ASSOCIATION OF
THE PROVIDERS OF
TELECOMMUNICATIONS AND
VALUE ADDED SERVICES

White Paper

Competitive Situation
In the German Telecommunications Market

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Overview

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While the developments in the competition for the **mobile telecommunications market** in the last ten years were predominantly of a positive nature, the competition for **stationary systems,** three years after full deregulation, has entered an extraordinarily critical stage.

Following initial impressive successes the competition is now stagnating. The restraining strategies practiced by Deutsche Telekom AG are becoming ever more varied, more subtle and, from the former monopolist's point of view, more successful. The number of package deals and offers at dumping prices is increasing. The competition for high-speed data transmission using DSL technology was over within a few months; the market was monopolized. Worse yet, even the alternatives for acquiring customers are affected by the massive displacement competition practiced by Deutsche Telekom AG. Instead of removing the market entry barriers, they are growing. The market-dominating organization is giving up its own margins and profits by offering prices below cost, and thus specifically prevents young businesses from being profitable in this competition.

The Regulatory Authority is unable to respond to the large number of complaints for abuse lodged by the competitors. Deutsche Telekom AG refuses to implement the Regulatory Authority 's directives, which are vital for the competition, and attempts to stop them legally in the form of interim orders.

At the same time, Deutsche Telekom AG initiated a discussion about changing the regulations in their favor, to soften them, rather than intensifying them considerably. In this situation, the Federal Government indicated that it also supports a decrease in sector-specific regulations while no clear objectives or directives for a successful deregulation and self-sustaining competition are provided.

Almost all businesses in the telecommunications industry continue to be in the red because of the high investments, and many had to postpone the scheduled date for their Return on Investment several times because under the current conditions, they are unable to meet their operational plans. Planning reliability, which is so highly important for a business, has decreased in the last three years, rather than increased. The predominantly foreign investors are highly unnerved and they are looking more closely than ever at the efficiency with which the German regulators are moving against Deutsche Telekom AG's restraining practices. Once it is lost, the investors' confidence cannot be regained.

The cost and competitive situation deteriorated considerably, both for local telephone networks and long distance systems. The market consolidation and the number of take-overs and discontinued businesses expected this year are very closely related to this alarming market trend which will result in re-monopolizing the telecommunications market.

If the legally provided regulatory mechanisms are not enforced considerably more thoroughly, the market-dominating organization will further increase the abuse of its market power and destroy competition. This will have a permanent adverse effect on Germany's economy. Instead of creating additional new jobs in one of the central growth markets 25,000 to 30,000 jobs may be lost again.

Market Situation

The Market Situation

Confident that the market would be opened quickly and efficiently, the competitive businesses invested a total of more than DM 140 billion for infrastructure and license fees. 60,000 new jobs were created, considerably more than were eliminated at Deutsche Telekom AG. The economy, but private customers as well, realized savings in the billions because of the competition.

The end user rates for long distance and overseas calls have dropped by up to 90% since deregulation began. In the Internet segment, a price decrease of 40% was achieved. In contrast, in the local telephone networks, where the market has not been successfully opened so far, the end user prices increased by 7.3%.

At the end of the year 2000, the competitors' market share as measured by the turnover was 13.4%. They achieved an increase of a mere 0.7% in the year 2000, and a decline is expected for 2001. Although the market continues to grow the competition is currently stagnating, even in the long-distance and overseas market, which had been so successful at first. In the local telephone network segment, where the market share is 1.3% of all customers, the opening of the market has not even begun.

A closer look at the individual markets presents the following picture:

Call-by-Call

As a result of a decrease in the end user prices while at the same time the purchase prices for advance products remain high the previously successful call-by-call market is no longer economically sound as an independent market and it is no longer a viable entry-level market with low entry barriers and requiring only a small investment.

Pre-selection

Furthermore, the acquisition of customers via pre-selection is affected by serious errors and delays in switching the customers and by Deutsche Telekom AG's restrictive contractual clauses in their package deals. The fine print in some of Telekom's rates prohibits pre-selection by a competitor. Positioning a business successfully is becoming increasingly difficult in this segment as well.

Local Telephone Networks

In year 4 following deregulation, the competition in the local telephone networks continues to be hampered by high leasing costs for terminal connections and delays and obstacles in switching lines and making the facilities available that are required for interconnection. As a result, few customers were willing to switch fully to a private telephone service provider.

Internet Access

The Telekom subsidiary T-Online has a market share of more than 50% and thus, it dominates the market by a wide margin. Network access rates that are kept artificially high make cost-effective offers to the customers impossible. Even T-Online had to concede massive losses and it had to eliminate its own flat rate. The competitors are unable to offer cost covering flat rates, which are common in other countries. Deutsche Telekom AG refuses to offer practical, capacity-related Internet rates to other system operators. This makes it more difficult for Internet and online service providers to switch to alternate system operators. They depend on Deutsche Telekom AG's system, their up-to-date status and prices. A broad competition with more cost-effective billing models, especially those which are not based on actual time used (flat rates), continues to be hampered by this.

New innovative services

Developing the market for innovative value-added services in the e-commerce and m-commerce segments is also becoming more difficult. Deutsche Telekom AG prevents such new services, which have been technically feasible for a long time, in that they are not making reasonable billing options available to the competitors.

DSL Technology (Digital Subscriber Line)

With regard to DSL, Deutsche Telekom AG created a virtual monopoly out of a new competitive market and gained more than 90% market share within only a few months. The reason for this are dumping prices which, while officially noted, were not prohibited by the Regulatory Authority . By the end of this year, Deutsche Telekom AG will have achieved a market share of 98%.

Wireless Local Loop (WLL), Cable TV, Power Line

The dumping prices also affect the competitive options available to alternate providers in the Wireless Local Loop segment, i.e. connections via radio, cable TV or power line (data transmission via the power supply system). The considerable long-term investments in the billions can only be profitable if the market-dominating company is not allowed to acquire customers with dumping prices in the meantime and to bind them contractually. This year, a mere 2,000 to 3,000 customers in Germany are expected to be connected via WLL.

Regulation

Regulatory decisions have no positive effect on competition

The Regulatory Authority 's efforts have to be measured by how successful they are in effectively controlling Deutsche Telekom AG's potential to discriminate in their position as a market-dominating company and in providing fair market entry conditions for new competitors. Many of the Regulatory Authority 's decisions, however, have had the effect of increasing Deutsche Telekom AG's free range of action.

Long-distance Systems

Long-distance Systems

Rate Control

In the long distance telephone market, Deutsche Telekom AG is currently able to pursue an aggressive pricing strategy, virtually without any restrictions, using the profits earned in the local segment, which they are dominating. The situation is further aggravated by the new package deals offered by Deutsche Telekom AG, for example consisting of long-distance and local calls ("Aktiv Plus" and "XXL" rates), or a combination of telephone and DSL connections (T-DSL). In this case, weak competitive markets (local telephone networks) and strong competitive markets (long distance system) as well as future markets (DSL) are combined. Product packaging is very difficult to copy for the competitors because the package deals include products (such as local calls) which only Deutsche Telekom AG is able to offer comprehensively.

Because Deutsche Telekom AG is able to use the "monopoly profits" for displacement strategies and cross-subsidies, its market power crosses over into new markets. The Regulatory Authority approved Deutsche Telekom AG's pricing for such product packages "on a trial basis" while not recognizing the direct distortion effect these rates have on the competition. In spite of a market share of almost 50%, the end user rates for calls to Turkey were approved on a trial basis.

The problems related to cross-subsidizing in Germany remain unsolved because Deutsche Telekom AG still has not followed the EU directives for a transparent cost accounting system and thus made it impossible for the Regulatory Authority to determine the level of cross-subsidizing between various business segments at Deutsche Telekom AG.

Advance Services by Deutsche Telekom AG

The competitors continue to depend quite heavily on Deutsche Telekom AG's advance services to enable them to offer their own end user products in the market. While the Regulatory Authority regulated the prices for such services, these are restricted or delayed by Deutsche Telekom AG. In part, the competitors are forced to accept waiting periods of more than a year for interconnections, leased lines and hook-up facilities. The competitors are suffering losses in the millions because of this, but the Regulatory Authority initiated formal proceedings because of abuse only in a fraction of the cases. If no sanctions are imposed, and especially without any rules about compensation for damages, market power abuse remains a risk-free, highly efficient tool for the market-dominating company in restraining competition.

Interconnection

The contractual terms for interconnection services continue to deteriorate: With every contract revision, Deutsche Telekom AG attempts to enforce new disadvantageous contractual clauses for the competitors. This is not addressed effectively by the Regulatory Authority . Also, the establishment of a modern charging system for interconnecting the networks with Deutsche Telekom AG cannot be accomplished with the significant rate reductions the Regulatory Authority is planning (EBC, Element Based Charging, i.e. the charges for interconnecting the competitors with Deutsche Telekom AG are based on the cost-driving system elements they utilize, such as switching centers, and no longer on the line length). Deutsche Telekom AG took legal action against the Regulatory Authority 's directives. Consequently, the EBC-related rate decreases for the competitors cannot be implemented in the market.

Collection

With Deutsche Telekom AG's refusal to continue handling collections for the competitors they succeeded in eliminating the economic basis for long distance call-by-call offers. In accordance with the Regulatory Authority 's collection decision of last year, beginning this summer, the other companies will no longer be able to have reminders and collections for call-by-call connections handled by Deutsche Telekom AG against reimbursement of expenses. Because of the low amounts that are usually involved it would be unprofitable to establish their own collection system, and thus the competitors' offers would not be economical.

Local Telephone System

The Local Telephone System

With respect to the local telephone systems, the Regulatory Authority 's decisions are causing enormous problems for the companies and prevent them from offering innovative services.

Terminal Connections

The decrease in the prices for terminal connections is highly inadequate, while at the same time, it does not prevent price dumping: The monthly lease payable by the competitors to Deutsche Telekom AG for terminal connections (DM 24.40 instead of the previous DM 25.40) based on the Regulatory Authority 's most recent decision is still above the price Deutsche Telekom AG charges their own "analog" customers (DM 21.38). The additional switching charges (DM 180 to 300) plus the cancellation fees (DM 74 to 116 DM) which are charged on top continue to drive up the costs vis-à-vis Telekom's end user rates. As a result, the competitors are unable to offer cost-covering competitive products to the customers, two thirds of whom are still connected analogous.

DSL Offers

Added to this is the aggressive pricing strategy pursued by Deutsche Telekom AG in the DSL market. In its decision of March 30, 2001, the Regulatory Authority stated that Deutsche Telekom AG offers their customers some T-DSL options at dumping prices (DM 15 to 20 DM surcharge for the ISDN connection). In spite of this, Deutsche Telekom AG's prices were approved for reasons of "economic policy". This kind of reasoning is unique in the history of telecommunications regulations and in the competitors' opinion, it is not covered either by the Telecommunications Act or by the laws governing restraint of competition.

Line Sharing and Resale

In response to the approval of the DSL rates, the Regulatory Authority demanded that Deutsche Telekom AG offer the competitors better access to the local telephone networks. For example, in the future, a terminal connection should be available for partial leasing, not only for full leasing, insofar as required for data transmissions with a high bit rate (such as DSL) for high-speed Internet access (line sharing). However, Deutsche Telekom AG refuses to submit a proposal for an agreement as requested by the Regulatory Authority , as they did in the case of resale (resale of telecommunication services).

Deutsche Telekom AG took action in the form of an interim order against the Regulatory Authority 's decision, which is merely enforcing the clear EU directives. In response to the refusal, the Regulatory Authority threatened an "enforcement fine" in the amount of DM 2,000 but suspended it until the Court has ruled. As a result, Deutsche Telekom AG continues to enjoy the exclusive benefit from the temporary approval of their DSL rates, which are distorting competition, while at the same time failing to implement the Regulatory Authority 's decisions, which would have a positive effect on the competition. To be consistent, the Regulatory Authority would have to prohibit Deutsche Telekom AG from using the T-DSL rates in this situation until they present an acceptable offer for line sharing and resale.

Connecting High-speed Data Transmission Networks (ATM)

Although the Regulatory Authority approved Deutsche Telekom's T-DSL offer with the proviso that in the short term Deutsche Telekom AG would have to make their advance products available, which are important to the competition, the request for interconnecting the data transmission networks ("ATM interconnection") with the competitors was rejected shortly thereafter. This happened despite the fact that the requested interconnection was technically feasible based on the Regulatory Authority 's findings and that it was supported by the Federal Cartel Office. In its comments dated May 4, 2001, the Federal Cartel Office harshly criticized the rejection and "regrets … that the process did not bring about a solution which would allow a stronger competition for broad band services that also includes private customers and small businesses […]."

Again, the Regulatory Authority ignored the Federal Cartel Office's concerns about competition as it did with its decision regarding the terminal connections. This trend has to be viewed as being extremely critical.

Flat Rate

Deutsche Telekom AG was also able to take advantage of the Regulatory Authority 's decision on flat rates, which was politically supported by all parties across the board. To avoid having to offer a flat rate as a service to other carriers, in addition to their own T-Online subsidiary, as the Regulatory Authority had intended, the flat rate offered to the end users was taken off the market. As a result, the process of making the use of the Internet more attractive to the public, which was the competitors' specific aim, continues to advance much too slowly. As long as the carriers are not being offered volume-dependent instead of time-dependent rates, they will not be able to offer volume-dependent rates for the use of their systems to the end users or the numerous Internet and on-line service providers. But this is precisely what Deutsche Telekom AG is offering to the Internet service providers (ISP). This further distorts the competitive situation heavily and takes one of the most important future markets out of the competition.

E-commerce and M-commerce

In this segment, Deutsche Telekom AG is also attempting to take over a future market before the competitors have had a fair chance of entering. Deutsche Telekom AG is determined to offer, as quickly as possible, freely priced value-added services, which allow shopping via the telephone and easy billing via the telephone bill. Although the competitors have no billing options available (offline billing), or they are prevented from obtaining such options, which are comparable to Deutsche Telekom AG, the Regulatory Authority released the "0900" numbers reserved for such new value-added services as of the beginning of next year. The only one benefiting from such a release at that time will be Deutsche Telekom AG whose willingness to make the so-called offline billing available to other competitors in time will drop dramatically. In reality, it would be impossible for the other competitors to make up Deutsche Telekom AG's lead in this new market segment. Consequently, another increasingly attractive market in the important e-commerce and m-commerce segments is not regulated or inadequately regulated by the Regulatory Authority .

In summary, the competitive situation in Germany has deteriorated considerably because the Regulatory Authority is not effectively controlling Deutsche Telekom AG's discrimination potential, contrary to all predictions and promises. This applies to both the advance products offered by Deutsche Telekom AG to the competitors (inadequate services / excessive prices) and to the prices offered to the end users by Deutsche Telekom AG for their services (package deals, cross-subsidizing, price dumping). At this time, fair market entry or competitive conditions do not yet exist. The regulation has not yet achieved its objective.

Political and Regulatory Responsibility

Overall, the market entry barriers that new competitors in Germany are facing have increased. Viewed superficially, the markets may be open. Specifically, however, Deutsche Telekom AG is pursuing a policy made up of restraining practices and displacement strategies. Currently, the politicians and regulatory agencies are not fully aware of this and they are not preventing it resolutely enough.

Instead of removing market entry barriers, the Federal Government is adding higher hurdles yet. The excessive requirements of the Telecommunications Supervisory Act ("TKÜV"), which make additional investments and charges in the 2 to 3 figure millions necessary, even for medium and small sized companies, are especially problematic.

The willingness of foreign investors to continue accepting incalculable risks in Germany has already dropped significantly. Politicians and regulatory agencies are required to redirect their efforts toward competition by means of issuing clear statements and decisions.

Market Analysis and Market Development Forecast

The prerequisite for clear regulatory directives is an analysis, equally clear and unsparing, of the current market situation, in addition to a well founded forecast of future market trends.

The Federal Government's assessment of the current situation and future trends in the telecommunications market proves that it is further and further removed from the realities of the market.

In its response to the major interpellation by the members of the parliamentary CDU/CSU [Christian Democratic Union/Christian Social Union] fraction dated April 25, 2001, publication 14/5167, the Federal Government assesses the competitive situation in the German telecommunications market as "distinctly positive". The figures regarding the price decreases presented by the Federal Government are considerably higher than the current findings of the Federal Office of Statistics and even omit the 7.3% price increase in the local telephone network segment.

With the statistical material, the Federal Government deliberately presents a retrospective view of the initial successes, which were possible in this magnitude only because of the highly exaggerated prices at the time a monopoly existed, including the respective margins, at the beginning of deregulation. This is intended to demonstrate the political and economic success achieved by the Federal Government's regulating policy. The number and the market relevance of the competitive businesses are misinterpreted. A perspective of future market trends is not offered.

Increasing competitive problems as a result of the former monopolist abusing its market power are being overlooked and are confused with a natural consolidation phase.

The 10% annual market growth rate, which is mentioned, disguises the fact that the competitors' market share has not increased in recent months and that the former monopoly company benefits considerably more from the growth rates than all the competitors combined.

Fewer than half of the 180 businesses listed as being active in the voice telephone service segment really hold an appreciable market share today and virtually all of them continue to operate in the red.

Competition on the Infrastructure Level

One of the most significant regulatory missteps is related to the DSL market, which is of such high technological importance. The Federal Government applauds the rapid expansion provided by Deutsche Telekom AG without acknowledging that gaining a market share of more than 90% within a few months is a problem. The fact that the Regulatory Authority did indeed find pricing below cost is omitted. Any response to the question as to why a company is offering below its own costs is denied, although based on its own statements, the company is technically unable to process all customer orders. The reason that pricing below cost is acceptable temporarily when a business attempts to enter a new market is nothing short of paradox as Deutsche Telekom AG completely dominated the market with a 98.7% market share of local telephone calls when they entered "the competition" with this new DSL product.

Deutsche Telekom AG did not need to fight for a higher market share. All they had to do was expand their local telephone network monopoly to include the new DSL technology.

The real reason for this systematic destruction of monetary wealth via dumping prices by Deutsche Telekom AG has not been recognized. The goal is not only based on the attempt of destroying any competition in the DSL market from the very beginning, its relevance goes far beyond that: The Federal Government and the Regulatory Authority underestimate how much alternative technical options via wireless local loop, broadband television cables or power lines (which continue to be supported by the politicians) depend on fair and primarily cost covering pricing for the competitive DSL product. The actual effect of the temporarily approved T-DSL rates is that alternative options for access, which the Federal Government continues to support, will be torpedoed right from the start and building up alternative network infrastructures will be considerably more difficult.

The relevance of regulation in the second phase of deregulation, i.e. the former monopoly holder's fight for market shares and the use of market power, is underestimated.

When the Federal Government views Shared Access (line sharing) as an important prerequisite for functional and equal opportunity competition it has to recognize that Deutsche Telekom AG denies such an offer to the other companies and has appealed to the Courts in an effort to shirk this very obligation. The Government accepts, without criticizing such conduct, that Deutsche Telekom AG continues to offer prices below cost in the market.

If this is not stopped, the competition will increasingly be limited to services, which means that the competitors are forced to utilize the former monopolist's infrastructure and are unable to build up their own.

Competition on the Services Level

However, in the long term, the competition for services will also be prevented by Deutsche Telekom AG's dumping strategies because of the inadequate regulation of the excessive prices for advance products that are offered to the competitors. This results in a gap between costs and prices for the service providers which they are unable to prevent. A self-sustaining competitive system is unable to develop either on the infrastructure level or on the services level.

Stricter, not softer regulations are absolutely necessary, especially in view of the clear dumping price trends, not only to advance competition, but also to maintain the level we have achieved.

Market Delimitation and Decrease in Regulations

When participating in discussions, the Federal Government increasingly refers to the four expert opinions on market delimitation and market power, which were commissioned by Deutsche Telekom AG. The resulting demand for a decrease in the regulations in various market sectors has the Government's support.

A political discussion on the decrease or suspension of sector-specific regulations in this situation has serious consequences; it favors the former monopolist and contributes considerably to unsettling the market.

In contrast, counter opinions prepared by renowned scientists impressively demonstrated that the theories underlying this demand, such as that of the contestable markets, cannot be applied in practice, and most particularly in the telecommunications market. Contrary to the assumptions on which the expert opinions prepared for Deutsche Telekom AG are based, the barriers to market entry continue to grow as a result of the increasing number of package deals offered by the market-dominating company.

The Federal Government's announcement in this situation that it intends to leave the path of asymmetrical and sector-specific regulation within the next ten years, without any indication of clear political or regulatory goals, has an unsettling effect on investors, both here and abroad.

The demand for fewer regulations is not combined with criteria and targets for a permanently functional competition causing the scientific community to protest who, based on comparisons with foreign countries and in view of such a demanding "10-year plan" considers a significant intensification of the regulations indispensable.

The benchmark paper on market delimitation and market dominance, which was prepared by the regulator agency in the meantime, includes good ideas, which will have to be broadened and applied in practice. It is incomprehensible, however, that the market for connections with Turkey is opened up at the same time, although Deutsche Telekom AG still has a market share of almost 50%. In this case, an individual decision was made already without clarifying the underlying situation, as the benchmark paper intended, which diametrically opposes the central principles of the benchmark paper.

The general regulatory conditions, the reluctance in forcing the former monopoly holder to provide fair, equal opportunity offers, considerable planning uncertainty and the related feelings of unease among investors may possibly mean the end for numerous companies that are active in the German telecommunications market as early as this year. In essence, the reason for such a consolidation will not be inadequate market strategies applied by the market participants, but rather the continuously deteriorating general regulatory conditions.

Need for Action

Federal Government and Regulators are responsible for thousands of jobs and must act

Demands from the Politicians

1. Create investment security

The Federal Government must make considerably higher allowances for the relationship between a clear general regulatory framework and the willingness to invest, especially of foreign investors. Spreading verbal uncertainty must be avoided and the goals of political actions must become clearer and more calculable.

2. Define the goals of regulatory and competitive policies

The Federal Government has to provide a reliable and realistic framework for regulations regardless of the federal budget's short-term fiscal goals. Any demands for further deregulation must be supported by defined goals that have to be achieved to justify such deregulation. A definition of such goals presented within a clear, limited timeframe must also include the steps to be taken to accomplish such a plan.

3. Consistent regulation

Regulations must move consistently with the market and with competition. The view of the justified interests of the market participants must not be biased. For example, Deutsche Telekom AG's demand for prompt payment must not take priority over the competitors' demand for prompt delivery. It is high time to impose adequate sanctions against time delays which increasingly jeopardize the companies' business plans and thus their willingness to invest. Any abuse of market power must be followed by tangible economic consequences in order to effectively prevent such conduct.

4. Regulation with foresight

Regulations must anticipate future market trends. Providing far-sighted and active regulatory impulses in a rapidly changing market and ensuring a well founded professional assessment of the economic consequences that significant regulatory decisions will have requires a reinforcement of the personnel in the policy setting department of the Regulatory Authority for Telecommunications and Postal Services. More consideration must be given to the relevance of telecommunications for Internet access and data transmissions. The effects of price dumping on all relevant connection methods have to be recognized early so as to prevent them.

5. Unbiased regulation

The Federal Government must give up its shares in Deutsche Telekom AG as quickly as possible. The approx. 45% remaining after the VoiceStream acquisition continue to represent a serious conflict of interest between the Ministry of Economics and the Ministry of Finance. True unbiased regulation is not feasible until the Federal Government has fully retreated from its position as a shareholder in Deutsche Telekom AG.

6. Regulation based on current facts and market trends

Regulatory policies have to be supported by and measured against current economic data. This is the only way to anticipate future market trends. The data must be analyzed without anticipating the outcome and it must no longer be misused specifically for justifying the Government's previously determined actions and decisions.

7. Learn from other countries

Other than in Germany, the countries that have much more regulatory experience, such as the United States and Great Britain, created alternative options to access the end users, deliberately excluding the national monopolists. In addition, the long distance and local telephone networks in the U.S. were forced to separate. In spite of this, the regulations, especially in the local telephone networks, were intensified so as to make the urgently required technical innovations possible. In all countries it was found that the former monopoly holders continue to attempt restraining or delaying competition by using their market power and by shifting their power into other markets.

Demands from the regulators

1. Prevent price dumping and cross-subsidies

The Regulatory Authority must prevent price dumping and cross-subsidies by means of consistently controlling package deals (such as Aktiv Plus, XXL) and by reviewing Deutsche Telekom AG's price strategies.

2. Demand a cost accounting system

The Regulatory Authority must force Deutsche Telekom AG to establish an internal cost accounting system in conformance with EU directives. This is the only way to ensure transparency and efficient price control.

3. Stop discriminatory practices

The Regulatory Authority must take firm action against Deutsche Telekom AG's discriminatory practices by demanding higher enforcement fines based on actual financial damage and by enforcing such fines.

Furthermore, in the future, the agreements with Deutsche Telekom AG must include a provision regarding "lump-sum compensation for damages" so as to force Deutsche Telekom AG to comply with the agreements and to allow that violations are punishable by civil law.

In addition to the prices, other relevant contractual elements (such as delivery times, payment terms, quality parameters, response times, availability) must be determined and controlled by the regulators so as to reduce Deutsche Telekom AG's potential for discrimination.

4. Regulate end user products and the related advance products simultaneously

In order to prevent a permanent competitive lead by Deutsche Telekom AG the end user products and the pertaining advance products from Deutsche Telekom AG must be regulated simultaneously.

5. Analyze market entry barriers

Telecommunications, above all, is characterized by a host of market entry barriers. Deutsche Telekom AG must not be allowed a wider range of action until it has been determined that market entry barriers can be effectively controlled. The Regulatory Authority must establish the criteria for assessing market entry barriers.

6. Closer involvement of the Federal Cartel Office

Far more than before, the involvement and the authorization of the Federal Cartel Office pursuant to § 82 of the Telecommunications Act must be taken into account for the Regulatory Authority 's decisions.

7. Follow EU directives

Based on the EU agreements, the laws of the European Union are also binding for the German regulators and have to be implemented quickly. Several EU directives that are intended to support the advancement of competition must be implemented or enforced as soon as possible.