5 KPN (Dutch incumbent) 22.5 BellSouth	14%
<b>O<sub>2</sub> (Germany) GmbH &amp; Co</b>	100% British Telecom	7%
net		
Narrowband and ADSL		
<b>AOI Deutschland</b>	45% Mediaways 45% America Online 10% Axel Springer Verlag	n.d.
<b>Germany.net/Arcor</b>	100% Arcor/Mannesmann	n.d.
Cable Modem		
<b>Cable regions Nordrhein-Westfalen and Baden- Württemberg</b>	Callahan Associates International Inc. and DTAG	n.d.
<b>Cable region Hessen</b>	International consortium of investors and DTAG	n.d.
<b>6 other cable regions</b>	Sold in January 2003	n.d.
<b>Tele Columbus</b>	100% Deutsche Bank	n.d.
<b>UPC Cable Deutschland</b>	100% UPC Cable Europe	n.d.

Source RegTP, companies and World Markets Research Center end 2002

**3. Legal framework**

**3.1 EU directives**

As a member state, Germany has to comply with the European law. In the telecommunications sector, that means transposing and implementing European telecommunications directives into national law, and complying with the European General Competition Law. As all other European countries, Germany has to transpose the new European directives (except the Data Protection Directive) and do market analysis before July 24, 2003. As mentioned below, Germany is currently revising its Telecommunications Act to make it compatible with the new EU framework.

**3.2 General national framework for telecommunications**

The legal basis for the regulation of the telecommunications sector is called the Telecommunications Act (*Telekommunikationsgesetz or TKG*), in force since 1996. The Telecommunications Act includes detailed sector-specific regulation provisions, details on the functioning of the regulatory authority RegTP and its collaboration with other institutions, appeal proceedings, as well as penal and administrative fines provisions.

**Table 5: Content of the German Telecommunications Act, 1997**

<p>General provisions Part I</p>	<p>Safeguard the interests of users. Ensure equal-opportunity and workable competition. Ensure provision of universal services. Promote telecommunications services in public institutions. Ensure effective use of frequencies. Protect public safety interests.</p>
<p>Universal service Part II Chapter 2</p>	<p>The content of US is designated by the federal government by ordinance requiring consent of the German parliament. Ordinance shall contain content, minimum quality standard, and funding mechanism. Imposition of US is possible when the RegTP notices absence of satisfactory services. US shall be compensated (by US levy on all operators) when there is evidence that it is not profitable for the company providing it.</p>
<p>Rates regulation Part III</p>	<p>General terms and conditions shall comply with European law. Rates 1. shall contain no surcharges prevailing solely as a result of the provider's dominant position 2. shall not be predatory for other companies 3. shall not create advantages for any individual users <u>unless there is an objectively justifiable reason therefore.</u> The RegTP shall approve rates and rate-condition for companies</p>



	<p>with SMP within a period of maximum 10 weeks of the written submission's receipt from the company with SMP. When the RegTP finds that non approved charges are being applied, it shall investigate and deliver a decision within a period of 2 months.</p> <p>Companies shall provide the RegTP with detailed information upon request and may be fined with a maximum of 1 million DM (500,000 €) when they do not comply.</p> <p>The cost-calculation principles and methods are laid down in the Ordinance <i>Telekommunikations-Entgeltregulierungsverordnung TentgV</i> and are divided into two categories: Local access network and national interconnection network. The cost-calculation methods are element based and developed by the German IT consultancy WIK. Reference documents are the '<i>Analytisches Kostenmodell - Anschlussnetz</i>' and the '<i>Analytisches Kostenmodell - Nationales Verbindungsnetz</i>' both from the year 2000.</p>
<p>Interconnection regulation Part IV</p>	<p>Dominant operators shall grant access to their services and infrastructures under the same conditions as they use them for their own internal use, <u>unless the provision of less favorable conditions is objectively justified</u>. Rules of compliance are those in the EU directives and the interconnection ordinances are elaborated by the federal government. Interconnection should be granted to all operators who require it and comply with the conditions set by the law. The RegTP can order interconnection agreements upon request by competing operators in a period of 10 weeks maximum.</p>

The Telecommunications Act has undergone a few minor changes in the course of its implementation (*kleine Novelle*) and is currently being totally revised (*grosse Novelle*) in the light of the new European directives. The content of the new Telecommunications Act is discussed by the actors involved in the system on demand of the Federal Ministry of Economics and Labor. Operators and the RegTP are asked for inputs before a final draft is submitted to the other Federal Ministries for review and approval. The vote on the new Telecommunications Act by the parliament (first the Federal Council and finally the Federal Assembly) is not expected to find place before next summer.

According to persons close to the situation, the new Telecommunications Act should not introduce any major changes to the institutional structure in Germany; main amendments concern the fields of market definition and SMP definition to comply with the new EU package. The content and provision of the universal service are also under scrutiny to guarantee compliance with European directives. During the process of revision, there will be a high degree of uncertainty around the actual content of the new TKG, which makes the situation particularly difficult for the telcos who draw up their business plans following the TKG.

## 4. Key regulation actors

### 4.1 National Regulatory Agency (NRA)

The regulatory authority *Regulierungsbehörde für Telekommunikation-und Post*, RegTP, superseded the Federal Ministry of Posts and Telecommunications (*BMPT*) on January 1, 1998.

The RegTP is a higher federal authority within the scope of work of the Federal Ministry of Economics and Labor (*Bundesministerium für Wirtschaft und Arbeit* BMWA<sup>8</sup>). RegTP's determinations are made by the Ruling Chambers and underpinned by the Telecommunications Act (*Telekommunikationsgesetz TKG*) and the Postal Act (*Postgesetz PostG*). There are four Ruling Chambers and the President's chamber, each of which make decisions on particular aspects of telecommunications and postal regulation.

The TKG institutes an Advisory Council at the RegTP consisting of 9 members of the Federal Assembly and nine members of the Federal Council and their deputies. The members and their deputies are appointed by the federal government upon proposal by the two parliamentary chambers. The Advisory Council meets at least once a quarter. The president and the two vice-presidents of the RegTP are appointed by the federal government upon proposal of the Advisory Council. Furthermore, the advisory council has the right to be informed about RegTP's activities and also has a right of proposition. In particular, it represents the interests of the parliamentary working group on telecommunications and as such, embodies political interests within the RegTP organization. RegTP's links to the parliament are further settled in its obligation to report on its activities on a biannual basis to the parliament. Unlike Switzerland, France, Austria and many other countries, the RegTP is headed by a single person, the President of the RegTP.

The RegTP fulfils all traditional functions of an independent telecommunications regulator (licensing, frequency management and allocation, numbering, standardization, interconnection management). It also has significant powers in the fields of ex-ante end-user and wholesale rates regulation, ex-post rates regulation for SMP, control of anti-competitive practices, market analysis and definition of SMP. Its competencies have varied very little over the years and are not expected to do so in the near future, even with the new legislation under construction.

The German regulatory regime is asymmetrical as in most European countries, which means that its main focus is on the incumbent to offset the significant market power of the incumbent telecommunication operator, DTAG. The RegTP can only intervene when dominance has been recorded within the market. The procedure to make such a record consists of the RegTP to delimitation of the market (market definition) through market observation and analysis from the RegTP followed by an assessment of possible market dominance. Only after market dominance has been certified it is possible for the RegTP to intervene. Unlike

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<sup>8</sup> Formerly *Bundesministerium für Wirtschaft und Technologie* BMWi. The new constitution of the Ministry BMWA entered into force on November 11, 2002.

other EU countries where dominance was essentially determined following a 25% market share rule (recommended by the EU), Germany has applied in-depth market analysis from the start. The main difference between the German concept of market definition and the new EU market definition lies in the fact that the EU recommends ex-ante market definition whereas Germany still has an ex-post market definition. In most countries the functions of market analysis and dominance fall totally or partly under the scope of the competition authority. In Germany, it is the regulator who instructs the cases and the regulator only needs the competition authority's approval to make a final decision. See details under competition authority.

The Ruling Chambers make the decisions about regulatory interventions of the RegTP when these are requested by the industry. The institutional arrangement of these jury-like decision chambers was adopted from the Federal Cartel Office, which uses a similar system. The determinations made by the RegTP cannot be overruled by the supervisory authority (Federal Ministry of Economics and Labor BMWA) unless they are directly linked to the interpretation of the Telecommunications Act, which has never happened yet. Another possibility for RegTP's decisions to be overruled is when affecting the Restraints of Competition Act by the Minister of Economics and Labor. This case has not occurred either so far. As in most other countries, there can no appeal proceedings or determinations be taken against the RegTP, apart from an action in the administrative courts. Article 80 of the Telecommunications Act explains that legal actions against RegTP determinations shall have no suspensory effect. See § 4.5 Judiciary Power.

The RegTP employs 2,600 people among which 230 are non civil servants. At senior grade, there are approx. 250 members of staff including 80 engineers and 170 legal and economics experts. At upper level, there is a technical staff of 700 which are mostly telecommunications engineers, and 150 business experts. The medium level is composed of 530 communications technicians and 780 administrative employees. The basic grade counts 80 persons in charge of internal administration and messenger services.

Around 1,300 people work in so-called regional offices dispatched throughout the country where their principal function is frequency management. The number of regional offices has recently been reduced from 80 to 35 and is likely to be reduced even further. The regional offices are actually a remainder of the former state monopolist who thereby ensured a nationwide presence.

The RegTP has recognized technical skills due to a combination of experience gained throughout the years and the presence of around 150 people coming from the former Federal Ministry of Telecommunications and Post (PTT Ministry) and 1,200 from the former *Bundesamt für Post und Telekommunikation*.

According to RegTP officials, personnel turnover is low at the RegTP for two main reasons: First of all, the work is and seems to remain interesting for most staff at least at advisory level. Secondly, the status of a civil servant in Germany procures a high level of professional security, especially in the present situation where Germany's economic situation is rather

critical. In the TC sector, both the incumbent and the competitors have been laying off many of their employees and will apparently continue to do so.

RegTP's budget is financed by the national budget and allocated through the Federal Ministry of Economics and Labor. The RegTP is not allowed to perceive fees for frequencies or numbering; these are exclusive prerogatives of the Ministry. The Money from the UMTS license auction went directly to the budget of the BMWA.

#### **4.2 Ministry**

The Federal Ministry of Economics and Labor BMWA is in charge of outlining telecommunication policies, drawing legislation and ensuring frequency management with neighboring countries<sup>9</sup> in collaboration with the RegTP. Furthermore, it represents the country in international meetings on telecommunication issues and regularly carries out benchmarking studies to assess the German situation in the telecommunications sector.

The Ministry and the RegTP although structurally linked are independent in their functions and as such, there are very few areas where their scopes of work meet. Only international frequency matters and to a certain extent, legislation review, require collaboration between the two institutions. The RegTP does not report to the Ministry but to the parliament. The independence of the RegTP was an explicit wish of the legislator which explains why their collaboration is very limited.

Some people think that the RegTP and the BMWA are not collaborative also because of their different philosophies and political tights: The technocratic and supposedly independent RegTP on the one side and the bureaucratic politically influenced Ministry on the other side. Whether that is right or not, it is indubitable that the state's partial ownership of DTAG (Federal Ministry of Finance) necessarily challenges the neutrality of the BMWA in its telecommunications sector-related activities.

#### **4.3 Competition Authority**

- **The Federal Cartel Office**

The Federal Cartel Office or *Bundeskartellamt* was founded in the early fifties and has its headquarters in Bonn. Its legal basis is the Act on Competition Restraints commonly called *GWB* standing for *Gesetz gegen Wettbewerbsbeschränkungen*. The role of the Federal Cartel Office with regards to telecommunications is outlined in § 82 of the Telecommunications Act and falls under § 19 and following of the *GWB*.

The role of the Federal Cartel Office in the field of telecommunication regulation has been subject to many debates in Germany back in the mid '90. Many argued that there was no need for sector-specific regulation and that some amendments of the *GWB* would be sufficient for the Federal Cartel Office to be able to regulate the sector. Later, when the idea of a sector-specific regulator rallied more and more advocates, the specific competencies of

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<sup>9</sup> Germany has 9 neighboring countries (the Netherlands, Belgium, Luxembourg, France, Switzerland, Austria, the Czech Republic, Poland and Denmark).

the Federal Cartel Office with regards to telecommunications regulation were extensively discussed, especially in the field of market definition and abuse of dominance matters. Finally, the RegTP was created and endowed with significant powers.

The Federal Cartel Office rules when the telecommunications issues fall under the scope of the Restraints of Competition Act. Moreover, the Federal Cartel Office co-operates with the RegTP in some cases that are explicitly specified by the TKG<sup>10</sup>. It also gives binding statements on several other issues such as price regulation, access, interconnection and on specific rules concerning licensing.

**Table 6: Respective powers of German Federal Cartel Office and RegTP**

<b>Cases</b>	<b>Federal Cartel Office</b>	<b>RegTP</b>
Merger control	Exclusive power	Unbinding advice
Market definition	Veto power Binding statement	Instructs the case upon complaint by a telco
Abuse of dominance	Veto power Binding statement	Instructs the case
Abusive practices	Unbinding statements	Exclusive power

*Source Federal Cartel Office, November 2002*

The sector-specific competencies of the Federal Cartel Office are of course and on purpose not as broad as those of the RegTP, but its merger control activities and the cases that it shares with RegTP have allowed the Federal Cartel Office to build up some capacity in the telecommunications field. When necessary, the Federal Cartel Office collaborates with the RegTP and in very few cases consults the regulator to compensate lack of technological knowledge.

The decisions of the Federal Cartel Office can be appealed in civil courts or through a ministerial decree (*Ministererlaubnis*) which happens very rarely; there have been only 17 overruling ministerial decrees in the whole Federal Cartel Office history, in over 30,000 merger cases. These have been granted when national interests came before competition objectives (e.g. national defense).

A legal action against a decision of the Federal Cartel Office has a suspensory effect, but when justified, there are cases in which the Federal Cartel Office can ask for immediate effect. Appeal procedures are quite long, the first instance can take 1 year; going to the other 2 instances can add up another 2 to 3 years.

- **Monopolies Commission**

The Monopolies Commission was created in 1974 together with the Regulations On Merger Control through the Legislation on Anti-Competitive Practices (*Gesetz gegen Wettbewerbsbeschränkungen*). The Monopolies Commission acts as an advisory body on competition issues for the federal government. As such, it publishes every two year a report

<sup>10</sup> When a provider is excluded from the licensing procedure and when the existence of market dissociation and market dominating position are established. OECD (3).

(*Hauptgutachten*) that constitutes a thorough observation of the state and evolution of company consolidation (*Unternehmenskonzentration*) within the country and assesses the efficiency of merger control mechanisms. The Monopolies Commission has no executive powers but it provides the legislator with information for policy-making. The Monopolies Commission can also be solicited on demand on particular topical opinions (*Sondergutachten*).

In the telecommunications sector, the Monopolies Commission has to hand in a specific report, every two years, that analysis the degree and nature of competition of the sector<sup>11</sup>. The last report was prepared in 2001<sup>12</sup>. The explicit aim of these reports as stated in the TKG is to

- Verify whether ex ante rules are still relevant
- Provide advice for amendments to the legislation or a rollback of regulation

In order to deliver these reports, the Monopolies Commission collaborates with consulting companies specialized in the telecommunications sector and organizes roundtables with the actors involved in the sector. The Monopolies Commission's report translates the will of the legislator to test the relevancy and adaptability of the regulatory framework that it has conceived in the transition phase from a monopolistic to a liberalized telecommunications market.

#### **4.4 Judiciary**

There are no sector-specific appeal bodies in telecommunications; cases have to be brought before the administrative courts. RegTP's decisions cannot be overruled other than by administrative courts<sup>13</sup>, whereas decisions from the Federal Cartel Office can be overruled by the Minister of Economics and Labor or appealed before civil courts.

The German appealing procedures are currently under vivid scrutiny, as the legislators' wishes cannot be fulfilled with the current system. First of all, DTAG appeals virtually every decision made against it by the RegTP regardless of its real chances to win the case. One official estimated the number of appealed decisions at approximately 1,000 cases since the establishment of the RegTP on January 1, 1998. As a matter of fact, DTAG was not very successful with its appeals, as less than 10% of all appeals dealt with in court whether they come from DTAG or its competitors have had a favorable turnout for the appealing companies (according to the RegTP). Out of the 10 % of cases won by operators, the majority had to do with prices or fees fixed by the Minister of Finance and not the RegTP. The chances that a RegTP decision is overruled in court is thus extremely low, which means that the appealing of decisions serves another purpose than the mere overruling of a RegTP

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<sup>11</sup> § 3 article 81 of the TKG

<sup>12</sup> Monopolies Commissions, *Sondergutachten zur Wettbewerbsentwicklung auf den Telekommunikations- und Postmärkten*, 2002.

<sup>13</sup> 1<sup>st</sup> instance: *Verwaltungsgericht* or Administrative Court in Cologne, 2<sup>nd</sup> instance: *Oberverwaltungsgericht* or Higher Administrative Court in Münster, 3<sup>rd</sup> instance: *Bundesverwaltungsgericht* or Federal Administrative Court in Berlin.

decision. In the case of DTAG, the company is known to make a systematic use of appealing procedures for the sake of delaying decisions made by the RegTP.

Article 80 of the Telecommunications Act explains that legal actions against RegTP's determinations shall have no suspensory effect. This rule should prevent the blocking of telecommunications reforms initiated by the RegTP. In practice however, operators (mostly DTAG) bypass this provision by means of a so-called preliminary order<sup>14</sup>, *Einstweilige Verfügung, Anordnung* (§ 60 WBG). Almost all RegTP's decisions are delayed by DTAG in this manner, as a preliminary order suspends RegTP's decisions until the court makes a final statement. The suspension of decisions can last from 3 to 6 months, leaving ample time for the market conditions to evolve.

This legislative failure has led competitors to firmly criticize the RegTP for not being able to enforce its decision in due time, and numerous voices can be heard in Germany who militate in favor of a legal reform. The RegTP itself also advocates a drastic shortening of procedures and has sufficient evidence to show that there is a manifest inadequacy between the legislator's initial wish to enforce decision rapidly and consequently and the practice that has been running for the past 5 years.

Within the scope of the elaboration of the new TKG, discussions are being held about the shortening of the legal procedures with the Ministry of Justice who has to approve any changes of the legal system such as the suppression of the first instance for example<sup>15</sup>. The RegTP, the Monopolies Commission and the alternative operators all militate in favor of an amendment of the current system, but it is not clear yet whether that will be possible. If the new TKG really restricted appeal possibilities, the incumbent would be deprived of one of its favorite instruments to block further liberalization and decisions would be applied much quicker.

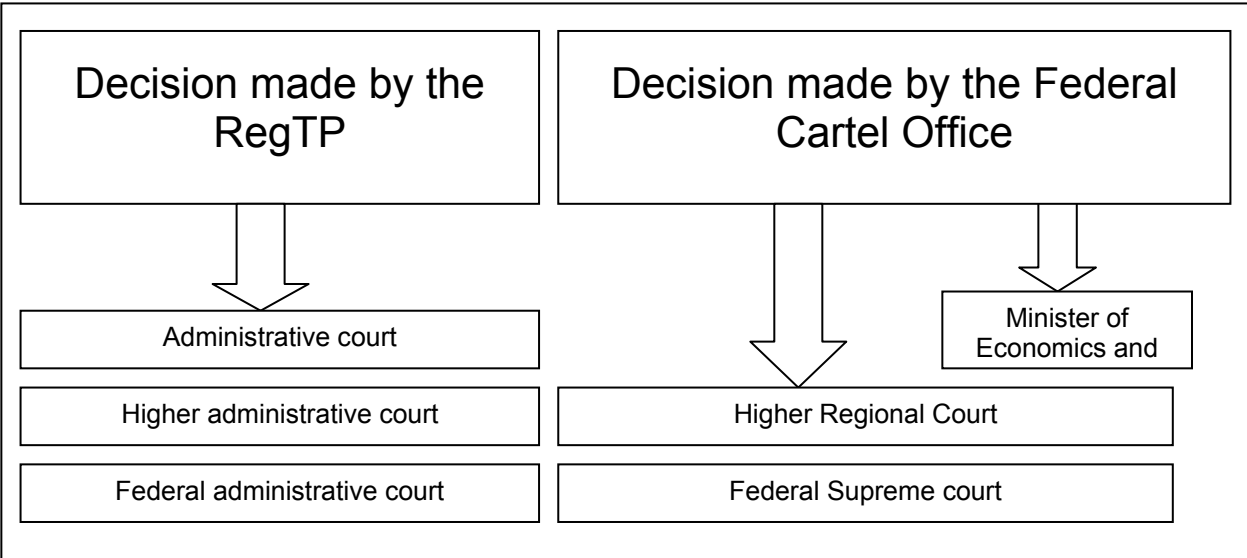
Another specificity in the German regulation system is that the appealing procedure differs according to the authority that makes the decision. RegTP's decisions are appealed in administrative courts and decisions made by the Federal Cartel Office are appealed before civil courts. This difference is due to historical reasons, since the Federal Cartel Office was founded in the fifties. The Monopolies Commission recommends standardization of procedures by transferring the competencies of the administrative courts to civil courts in order to avoid disparate law praxis in sector specific and general competition law. Competitive operators also plead for transfer of competencies to the civil courts, arguing that in the end, disputes are not really between an administration and a private company but always involve two 'private' market players (DTAG and its competitors).

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<sup>14</sup> Also referred to as expedited proceeding, temporary injunction or preliminary stay.

<sup>15</sup> The Monopolies Commission has recommended the shortening of legal procedures by eliminating the first instance for the appealing of decisions made by the RegTP. Appeals would go straight to the Higher Administrative Court in Münster instead of the regular administrative court in Cologne. No decision has been made yet in this respect.

**Figure 2: Appeal procedures in Germany**

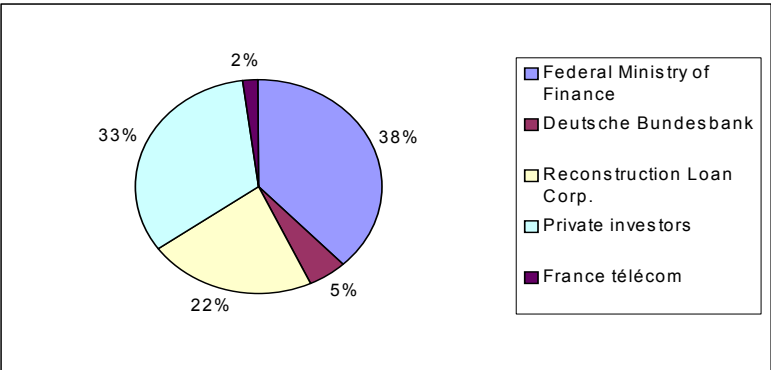


*Source: Federal Cartel Office and RegTp, November 2002*

**4.5 Owner of incumbent operator**

DTAG is 43% owned by the federal government and 22% by a government controlled investment vehicle: the Reconstruction Loan Corporation, founded by law as a statutory corporation in 1948, with its head office in Frankfurt. The shares of the Reconstruction Loan Corporation are owned by the federal government and the federal states. The Reconstruction Loan Corporation supports the German economy through investment loans and export credits under the most favorable conditions. Indirectly, the German government still controls 65% percent of DTAG shares, France Télécom and private investors owning the rest.

**Figure 3: DTAG Ownership 31.12.2002**



*Source: DTAG, end 2002*

As one can expect the fact that DTAG is still partly state-owned weighs very heavily on the regulatory outcome of the German telecommunications sector. Obvious contradictions between competition objectives, on the one hand and fiscal interests, on the other hand, make it structurally impossible to guarantee equal treatment between competing, often foreign companies, and the incumbent operator. Since its foundation, the RegTP has been put under pressure by an ambiguous assignment consisting of ensuring a liberalized competitive market and preserving national economic interests.



The owner of the incumbent operator (the federal government by the intermediary of the BMWA) can intervene directly on RegTP's decisions by using its right to give general directives to the RegTP (§ 66 of the TKG). Such general directives have to be published in the Federal Gazette and their scope should be broad enough so as not to affect any particular decisions. Nonetheless, experience in the postal market has shown that even very general directives may affect particular cases in one way or the other. It has not happened in the telecommunications sector so far, but the mere existence of this legal prerogative weighs on the RegTP's independence.

#### Competing Operators

Germany's principal PTO's are represented by the German Association of Telecommunications and value-added Service Providers VATM (*Verband der Anbieter von Telekommunikations - und Mehrwertdiensten*) and the BRECO the *Bundesverband der regionalen und lokalen Telekommunikationsgesellschaften*.

The VATM represents over 50 competing carriers (80% of DTAG's competitors in revenue) who seek to defend and improve their conditions on the German telecommunications market with a strong focus on the clearing DTAG's historical advantages. The VATM has frequently protested against the RegTP which, according to the VATM, does not fulfill its mission to create acceptable market entry and competition conditions for DTAG's competitors. The VATM notably reports that the great number of bankruptcies, which have occurred over the past 2 years, were due to the lack of fair market conditions.

The BRECO represents the majority of Germany's so-called Citynets, i.e. telcos operating on local and regional level mainly in big cities and their surroundings. BRECO's board is composed of local and regional telcos CEOs and it was established explicitly to confederate local and regional fixed-net operators competing against DTAG.

Operators complain about unfair market conditions in the German telecommunication sector and in particular about the weakness of the RegTP towards political interests, the length of procedures and legal actions, the lack of sanctions against DTAG, and severe legal uncertainty.

It is no longer the case that all operators share the same interests though, as many of them have adapted their business plans to the current situation, i.e. have amended their strategies by taking into account existing legal failures and market distortions. As a result, it occurs that telcos may have opposite objectives in certain issues.

## **5. Regulatory functions**

### **5.1 Allocation of scarce resources**

#### **5.1.1 Frequencies**

Frequencies are managed by the RegTP in Bonn and its regional offices in order to safeguard the interests of the federal States in respect of broadcasting matters under their jurisdiction. Three specific Ordinances accepted in 2001 by the German Federal Council lay the provisions of frequency management in the Federal Republic: The Frequency Band Allocation Ordinance (*FreqBZPV*), the Frequency Usage Plan Ordinance (*FreqNPAV*) and the Frequency Assignment Ordinance (*FreqZutV*). There is no shortage of frequencies in Germany nor have there been any specific decisions made on frequencies for the past 2 years.

#### **5.1.2 Rights-of-way**

Under the TKG, the RegTP must give its approval before public ways can be used if the authorities responsible for their construction and maintenance are license holders themselves or are merged with a license holder. In 2001, this was the case in 94 towns and cities in Germany, more than 5,000 approval certificates were issued. It is RegTP's regional offices who grant approval to license holders wishing to use public ways to install new or modify existing telecom lines. There are no major problems related to the use of public ways in Germany. There has not been a single disputed case in 2001.

### **5.2 Enhancing competition**

#### **5.2.1 Licensing**

All public telephony operators have to apply for a license to the RegTP. The process of receiving a license is not difficult. The number of licenses attributed can only be limited when there is frequency scarcity. In that case, an auction or a beauty contest can be held to determine the beneficiaries of the licenses (in the case of UMTS licenses for example).

There are 4 different types of licenses:

- License Class 1: Operation – by the license holder or others – of transmission paths for public mobile radio services (Mobile Radio License).
- License Class 2: Operation – by the license holder or others – of transmission paths for public satellite services (Satellite License).
- License Class 3: Operation – by the license holder or others – of transmission paths for public telecoms services not covered by Class 1 or 2 (Transmission Path License).
- License Class 4: Provision of voice telephony using self-operated telecom networks (voice telephony license), the right to operate transmission paths not being included.

By the end of 2001, more than 2000 providers were registered with the RegTP (registration is compulsory).

### **3G licensing**

Unlike most countries where the auctioning for the allocation of 3G licenses occurred more recently (France, Switzerland), Germany succeeded in selling the 3G licenses to high prices, thus raising a considerable amount of money for the government (45.8 billion USD). In many other countries, the widely reported auctioning process for UMTS licensing led to disappointing results in terms of revenue for the government, mainly due to the technical and business realities and delays in the 3G network development.

#### **5.2.2 Granting access to infrastructures for new companies**

- **Interconnection rates and agreements**

Germany boasts to have rather low interconnection rates from the beginning of the liberalization process. When the rates first became public in 1998, the announcement led to a major fall in the DTAG share. The relative affordability of interconnection tariffs (and the costs of alternative solutions) has led to the fact that most operators prefer leasing DTAG's network rather than building their own. The low prices of interconnection<sup>16</sup> are due to early and constant pressure by the RegTP, urged to regulate that field by complaints coming from competitors, the EC and the US government. As DTAG still owns the majority of access lines (around 97%) the interconnection rates are of great importance to the competing operators. Even though the RegTP already made several decisions in 2001 to lower the interconnection rates, competitors still accuse DTAG to charge rates that are way above real costs. Element based charging was supposed to be introduced in June 1, 2001 but had to be postponed to January 1, 2002 because of DTAG's unwillingness to provide reliable and acceptable cost calculations. Approval of new interconnection rates finally occurred on October 12, 2001.

Interconnection issues are not only problematic with regards to prices. Delays and postponements seem to have become a rule in Germany, where DTAG requires great amounts of time to determine the availability of interconnection services, to provision interconnection interfaces and to agree on the terms of interconnection agreements with competitors. In 2001 alone, the RegTP received 25 requests from operators to order interconnection with DTAG's network. Many of these cases are still pending as the RegTP as the verification of the costs such as they are presented by DTAG can take several months, and DTAG's strategic incompetence is well-known among the people in the sector.

Predatory end-user pricing by DTAG also adds to the problem as it leaves the competitors with a very low margin. Several cases of practices close to price dumping by DTAG (low cost XXL offer for week-end fixed telephony for instance<sup>17</sup>) have naturally excluded competitors from certain markets as they did not have adequate and cheap pre-products at their disposal to offer similar services.

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<sup>16</sup> Below or at EU average. EU, 8<sup>th</sup> *Implementation report*, October 2002

<sup>17</sup> The RegTP has ruled against this offer which DTAG has to withdraw from the market on 04/ 30/2003

- **Leased lines**

The leased line market is very problematic in Germany as DTAG is again particularly well-known for strategic incompetence in the field of putting wholesale products at the disposal of its competitors. It is not the pricing in particular, but the provisioning of leased lines that hinders the market in Germany. The worsening market situation in Germany has resulted in the exit of numerous new competitive entrants. Delays of up to nine months for delivery of leased lines by DTAG make it impossible for competition to thrive.

In 2001, the RegTP was frequently solicited to regulate in the field of leased lines, both on tariffs for the different sorts of leased lines available and on the delivery times very much contested by the competitors. The RegTP called on DTAG to guarantee delivery times ranging from 8 weeks to 6 months depending on the technical effort involved. DTAG has to give the contracting party a set of reasons for possible delays. Special provision was introduced for cases in which it becomes clear that delays after the beginning are unavoidable.

The excitement to RegTP's decision by the competitors was low as delays are not dramatically challenged by the new decision and the RegTP has very little possibilities to sanction DTAG in case of non-compliance with its obligation.

- **Unbundling of the local loop**

**Table 7: Monthly rental for a fully unbundled line in Germany**

Monthly rent for a fully unbundled line	12.48 €
EU average	13.2 €
Cheapest in EU ( Denmark)	8.2 €
Most expensive in EU (Holland)	17 €
Most expensive in Europe (Norway)	21€

**Source: ECTA, June 2002**

Germany has led the way by unbundling its local loop. The unbundling of the local loop is compulsory since 1996. In the beginning, the unbundling of the local loop was supposed to encourage the deployment of alternative infrastructure to DTAG's raw copper. The costs induced by the development of a parallel infrastructure was underestimated though, as was the possibility for competing operators to guarantee return on investment and make economies of scale. As a result, more than 6 years after the unbundling of the local loop, only 3% of the subscriber lines belongs to operators other than the incumbent (end 2001). The remaining network still fully belongs to DTAG.

Line sharing and line rental rapidly became a more realistic option. The incumbent is obliged to offer access to its local loop in all of its exchanges against financial compensation. In theory, there should be no impediments for the competing operators to use DTAG's raw copper. In practice, DTAG has shown tough resistance in the access' granting of to its local

loop. Many operators have experienced delays in the provision of access to the local loop which obligated the RegTP in June 2000 to finally set a time limit of seven days from receipt of request to the provision of the individual lines.

In spite of the ULL, there is virtually no competition in the subscriber lines market, the local-calls and the ADSL markets. Only regional carriers<sup>18</sup> have succeeded in some German major cities to counter DTAG's quasi-monopoly on the subscriber line/local calls market. Their market shares represent less than 3% at national level.

Unbundling still has a long way to go in Germany, and recent developments in the ADSL market demonstrate a noteworthy lack of structural competition in the ULL. DTAG has been offering bundled services since the summer of 2000 in the sense that DTAG's ADSL offer called T-DSL is available only in conjunction with analogue or ISDN telephone line rental. By doing so, DTAG leveraged its market power from the local loop monopoly to the new broadband market. Furthermore, DTAG lingered to offer suitable wholesale offers to its competitors so they could enter the ADSL market at the same time. In spite of a formally unbundled local loop, it is manifest that DTAG's permanent and unpunished foot-dragging to grant other operators access to its infrastructures annihilates the expected results from full ULL.

As a result of complaints by the U.S. government and pressures from the EC, the RegTP took steps to improve the situation in early 2002. In March 2002 the European Commission initiated a new legal proceeding against Germany for failing to assure that the incumbent operator offers adequate unbundling.

### **5.2.3. Facilitating access to the customers for new companies**

- **Carrier Pre-selection (CPS) and Call-by-call (CbC) carrier selection**

Call-by-call carrier selection is very popular in Germany, where customers take advantage of DTAG's cheap week-end prices (XXL offer) for local calls and make extensive use of other operators to make long-distance and international calls. Most German customers are used to switch from one operator to another depending on the kind of traffic they want. Carrier Pre-selection is less successful in Germany.

Surprisingly there is no CPS and CbC in the local market yet and it is not likely to occur very soon, as the RegTP recently decided to suspend introduction until the end of April for CbC and begin of July for CPS (it was due to become effective on December 1, 2002).

The RegTP argues that the short time between adoption of the amending law and its entry into force makes the introduction of carrier selection and carrier pre-selection on December 1, 2002 not a viable technical possibility. This seems to be also the view of the competing companies and Deutsche Telekom AG (DTAG). The RegTP plans to hold a public consultation and to publish the findings in order to ensure maximum transparency and to take into account all the viewpoints. The consultation is scheduled to begin on the date of the next issue of RegTP's official gazette, which is December 18, 2002.

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<sup>18</sup> A list can be found on [www.teltarif.net](http://www.teltarif.net), a private service website for German telecom consumers

The First Amendment to the Telecommunications Act of October 21, 2002 required DTAG to provide since December 1, 2002 the call by call and the pre-selection facility for local calls as well. The RegTP has recently become aware that, according to the current state of play, call by call could not be introduced before April 24, 2003 at the earliest and pre-selection not before July 8, 2003 at the earliest in light of the technical and operational processes required for implementation.

In the absence of CPS and CbC facilities, it is impossible to further deploy competition in the local calls market as customers have no other possibility but to use DTAG or completely change carriers and become a subscriber of a Citynet for instance.

- **Number portability**

Number portability for fixed telephony was introduced in conjunction with market liberalization in 1998. Mobile number portability has only recently been introduced (November 2002) and is expected to have a positive result on the market shares of the competitors.

#### **5.2.4 Guaranty of stable and equal market conditions**

Entering the market is not difficult in Germany, where there is no restriction of the number of telcos operating on the fixed net (for the mobile market, there is a limited number of licenses). Remaining on the market is much harder, as the current wave of consolidation is demonstrating. The number of companies has been decreasing since 2001 and with it, the number of people employed in the sector. Ambitious business plans, excessive growing and spending, acquisition of non-profitable companies and collapse of the stock exchange are some of the reasons that can explain the moroseness in the telecommunications sector. There are also other reasons linked to the regulatory system and its assignment to create equal conditions on the market for all telecommunications operators.

- **Legal certainty and planning certainty**

The TKG and its application should provide legal certainty to all telcos operating in Germany. In practice, the industry finds that legal and planning certainty is not at all guaranteed and they base their statement on extensive evidence. The law only sets a general framework and there is plenty of room for *ad hoc* decision making mostly in favor of the incumbent. Often there is great uncertainty about the outcome of RegTP's investigations and decisions; and even when RegTP's final decision is favorable for competitors, the problem of enforcing these decisions remains relevant. Legal and planning certainty affects competitors much harder than the incumbent, as they do not have the same financial stability and public support as the incumbent does.

- **Debt authorization**

At the same time, new market players do not have the right to accumulate the same amounts of debt as DTAG can because of its state ownership. Consequently, companies have to show rapid results or else they are likely to go bankrupt in a very short time. As few companies make economies of scale so far, their chances to survive in the German market depend largely on their initial funds and survival capacity in the absence of new resources.

- **Sanction power**

There are two main problems with the enforcement of RegTP's decisions on the operators, especially on DTAG. First of all, the RegTP does not have enough sanction power to enforce rapid and accurate application of its decisions. Secondly, DTAG makes extensive use of legal action against RegTP's decisions thus suspending them for enough time to allow market evolution in its favor. The Monopolies Commission advocates a change in the legal proceedings allowing faster resolution that would take market conditions into account. It also recommends providing the RegTP with more severe sanction powers (amounts of the fines and possibility to request retro-active compensation).

For instance, there is a real problem with the provisioning and quality of wholesale products for competing operators in Germany. The RegTP is not pro-active and only acts upon complaints by competing operators. The availability of suitable wholesale products has often been realized only after DTAG had already launched its own end-products on the market, such as in the ADSL market. Although the RegTP now sets precise timeframes for the provisions of raw copper or leased lines to competitors, DTAG continues to push its luck to refrain from or delay granting access to its infrastructure. Only effective and rapid sanctions could oblige DTAG to respect the RegTP's determinations.

### **5.3 Guaranty of public service**

#### **5.3.1 Universal service**

The content of the universal service in Germany is laid down in the Ordinance on Universal service Obligations (*TUDLV*) underpinned by the general rule that the quality of the services defined as indispensable to the customer are offered at a quality at least equal to the situation in 1997, e.g. before liberalization.

The RegTP only intervenes when it finds or suspects that universal service provisions are not adequately offered and in that case, can oblige any licensed company achieving 4 % market share within its market to provide universal service, with financial compensation in case costs related to the provision of universal service are found to exceed earnings. Financial compensation would come from levies on operators proportional to their turnover. In that case, DTAG would contribute approximately 90% of the compensation fund. As a result, no regulatory measures have been taken in the field of universal service until now. DTAG provides universal service in Germany without requiring financial compensation.

The German legislation on universal service is likely to become more detailed with the transposition of the new Universal Service Directive of the EU package into national law.

#### **5.3.2 Consumer protection and quality control**

The RegTP has a consumer advice department in charge of informing consumers about their rights, and the offer of telecom services for customers and dealing with their complaints. Since its foundation in 1998, there has been a steady increase in the use of this service by the customers as well as an increase in the proportion of complaints. Most complaints are

about unsolicited direct marketing, bills and high prices. The consumer service works together with consumer associations.

DTAG seems to offer good quality services; indeed only 10% of complaints addressed to RegTP's consumer service were about DTAG although its market shares are close to 97% in some sectors.

When complaints cannot be resolved immediately, the consumers may seek to contact the conciliation service that will deal with the case in order to resolve the dispute outside of court. In 2001, 508 cases were heard.

The RegTP established a favorable status list for consumers to find out which companies have been found to make a correct use of the standardized itemized bill.

The RegTP does not do price comparison for customers, but there are a few private organization who provide that service (for instance [www.teltarif.de](http://www.teltarif.de)). Due to the high number of locally active telcos, it is certainly not easy for consumers to know exactly what they pay and what they could save if they changed operators.

## **6. Evaluation of the regulatory system**

### **6.1 Assessment of the NRA**

#### **6.1.1 Resources and expertise**

The RegTP has extensive formal powers that should not be negatively affected by the transposition of the EU package into national law. Only the new ex-ante market definition rule might deprive the RegTP from its own prerogative to determine these. In most other fields, the RegTP should be given even more rights with a larger palette of possible interventions. Nonetheless, in the long run, it is not impossible that a rollback of sector-specific regulation shift competencies from the RegTP to the Federal Cartel Office.

The RegTP has considerable resources both in terms of staff and in terms of technical skills. It can count on an important number of employees (2,600) including telecommunication and postal sector regulation at the headquarters in Bonn and in regional offices. The sector-specific skills of its employees are adequate but there is a constant pressure to maintain and upgrade the level of knowledge as regulatory issues and especially the controlling of data provided by the operators require high levels of competencies. The fact that Germany is currently going through an economic crisis has a favorable impact on the level of qualifications of the RegTP's staff who have less difficulty in recruiting and keeping skilled people.

The RegTP is recognized to be competent in its field of activity and it is not so much its actual competencies that are being questioned by the industries, as its will to put these to the service of an effective liberalization of the sector.



### **6.1.2 Independence vis-à-vis political interests and transparency**

The independence of the RegTP vis-à-vis political interest is indubitably the most critical point in the whole regulatory system, in the sense that the RegTP has to cope with a double assignment of promoting competition in the telecom sector and preserving the interest of the state as the major shareholder of the incumbent. Past rulings have shown that the RegTP has often withdrawn initiatives to intensify market competition or declared itself incompetent in matters where DTAG's interests were manifestly challenged. The merely formal independence of the Ruling Chambers is not an efficient firewall against political interests coming from higher authorities. In the past, and although this is not formally said so, decisions have been 'influenced' and finally resulted in the sustaining of DTAG advantages or closing of cases brought before the RegTP by competing operators.

In spite of manifest efforts to appear transparent to the industry, the RegTP suffers from a rather opaque image to the competitors. Here again, it is RegTP's frequent and sudden reversals of opinion that give the impression of a blur profile.

### **6.1.3 Efficacy and credibility**

Contradictory objectives at the political level - competition on the market and preservation of the partly state-owned enterprise - put the whole regulatory system under great pressure and erode its efficacy. This inherent contradiction makes it very difficult for the regulator to implement the public policies as laid down in the telecommunications law.

The length of proceedings is also mentioned as being critical for RegTP's efficacy and there is a will to improve RegTP's speed of action with the new TKG. For the moment, it is too soon to tell whether this will actually happen or not.

Another aspect that weighs on RegTP's efficacy is its tight delimitation of powers. The exhaustive and delimited catalogue of RegTP's competencies has sometimes led to weak adaptability to unforeseen situations. For instance, the billing system through DTAG was an unexpected problem that the RegTP had difficulties with. DTAG did not want to cash money for other operators (call-by-call) on their bills, thus obliging competitors to set up a whole accounting system with back pay procedures for small amounts starting at 1 €.

## **6.2 Flexibility of the whole regulatory system**

The monitoring system foreseen in the regulatory system consists of a bi-annual assessment by the Monopolies Commission that should allow the regulatory system to adapt to new contexts and events. The Monopolies Commission determines whether, in the light of the market situation and foreseeable events, it is pertinent or not to maintain the regulatory regime under its current form. In particular, it assesses whether a rollback of regulation is desirable or possible. So far, the Monopolies Commission has been rather skeptic about the effective presence of competition in the telecommunications sector and has declared itself against the phasing-out of sector specific regulation.

Although, one can only praise the effort of carrying out a periodic global assessment of the regime, there are still some concerns about the ability of the system to deal with problems in due time. In various cases, indeed, the German regulatory regime and more specifically the

regulator itself have proven to have difficulties with unforeseen situations. Minor changes have been introduced into the Telecommunications Act but it has occurred more than once that the RegTP was unable to make a decision in due time. Especially competitors complain about RegTP's little flexibility and they criticize the lack of legal certainty deriving from these blockages.

With the entire revision of the Telecommunications Act (*grosse Novelle*) which is currently being carried out, actors involved in the telecommunications sector are impatient to know whether there will be more flexibility and adaptability of the regulatory system in the future. Unfortunately, discussions with people close to the situation lead to think that the revision will essentially concentrate on the transposition of EU law into national law and not so much deal with deficiencies of the German regime.

Amongst others, many German actors involved in telecommunications believe that there should be a new and thorough reflection on the incidences and the pertinence of the unbundled local loop as a driving-force competition in the fixed market, whereas the new EU directives do not address this fundamental question and go on believing that the ULL will indeed lead to effective competition on that market. One gets the impression that the Germans are ready and eager for changes that are not yet of interest for the EU.

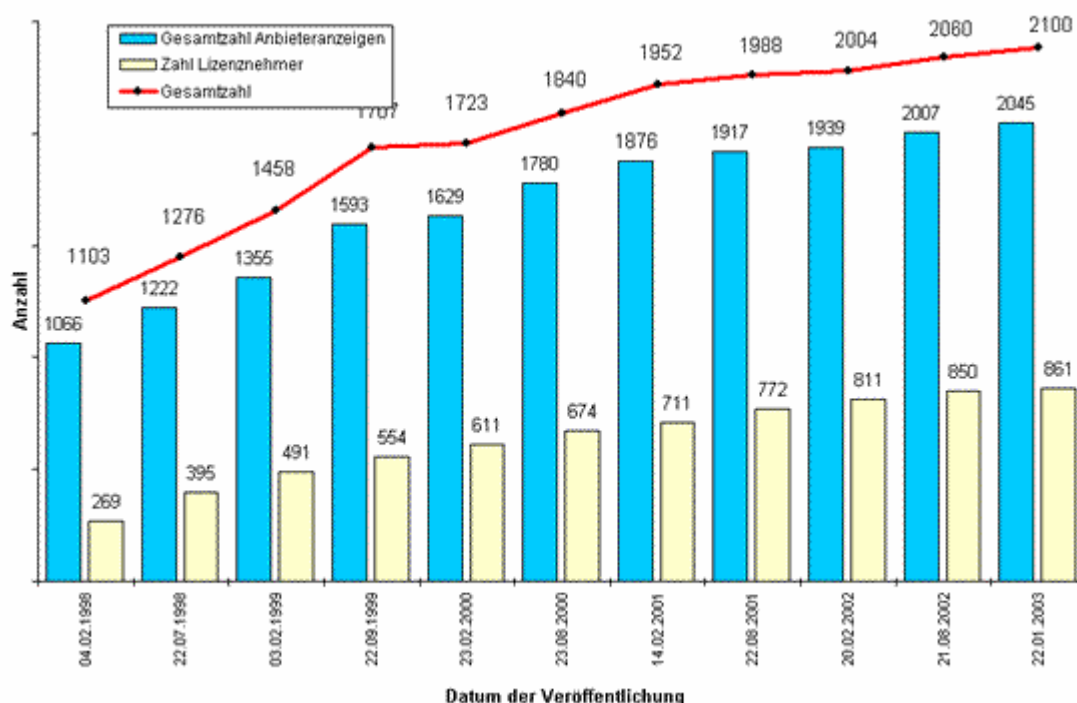
## 7. Outcome performance indicators

### 7.1 Competition

- **Number of telecommunications operators**

When we assess the number of telecommunications operators for an evaluation of the performance of the German regulatory system the record is rather positive as there are more than 2,000 operators in the country. Nonetheless, this high number does not say much about the actual state of competition and customers' choice (in the biggest country in Europe). Indeed there may be close to 2,000 different operators but the local loop and ADSL services still represent market shares of close to 97% for DTAG.

Figure 4: Number of telecom operators in Germany



Source RegTP, 2003

Although the graph above shows a steady increase in the number of operators, a more refined analysis of the field of services of the operators shows that the number of telcos offering common telephony services is now declining following a trend observable in most European countries. For long distance calls for instance, there were 40 companies in Germany two years ago and today there are only 10 companies left on the market<sup>19</sup>. The German market evolution shows that the high number of bankruptcies in the past two years has considerably tempered the telecom frenzy of the late '90. Many companies have experienced failure of their business models when the market evolved in a different direction from what could have been expected by the legislation. Unlike DTAG, time and cash flows are two important prerequisites that most competitors do not have. In the fixed voice market,

<sup>19</sup> RegTP, November 2002

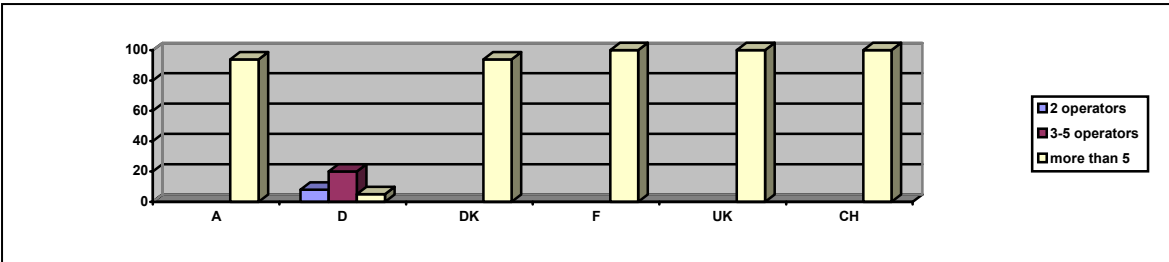
CityNets seem to be the main realistic survivors although none of them has made any profit so far. Future regulatory matters and consumer behavior will show whether these market players constitute a real alternative to DTAG. In the fixed voice telephony market, strong sector regulation is an important condition for the achievement of structural competition. As the Monopolies Commissions notes it, there are absolutely no reasons yet that could justify a rollback of regulation in these markets.

In particular, certain actions of the regulator have an impact on the ability of competitors to remain on the market. For instance, the regulator has an impact on legal and planning certainty, by making decisions rapidly (the RegTP has a maximum of 10 weeks to issue a decision), by making effective use of sanction power (according to competitors, the RegTP does not use its sanction power enough) and by exerting effective control on predatory pricing of the incumbent. Here again, RegTP has been solicited many times to intervene, but has rarely accused DTAG of predatory pricing or cross-subsidizing. Strong regulatory intervention also means controlling the incumbent's compliance with its SMP obligations, such as adequate provision of wholesale products, in order to prevent competitors from being driven out of the market. The RegTP has issued several decisions urging DTAG to respect timelines and quality requirements, but the problem of enforcing these remains.

- **Choice for the consumers**

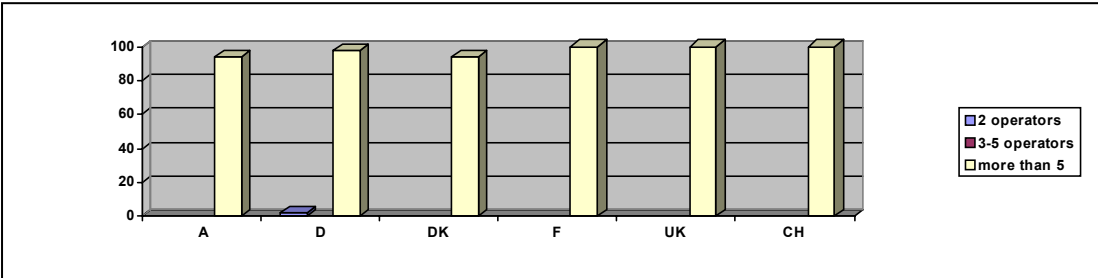
The variety of choices for a German consumer depends on its location; big cities offer more choice than large rural parts of Germany where there are no city carriers. It must not be forgotten while reading the graphs below, that CbC and CPS are not yet available for local calls (reason why the choice is limited for fixed local telephony calls).

**Figure 5: Percentage of population that can choose between different operators for fixed telephony local calls**



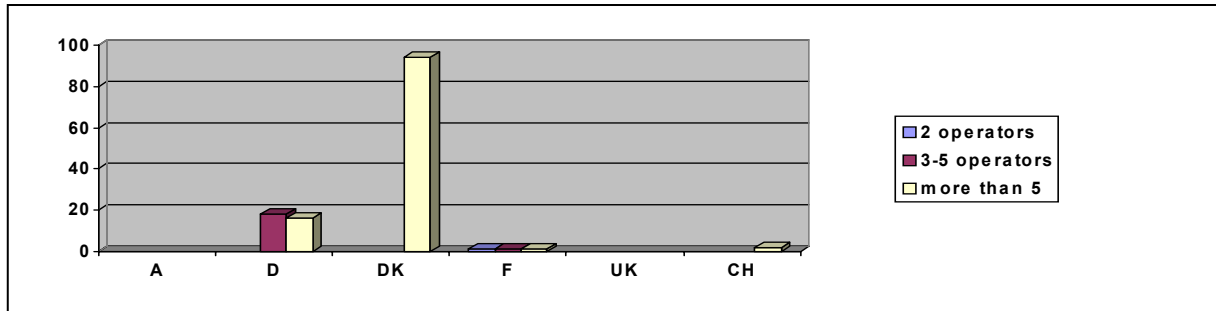
Source: WIK Consult Auszug aus dem 8. Implementation Report der EU -erweitert um die Schweiz

**Figure 6: Percentage of population that can choose between different operators for fixed telephony domestic long distance and international**



Source: WIK Consult Auszug aus dem 8. Implementation Report der EU -erweitert um die Schweiz

**Figure 7: Percentage of population that can choose between different operators for subscriber line connection**



**Source: WIK Consult Auszug aus dem 8. Implementation Report der EU -erweitert um die Schweiz**

For mobile telephony, the Germans can choose between four different operators (T-mobile, Vodafone, E-plus and O<sup>2</sup>) and will have one or two more competitors for UMTS (depending on the survival or merger of Mobilcom).

For the Internet, German customers can choose between many providers, but DTAG still leads the market by far, because it offers interesting and easy-to-set up bundled services. In the ADSL market, German regulation has proved incapable or unwilling to foresee predictable market evolution by allowing DTAG to offer ADSL services before it granted adequate wholesale services to its competitors. As for cable modem, now that the cable companies pertaining to DTAG have been sold to private investors, cable modem could become an interesting alternative to DTAG for the German consumer. However, Internet over cable has not yet encountered a great success.

Formally, the German regulatory system has succeeded in offering more choice to the consumers but if we look at the situation more in detail, many competing offers cannot rival with DTAG's large palette of affordable services. A more pro-active attitude on behalf of the regulator would certainly contribute to make the offers more attractive. The introduction of CbC and CPS in the local fixed telephony market (postponed several times) would be a way to increase choice for the consumer. Tighter control on predatory pricing and cross-subsidizing would also increase the attractiveness of competitors' offers. The providing of information to the consumers on different technologies available would stimulate the demand side and allow the German consumers to benefit more from the choices that are offered to them.

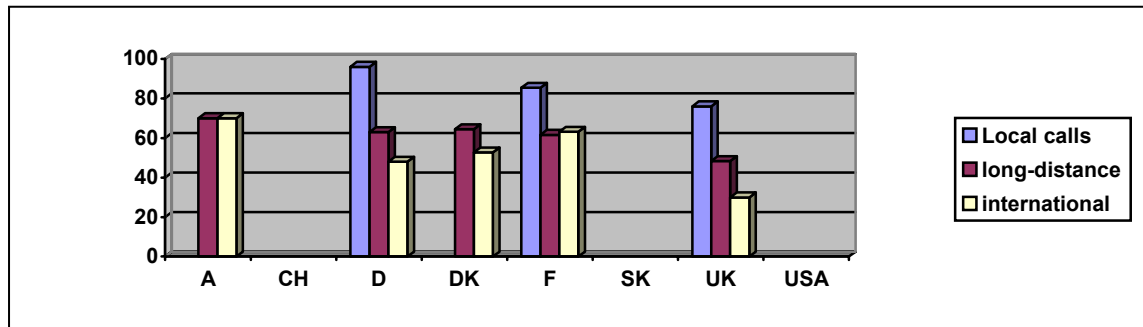
- **Market shares**

The mobile market is rather competitive, and DTAG's share is equal to the share of the second largest operator Vodafone (40% each).

Fixed voice telephony is divided into two markets in Germany, namely subscriber lines and local calls on the one hand, and long distance or international calls on the other hand. Despite the unbundling of the local loop, DTAG still owns over 97% of the market shares in the subscriber lines and local calls market and this number is not likely to change in the near future. The upcoming introduction of carrier pre-selection and call-by-call selection in the local

calls market could boost the market shares of the competitors, and so could the planned suppression of DTAG's XXL offer allowing extremely cheap nationwide phone-calls on Sundays and bank holidays. In the long distance and international calls market, DTAG's market shares fell to 70% and 63% (2001) respectively, essentially because of CbC selection.

**Figure 8: Estimates of incumbent's market shares outgoing minutes on the fixed network, August 2002**



*Source: EU 8<sup>th</sup> Implementation report, November 2002*

As far as the Internet is concerned, DTAG's quasi-monopoly on the fixed network has severe repercussions on the Internet market, where dial-up Internet is mainly in the hands of DTAG. As for ADSL, the situation has evolved in such a way that DTAG very rapidly conquered market shares after the initial launch of the market. According to RegTP's functioning principles, it is only allowed to regulate markets in which dominance has been recorded. When ADSL was launched in the German market, there could be no recorded dominance, as the market was new. As a result, it was considered that all market players entered the market under the same conditions. Nevertheless, competitors depended on DTAG's infrastructure to make their own ADSL offers, and DTAG postponed the access to its network for other operators while in the meantime, it offered extremely low prices for ADSL. The RegTP investigated DTAG's price strategy and found that there was no evidence of price dumping but obliged DTAG to accelerate interconnection agreements and provision with its competitors. By the time the situation was cleared, DTAG had acquired over a million customers and competitors had been considerable delayed in setting up their own offers.

A more pro-active attitude of the RegTP (and less political influence in favor of the incumbent) could have a positive impact on the market shares of the competitors. There is a need to maintain and even reinforce asymmetric regulation. The question is whether the regulator will be offered more extensive powers with the new TKG, in particular in the field of investigation power and sanction power. The fact that RegTP's decisions are systematically appealed and, in many cases, suspended, has a very negative impact on the development of market shares in the different markets. Tougher market surveillance and more rapid and strong intervention by the RegTP call for more independence and maybe even a change in the legislation. Thus, as things are now, the RegTP has not enough possibilities to maneuver and to effectively promote competition.

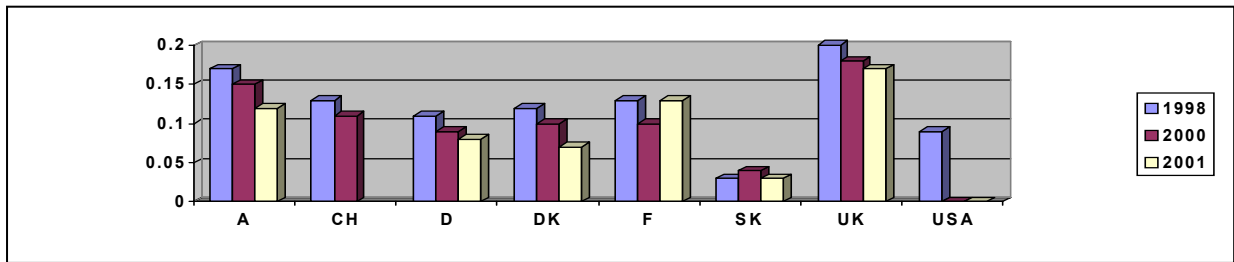
- **Prices end-users**

After an initial period of intensive price drops in this market (up to 90% for long distance calls), essentially due to regulation, the situation has now been quite stable for the past two years. The introduction of CbC and CPS account for most of the price drops, and the future introduction of these features in the local calls markets could bring along additional price reductions.

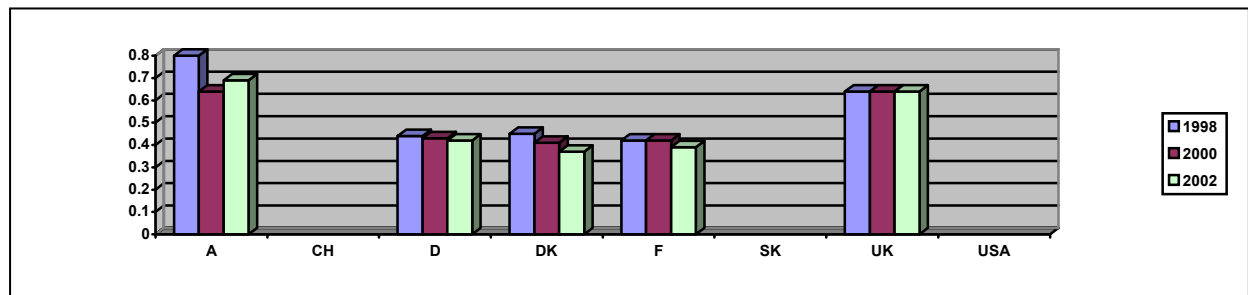
The RegTP has actively contributed to a real drop in prices for the customers, at least for long-distance and international calls over the fixed network. In other market such as the local calls and ADSL market, low prices are essentially due to DTAG's low price strategy (close to dumping in several cases). The RegTP's action on end-user prices is limited to the approval of prices submitted by the incumbent, and indirectly through its intervention on wholesale prices.

As shown in the graphs below, end-user prices in Germany correspond to the average of the 8 countries included in this study, and so do wholesale prices.

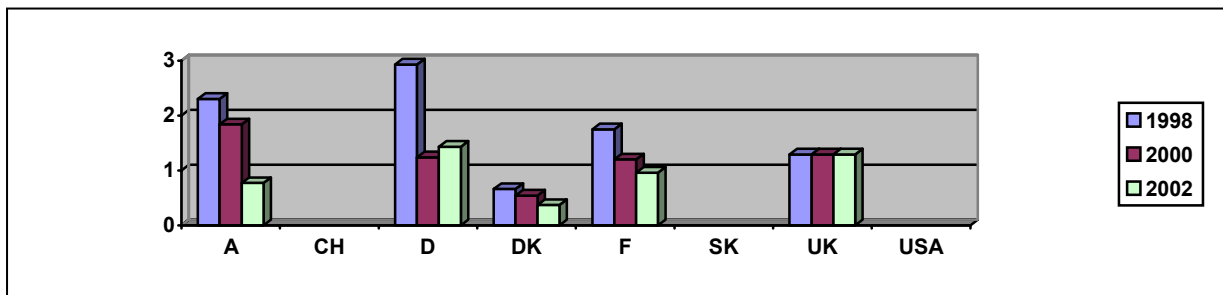
**Figure 9: Fixed voice Telephony, 3 minute local call, average charge in PPP €, Source ITU**



**Figure 10: Fixed voice telephony, 10 minute local call, average charge in PPP €, Source Eurostat**

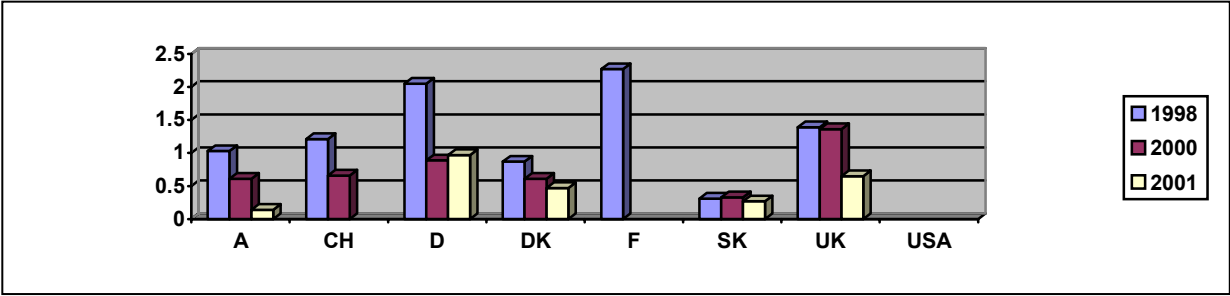


**Figure 11: Fixed voice telephony, 10 minute domestic long-distance call, average charge in PPP €**



Sources Eurostat, WIK Consult

Figure 12: Mobile telephony, 3 minute local call, average charge in €, Source ITU



7.2 Public service

• Availability of services

ADSL n.d.	Leased lines 2 Mbps n.d.
ISDN 100% (penetration rate 40%)	Voice telephony over cable: Available
Availability of cable modem 1 million customers (Penetration rate CATV 56%)	Data over powerline: Available since 07/01/01 Availability: 90,000 households
FWA availability n.d.	

Sources BMWA, Operators and RegTP Annual report 2003

Availability of services is good in Germany, although there are some differences between the offer in the urban centers and those in rural areas. It is not easy to report about the availability of services in Germany, as the RegTP does not collect precise data, and companies provide only partial information. Generally speaking, availability of services in Germany is similar to that of most European countries that are neither at the forefront of technological innovation nor lagging behind.

To our knowledge, there is no national strategy or target setting for the rollout of new technologies. Responsibility for innovation is left to the companies and driven by consumer demand, not by regulation. The RegTP does not intervene on consumer demand either, by advertising new features for instance. The regulator relies essentially on the customer to find out about (new) products and on the companies to advertise these.

The role of the RegTP is thus limited to the technical aspects of technological innovation, by setting standards and allowing test-phases. The limited pro-activeness of the regulator is essentially due to the regulatory framework that does not foresee intervention on this level.

• Quality of services (QoS) throughout the country

The quality of German telecom services is good, but probably not very different from most other OECD countries. Intensive regulatory pressure on the quality of services is a positive contribution and ensures that quality remains high. The German regulatory regime foresees the definition of quality standards for USO but not for the services of other telcos.



The RegTP publishes a favorable status list on its website informing about companies that have correctly implemented itemized billing systems. This is a way to guide the consumers with their choices, although the mere itemized billing aspect is probably not sufficient to justify a client's choice. The RegTP has a consumer advice center and deals with complaints from consumers who are dissatisfied with the quality of their services. The RegTP could do more by doing close quality monitoring, publishing the results of quality tests or oblige companies to implement a consumer service with minimum quality standards.

- **Information to the public**

In the fields of information and support to the customer, the RegTP cannot be referred to as a leader. Information is not very widely available; the RegTP relies on the companies to advertise new technologies or products and on the German consumers to look up that information for themselves. The RegTP offers a consumer advice service in which end-users can ask for information or for a conciliation procedure. Consumers cannot have access to any price guides elaborated by the RegTP, but some private actors offer this service. According to the RegTP, a price guide would be too difficult to elaborate at nation-wide level, given the disparities from one region to another.

We have no additional information in our possession that would demonstrate a stronger implication of the RegTP in the preparation and deliverance of information to consumers.

## **8. Conclusion**

As mentioned before, there are few doubts about RegTP's field-knowledge and capacity to carry out the tasks that are assigned to it by the legislator. However, in terms of outcomes, German regulation has not yet achieved all of its goals concerning choices for the users, competition and technological innovation at nationwide level. Where are the responsibilities of the regulator and which are the most important external factors influencing the telecom markets in Germany?

As far as the regulator is concerned, we have seen that, in spite of formal independence, the RegTP is under influence of political pressures to maintain the advantages of DTAG. The fact that RegTP's budget is entirely financed through state funds allocated through the Ministry could also raise questions about its independence from the Ministry, and thus political pressures. Of course, as all other European regulators, the RegTP's official assignment is to offset the incumbent's historical advantages and to create equal market conditions for operators. However, the German regulator cannot possibly fulfill its objective to create effective competition on the telecommunications market as long as protection of the partially state-owned Incumbent is a prevailing although dissimulated aim. Five years after liberalization, there is still a real need for asymmetric regulation.

On the other hand, it is undeniable that the identification with the historical operator is still very strong among the population and that DTAG's high quality services and customer support contribute to disseminate its positive image throughout the country. The fact that some of the competing companies' problems (delay, defect billing system, poor offers) are often due to DTAG is less known among the population. Consumer inertia constitutes a major

challenge for the German regulator, who can do little against that apart from more intensive advertising of alternative technologies or initiating important price drops on wholesale prices.

The incumbent's popularity is the result of a successful reorientation towards customer relationship management, but also derives from DTAG's advantages as the historical operator. And DTAG intends to maintain these advantages at any price, by systematically appealing any decision issued by the regulator, with the hope to delay the introduction of competition in the market. The possibility for the incumbent to suspend RegTP's decisions by requiring a preliminary order is indeed responsible for the slowness of the whole regulatory system. Whereas the RegTP is obliged to issue decisions within a period of 10 weeks maximum, the enforcement of these decisions can take months, if not years. The consequent absence of legal and planning certainty are particularly damageable to the competitors who don not have the financial resources to wait for a decision to be made and then to be enforced.

Indeed, the German regulator does not seem willing to use its sanction power to an extent that would be persuasive. According to many operators, the incumbent has never been threatened by important financial or operational sanctions. Effective sanction power could contribute to diminish the resistance of the incumbent and to apply the rules set by the legislator and implemented by the RegTP.

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