

The 1996 *Telekommunikationsgesetz* and the Telecommunications Act of 1996: Toward More Competitive Markets in Telecommunications in Germany and the United States

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I. Introduction

Both Germany and the United States are in the process of substantially revamping the legal frameworks of their telecommunications industries. On February 1, 1996, the U.S. Congress passed the Telecommunications Act of 1996 (1996 Act).¹ Striving to meet a European Union (EU) deadline,² the German Parliament passed its new telecommunications law, the *Telekommunikationsgesetz (TKG)*, on July 25, 1996.³ Each statute establishes significant changes in the makeup of the respective industries, setting the stage for market competition in virtually all sectors of these telecommunications industries.

Such changes are occurring throughout the world and represent the culmination of what began in the late seventies with the liberalization of the U.S. equipment market and proceeded with the breakup of AT&T and the privatization of British Telecom in 1984. The provision of local and long-distance telecommunications services had previously been viewed as a natural monopoly. However, based on tremendous leaps in technological capabilities and changes in thinking regarding national security, telecommunications markets have, over the past twenty years, come to be viewed as amenable to competition.⁴ Commentators have argued that, rather than protecting domestic telecommunications industries, national monopolies have hindered growth and development in nationalized markets.⁵ Accordingly, nations are striving to improve the competitiveness of their telecommunications-sector monopolies and designated dominant providers-whether private like AT&T, public like British Telecom, or state-owned like the former *Deutsche Bundespost (DBP)*, the German Federal Postal Service-as they are converted from public-sector utilities to private operators.⁶

The size of telecommunications markets worldwide and expected continued growth rates demand liberalization. For example, it is estimated that the telecommunications market in Germany will grow to Deutsche

Mark (DM) 120 billion by the year 2000.⁷ The EU estimates that the telecommunications sector will account for 7 percent of the EU's gross national product by the year 2000, up from 2 percent in 1984.⁸ Moreover, telecommunications costs are estimated to account for 10 percent of Fortune 1000 company budgets.⁹ Accordingly, it is not surprising that countries want to ensure that their telecommunications infrastructures and legal systems are able to support this enormous industry.

The *TKG*, also referred to as Post Reform III, represents the culmination of a radical overhaul of Germany's telecommunications market, setting Germany on a course toward the opening of virtually all aspects of the telecommunications market to competition on January 1, 1998. The transition in the United States from state-supervised private monopoly to competition has been piecemeal—beginning with equipment in the 1970s, moving to long-distance in the 1980s, and finally, with the Telecommunications Act of 1996, to local exchange markets in the late 1990s. Germany had earlier opened up its equipment manufacturing and retail markets to competition, but it is now set to liberalize both long-distance and local service in one fell swoop. Accordingly, while both are intended to create similar competitive environments, the particular issues upon which the two laws focus are different, representing different levels of market development.

This Article describes and analyzes five primary subject areas contained in the *TKG*. The *TKG* covers a variety of issues relating to liberalization of the telecommunications market, but five areas in particular stand out as primary focal points: licensing, universal service, market-dominance regulation, interconnection, and rights-of-way. Each area's treatment in the *TKG* will be contrasted both with prior German law and with the current state of U.S. law. However, because of the differences in the structures and focuses of the respective legal systems and regulatory priorities, the broad categories do not always lend themselves to simple comparisons. Because this Article focuses on the *TKG*, the contents of the 1996 Act will be analyzed only to the extent that it corresponds with the five identified *TKG* areas under consideration. European Union telecommunications law is also discussed as it relates to Germany.

Although important, several specific issues that the *TKG* deals with or are otherwise relevant as points of comparison with major themes in U.S. regulation are not addressed. These include the relationship between telephone service and cable television,¹⁰ technical standards, manufacturing and sale of equipment, mobile telecommunications, satellite issues, and rates. World Trade Organization activity in the telecommunications area is also not discussed.

II. The State of the German and U.S. Telecommunications Industries Leading Up to 1996

A. Overview

In contrast to the situation in the United States where telecommunications began with competition and only later became a service of a state-sanctioned monopoly,¹¹ in Germany and throughout Europe, telecommunications service was traditionally supplied by the state—typically, by a state's Ministry for Post, Telegraph and Telephone (PTT). This provided a variety of structural impediments to privatization and liberalization.¹² For example, the German Constitution itself provided a duty on the part of the federal state to ensure availability of essential telephone services for the general population. This constitutional provision prevented privatization and had to be amended in order to allow privatization to go forward.¹³ Also different is that the German telephone system has functioned as both provider and regulator. By contrast, provider and regulator functions have always been legally separate in the United States, though the relationship between regulators and the regulated was sometimes less than distant.

B. The History and Structure of the Industries

1. Germany

Presently, the legal framework for Germany's telecommunications industry is to a large degree founded upon EU requirements.¹⁴

a. EC Telecommunications Legislation-Toward Open Networks in Europe

Article 90(2) of the European Economic Community Treaty requires that "[u]ndertakings entrusted with the operation of services of general economic interest or having the character of a revenue-producing monopoly shall be subject to the rules contained in this Treaty, in particular to those rules governing competition"¹⁵ The European Commission (Commission) considers PTTs to fall within the scope of this section.¹⁶ Article 90 therefore serves as the primary EU legal foundation for the push toward the break-up of national telecommunications monopolies and the opening of markets to competition. Secondly, however, two EU competition law provisions are also applicable. Article 85 prohibits agreements between enterprises or associated groups which are intended to or have the effect of preventing, inhibiting, or distorting competition within the EU.¹⁷ This is viewed as a potential problem, particularly in European telecommunications markets because of the tight relationship between the previous state monopolies and the state governments.¹⁸ Article 86 prohibits the misuse of a market dominant position that affects trade within the EU. This is an immediate danger in each European market given the automatic dominance of former state monopolies, and is similar to that present in the United States following the break-up of the Bell system.¹⁹ Because of the potential for conflicts in attempts to comply with both EU competition and telecommunications law, the Commission has issued guidelines stating that telecommunications legislation is to be interpreted and applied in a way consistent with EU competition law.²⁰

In the early 1980s, faced with increasing pressure from other countries like the United States and Japan to liberalize equipment and services markets, the Commission began focusing its attention on reforming European telecommunications markets. Commission policy to this end moved along two tracks: First, "liberalization," which refers to the breaking down of national monopolies and the opening of the telecommunications markets to competition. Second, "harmonization," which refers to the establishment of a level playing field in the industry that will allow firms to compete equally throughout the EU in telecommunications goods and services.²¹

While the Commission's interest in reforming the telecommunications industries within the EC dates back to 1984,²² the impetus for reform accelerated in 1987 with the issuance of the 1987 "Green Paper" that proposed how liberalization and privatization of member state telecommunications monopolies could take place.²³ It set forth ten proposed positions to accomplish:

the development in the Community of a strong telecommunications infrastructure and of efficient services: providing the European user with a broad variety of telecommunications services at the most favorable terms, ensuring coherence of development between Member States, and creating an open competitive environment, taking full account of the dynamic technological developments under way.²⁴

The Council endorsed the Green Paper's objectives in its Resolution of June 30, 1988, inviting the relevant bodies of the Community to develop measures to achieve the goals.

The next significant steps came with the European Commission's Directives of June 28, 1990, on the liberalization of telecommunications services markets and achieving of harmonization via implementation of open network provisions. The former, the Services Directive,²⁵ according to the Commission, "has come to be identified as a cornerstone of the EU framework for liberalizing the European telecommunications market."²⁶ The latter, the Open Network Provision (ONP) Directive, laid the foundation for open access between all networks and carriers.²⁷

The Services Directive required Member States to eliminate special and exclusive rights in the telecommunications services sector and to take the necessary steps to allow entrance to the market.²⁸ The only exception was voice telephony services. Since 1990 the Commission has adopted a variety of directives which

amend the Services Directive. The timetables in place for liberalization are: All exclusive and special rights for provision of telecommunications services, other than for voice telephony, were scheduled for elimination by July 1, 1996. Exclusive and special rights for provision of voice telephony must be eliminated by January 1, 1998.²⁹

The Commission's ONP Directive was aimed at Community-wide harmonization. The Directive required the opening of existing public networks to competitors, allowing access to all newcomers on equal terms, including divisions within a network infrastructure provider's own company.³⁰ The goal was that all new entrants could compete on an equal basis with existing telecommunications networks, since the high capital investment requirements of laying a telecommunications network would otherwise block out new entrants. The Commission intended to limit both technical and other impediments, such as stalling, to competitor access.

Access restrictions to existing networks would only be allowed for public necessity purposes, so-called "essential requirements." Only "security of network operations, maintenance of network integrity, and, in justified cases, interoperability of services and data protection,"³¹ qualify as such.

With regard to conditions for access, the Directive spelled out three principles that all ONP access conditions must satisfy in order to be valid: "they must be based on objective criteria, they must be transparent and published in an appropriate manner, [and] they must guarantee equality of access and must be non-discriminatory, in accordance with Community law."³²

The EU was expected to pass the final version of its ONP directive in late 1996. However, the EU Telecommunications Ministers did not reach a common position on a proposed Directive until March 6, 1997.³³

b. The Development of German Telecommunications Law

Article 87 I.1 of the German Constitution [*Grundgesetz*] had previously clearly delineated the providing of postal service, including mail, telecommunications, and banking functions, as a responsibility of the federal government.³⁴ However, as of 1994, the Constitution was amended; now the federal government remains responsible for ensuring that adequate telecommunications services are available in Germany, but it is no longer responsible for actually providing those services.³⁵

Before 1989, German telecommunications law was founded primarily upon two laws: the Law on Telecommunications Equipment [*Gesetz über Fernmeldeanlagen*] which authorized the establishment and operation of the telecommunications network through the *DBP*, and the Telegraph Route Law [*Telegraphenwege-Gesetz*] which granted the *DBP* rights-of-way to establish and operate its system.³⁶

As in the United States, liberalization first came in the area of equipment manufacturing and sales. In 1989, *DBP* lost its monopoly in this area.³⁷ Reform of the telecommunications laws has proceeded in primarily three phases: Post Reform I in 1989, Post Reform II in 1994, and finally, the *TKG* in 1996. While the impetus for reform existed independently within Germany as well, how reform has been effected to a degree has been dictated by the requirements of the EC Directives discussed above.

i. Post Reform I (1989)

Post Reform I in 1989 laid the legal groundwork for the creation of a private market for telecommunications goods and services.³⁸ The drafters intended that the legal framework in the industry would be reversed, that monopoly would become the exception and competition the rule.³⁹ The law effected several foundational changes in the structure of telecommunications in Germany. First, some areas of telecommunications services like mobile service and manufacture and sale of equipment were actually opened to private competition. Second, it split the *DBP* into three sections: the mail service, the post bank, and telecommunications (*Deutsche Telekom*), creating respective independent organizations.⁴⁰ Third, it effected a vertical split between the actual provision of telecommunications services and oversight over the industry, leaving the former to *Deutsche Telekom* and

creating a separate regulatory body, the Federal Ministry for Post and Telecommunications [*Bundesministerium für Post und Telekommunikation*, or *BMPT*] to perform the latter.⁴¹ Finally, it changed the legal relationship between *Deutsche Telekom* and consumers from the realm of public to private law.⁴²

Post Reform I created a dual legal framework, providing rules for those telecommunications functions remaining in the monopoly realm and those which became competitive. The provision of telephone service and network functions remained exclusively the domain of *Deutsche Telekom*.⁴³ Other telecommunications functions, like mobile telephones, corporate networks, manufacturing and sales of telephones, and satellite communications were opened to competition. Because *Deutsche Telekom* was required to operate in monopoly areas yet could also operate in competitive areas, it was critical that the profits from each area be kept separate. Otherwise, *Deutsche Telekom* could use profits from its monopoly activities to subsidize its competitive activities, thereby giving it an unfair advantage over its competitors.⁴⁴ In order to prevent such subsidization, the law required that *Deutsche Telekom's* various enterprises and their earnings be kept separate.⁴⁵

ii. Post Reform II (1994)

The basic purpose of Post Reform II⁴⁶ was to make the three fledgling former *DBP* entities ready for competition.⁴⁷ The first concrete step was to turn all three into private corporations; *Deutsche Telekom* became *Deutsche Telekom AG (Telekom)*.⁴⁸ Moreover, it amended the German Federal Constitution in order to allow private entities like the newly private *Telekom* to provide telecommunications services.⁴⁹

Post Reform II also established a federal institution to supervise the privatization of *Telekom*. This institution, the Federal Institution for Post and Telecommunications [*Bundesanstalt für Post und Telekommunikation*], also has continued supervisory powers to ensure that the privatized corporation functions properly.⁵⁰

However, Post Reform II did not end *Telekom's* monopoly over basic telephone service. Accordingly, the law has been referred to as "Privatization without Liberalization."⁵¹

iii. *Telekommunikationsgesetz* (1996) (Post Reform III)

The *TKG*, in compliance with the European Council's timetable, sets forth January 1, 1998 as the date for the complete opening of the telecommunications network and services market in Germany for private competition.⁵² Passage in summer of 1996 was aimed at allowing the first licenses to be granted in early 1997.⁵³

2. The United States

The United States telecommunications industry grew from a patchwork of independent operators dominated by the early Bell System, into a de facto monopoly as the Bell System squeezed out and/or acquired its competitors in the early twentieth century, and finally into a regulated, state-sanctioned monopoly.⁵⁴ Until the 1970s, AT&T, through the ubiquitous Bell System, served as consumers' one-stop shopping provider, providing all equipment, repairs, local exchange, and long-distance services. Some specialized long-distance competition was introduced in the 1960s and equipment sales and manufacturing were opened to competition in 1976, but the major change in the industry occurred in 1982 with the court-ordered break-up of AT&T. This opened the long-distance market to competition and split off the local exchange carriers from long-distance service. The 1996 Act completes the process, opening local service to competition.

a. Structure of the U.S. Telecommunications Network

A telephone service customer's phone is connected to the Local Exchange Carrier (LEC),⁵⁵ usually a Bell Operating Company (BOC), which provides local telephone service and connects the customer's long-distance calls with his or her designated interexchange carrier (IXC), a long-distance provider.⁵⁶ The telephone call

travels from the customer to the LEC's local central office and then to the IXC. BOC and independent company territories are divided by the Modification of Final Judgment (MFJ) into Local Access and Transport Areas (LATA), each of which encompasses many LECs. The LATAs constitute boundaries; as a general rule, BOCs may not provide interLATA service, only intraLATA service.⁵⁸

b. Purposes of the Telecommunications Act of 1996

As stated in the introduction to the Conference Report, the 1996 Act is intended "to provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition."⁵⁹ Specifically, with regard to telecommunications markets, the centerpiece of the 1996 Act is its opening local exchange service to competition. The Act allows long-distance companies to enter this market and allows local telephone exchange providers to enter the long-distance market under specified conditions. Moreover, the Act provides rules for providing universal service, removing barriers to entry of new competitors, and interconnection.

C. Regulators

Regulation of the telecommunications industry has taken different forms in the two countries because of the industries' differing structures. Until recently in Germany, the service provider was also the regulator-the *DBP* performed both functions. By contrast, in the United States, though AT&T was a state-approved monopoly, it remained a private organization, regulated by the Federal Communications Commission (FCC), the courts, and state regulators.

With the changes brought about over the past several years, the German system is becoming more like the U.S. system: the providers themselves are, or are to become, private, but subject to oversight by federal regulators. However, German telecommunications providers are also subject to the authority of EC regulation.

1. German Telecommunications Regulators

a. National Regulation

Prior to 1989, the service provider and the regulator were one and the same-the *DBP* performed both functions. It was a federal organization subject only to relatively loose federal control⁶⁰ and headed by the federal cabinet level Minister of the Postal Service and Telecommunications.⁶¹ It was, on one hand, subject to the market in terms of generating revenue but on the other an administration subject to political and governmental bureaucratic control.⁶²

Post Reform I in 1989 effected a split between entrepreneurial and regulator functions, though the boundaries between the two areas remained murky because the exact line between sovereign oversight activities and private entrepreneurial functions remained unclear.⁶³ However, with Post Reform II's changing *DBP's* telecommunications arm into a private corporation, *Telekom*, on January 1, 1995, the public-private split between it and the BMPT became clear.⁶⁴ One substantial practical effect of this split was to free *Telekom* to contest BMPT decisions in court. Previously *Telekom* had no standing to sue the *BMPT* because it was not a freestanding legal entity.⁶⁵

The BMPT is a member of the federal government⁶⁶ and carries primary responsibility for ensuring that *Telekom* is run according to law.⁶⁷ Accordingly, it answers to the Federal Chancellor and has authority over ensuring application of and compliance with all telecommunications and other laws.⁶⁸ It includes a regulatory council made up of representatives from each of the states⁶⁹ which participates in decision making.⁷⁰ Some of the *BMPT's* decision making is carried out by decision making panels.⁷¹

The Federal Cartel Office (Cartel Office) also has authority over telecommunications companies under section 44 of the Law Against Restraints of Competition (Competition Law).⁷² The Cartel Office applies both domestic and EU competition law to ensure proper competition within the market. Its control over the telephone company as a natural monopoly is weaker than it will be in the future when the industry is opened to competition.⁷³

b. The TKG

The *TKG* designates as the National Regulatory Agency (NRA)⁷⁴ the Regulatory Authority for Telecommunications and Posts [*Regulierungsbehörde für Telekommunikation und Post*] which operates within the jurisdictional area of the Ministry of Economics.⁷⁵ It will replace the *BMPT*, which will be dissolved.⁷⁶ While it is intended that the NRA be politically independent from the Federal Government, debate continues in Bonn over whether the NRA's oversight will be politically or substantively based.⁷⁷

The NRA's seat is in Bonn and is presided over by a president who represents the NRA both in and out of court, and who regulates the NRA's actions via rules of procedure that must be ratified by the Federal Ministry for Economics.⁷⁸ The President and two Vice-Presidents are appointed by the Federal Government based on the suggestion of the Advisory Council. While earlier drafts of the *TKG* set five-year terms of office and allowed for their removal from office by the Federal Government, the *TKG* is silent on these matters.⁷⁹

In accordance with the suggestion of the *Bundesrat*, the upper house of the German Parliament, the *TKG* establishes a regulatory structure that includes an Advisory Council [*Beirat*] made up of nine members each from the *Bundestag*, the lower house of the German Parliament, and the *Bundesrat*.⁸⁰ Its duties include: nominating candidates for the positions of President and Vice-President of the NRA; taking part in making decisions concerning granting of licenses and making market dominance determinations; proposing measures for the implementation of regulatory goals generally and universal service in particular; providing advice and information to the NRA; and taking part in preparing regular reports to the *Bundestag* concerning the condition of the market and regulation.⁸¹

The NRA is charged with preventing competition in monopoly areas and encouraging it in competitive areas. As envisioned in EU Directives and as recommended by commentators, the NRA is to be as independent as possible in its decision making because its purpose is not merely to guard against rule violations but also to foster a competitive environment.⁸² The NRA is empowered to form commissions to assist with decision making or to provide expert opinions.⁸³

In order to properly fulfill its oversight and regulatory functions, the NRA has the authority to demand relevant information and documentation from market participants,⁸⁴ to enter and inspect telecommunications service providers' premises, and to seize relevant documentation.⁸⁵ The NRA must provide its requests for information in writing, including the legal basis for the request. It may only conduct searches after obtaining a court order from a local district court, absent extenuating circumstances.⁸⁶ Information demanded under this section may not be used for other purposes-such as tax or securities investigations-unless a significant public interest is involved or false information was intentionally provided to the NRA.⁸⁷

The NRA may prohibit specific activities of license-holders where they are not adhering properly to their license terms and may issue administrative fines of up to DM 1,000,000.⁸⁸ Violations such as improper compliance with reporting requirements are subject to fines of up to DM 20,000. Violations such as providing telecommunications services without a license and raising rates without approval are subject to fines of up to DM 1,000,000.⁸⁹ The drafters of the Original Draft recommended the use of administrative fines over the other available remedies-prohibitions [*Untersagung*], bans [*Verbot*], and closing of an enterprise [*Ausserbetriebnahme*]-because their effect on consumers is too negative.⁹⁰

The NRA is to make some of its decisions through three-person adjudicatory panels referred to as "Ruling Chambers."⁹¹ These Chambers have jurisdiction over questions involving the distribution of licenses when applications exceed the number readily available, imposition of universal service, rates regulation, open network provision and interconnection, and assignment of frequencies where several applications are filed for the same frequency.⁹² The Chambers consist of three members, all of whom must be life-time government employees with appropriate backgrounds in telecommunications. The Chambers are judicial bodies that also have authority to function as arbitrators between private parties.

Proceedings are instituted before a Chamber either *ex officio* or upon a motion. Participants in hearings are the petitioner, the provider of services against whom a claim is brought, and any other party that the Chamber believes is significantly interested in the outcome.⁹³

Participating parties have the right to comment on the content of the proceeding. With approval from the Chamber, other parties who could be economically affected by the process may also offer comments. Normally, decisions are made based upon oral proceedings, but where the parties agree a decision may be made based upon written comments. Hearings are public unless the parties request closure to the public because public safety or private trade secrets would be threatened.⁹⁴

A Chamber can order investigations and may collect evidence necessary to fulfill its functions. Civil process rules apply for evidence collection. Appeals regarding evidence collection are to be brought in the Higher Regional Court.⁹⁵ A Chamber may seize such items as are necessary as evidence in a proceeding.⁹⁶

Chamber decisions must be legally justified and within the realm of its authority.⁹⁷ A Chamber may conduct investigation and gather necessary evidence⁹⁸ as well as issue temporary orders pending a final decision.⁹⁹ A Chamber communicates its decisions to the parties via their registered agents. Where a party appeals a Chamber decision or otherwise takes legal action against the NRA, there is no postponement of the effect of the decision or action pending the outcome of the appeal.¹⁰⁰

While the NRA is relatively independent, it remains subject to parliamentary oversight. In order that the parliament may evaluate whether competition is functioning properly, the NRA is required to report to the federal government every two years regarding its activities and the condition of the telecommunications market.¹⁰¹

Along with this report it must also present the Monopoly Commission's regular reports analyzing the competitiveness of the market. The report must also address whether the definition of universal service should be changed.¹⁰²

Because of the overlapping jurisdictions of the NRA and the Cartel Office, the *TKG* mandates a degree of cooperation between the two in order to prevent contradictory decisions from the two bodies.¹⁰³ For example, where the number of licenses in a given market is limited, the NRA "shall" work together with the Cartel Office in making its decisions concerning granting licenses.¹⁰⁴ Where the NRA makes decisions concerning rate regulation and open network provision and interconnection, or where it attaches collateral clauses to licenses affecting these matters, the NRA must give the Federal Cartel Office an opportunity to comment.¹⁰⁵ Similarly, where the Cartel Office is implementing procedures regarding market dominant enterprises in the telecommunications sector, it must give the NRA opportunity to comment prior to issuing decisions. Both agencies are directed to seek consistent interpretations of the *TKG* in order to avoid conflict with the Competition Law and to keep each other informed of observations and determinations which may be significant to the other.¹⁰⁶

c. EC Regulation

Both the European Council and the European Commission have authority to regulate state telecommunications

markets.¹⁰⁷ The Commission has authority under article 90 to enact legislation aimed at eliminating state-sponsored monopolies in telecommunications, to enact other legislation as specifically empowered by the Council, and to prevent anticompetitive behavior on an individual basis by enforcing articles 85 and 86. On the one hand, the Community has authority over the individual states through its requirements that they establish and maintain free markets in goods and services; on the other hand, it has authority over individual private enterprises through enforcement of competition laws.¹⁰⁸

The European Council has authority to enact legislation concerning anticompetitive behavior under articles 85 and 86 and under article 100a, which empowers it to adopt measures for the "establishing and functioning of the internal market."¹⁰⁹ Within this rubric comes prohibiting cartels and restraining market dominant behavior.¹¹⁰ Under this authority, the Council adopts measures the individual state legislative bodies are to enact so as to become binding in the particular state. The Commission has authority to enforce EU competition laws against individual private enterprises. In particular, it is empowered to review mergers that have European Union-wide dimensions, primarily defined as satisfying a high turnover threshold.¹¹¹

2. U.S. Regulators

a. Federal and State Regulation

Telecommunications law in the United States is primarily comprised of the Communications Act of 1934 (1934 Act), the antitrust laws, state regulatory laws, FCC orders and regulations, the actions of the public utilities commissions of the states,¹¹² and now, the 1996 Act which amends the 1934 Act. Not surprisingly, this myriad of authority has often led to conflicts between the various bodies of law. In general, the FCC has primary jurisdiction when conflicts arise between regulatory and antitrust standards,¹¹³ and when federal regulation preempts state regulation.¹¹⁴ The lines between state and federal regulatory authority and their primacy are at times uncertain. The National Association of Regulatory Utility Commissioners provides some degree of coordination between the federal and state regulatory organizations.¹¹⁵

The 1934 Act established a dual regulatory structure: The FCC has jurisdiction over interstate and foreign wire and radio communications, and the states have jurisdiction over intrastate communications.¹¹⁶ Where a telephone plant is used for both intrastate and interstate service, both the FCC and state regulators have concurrent jurisdiction.¹¹⁷ Because this distinction is often artificial, in practice, the line between intrastate on the one hand, and interstate or foreign communications on the other are extremely blurry. Accordingly, often the various components of a service are either divided between the two realms-and thereby the two regulators-or the FCC simply preempts the state regulator.¹¹⁸

The FCC is an independent agency, comprised of five commissioners appointed by the President. No more than three may be members of the same political party. The commissioners serve for five-year terms and may only be dismissed for cause. The FCC holds a mixture of legislative powers (through its authority to adopt regulations), executive authority (through its power to enforce its rules), and judicial power (exercised via adjudication of cases).¹¹⁹

From virtually the beginning of the industry, antitrust law decisions have played an enormous role in shaping the industry's structure.¹²⁰ The primary example, and the suit which is most responsible for the current shape of the industry, is *United States v. AT&T*.¹²¹ Filed in 1974 and presided over by Federal District Court Judge Harold Greene, the suit ended in 1982 with a consent decree known as the Modification of Final Judgment (MFJ).¹²² The suit originally concerned an alleged unlawful combination between the various Bell entities that resulted in their monopolization of both long-distance service and telecommunications equipment manufacturing.¹²³ However, the suit took many twists and turns, based upon changing priorities within the Justice Department, legislative proposals, and industry activity.

The MFJ had four primary components. First, it broke up the Bell system into various parts, forcing AT&T to divest itself of its twenty-two LECs. The LECs, also referred to as Bell Operating Companies (BOC), were then distributed among seven Regional Bell Holding Companies (RBOC).¹²⁴ The BOCs, in turn, were subdivided into 163 Local Access and Transport Areas (LATA), which served as the boundaries for the definition of local service. Second, it required the BOCs to provide interconnection to all long-distance carriers and information services providers in a nondiscriminatory manner. Third, it barred the BOCs from various lines of business, including providing long-distance and information services and manufacturing of equipment. Fourth, the MFJ liberated AT&T from a 1956 consent decree's restrictions.¹²⁵

On the state level, telecommunications enterprises are typically regulated through state public service commissions. Their activities typically resemble FCC regulation, but wide variety exists between each of the fifty states. Both states and municipalities often exercise further authority over telecommunications providers by way of right-of-way regulation, building codes, and other local regulation.¹²⁶

b. The Telecommunications Act of 1996 and Regulators

The 1996 Act does not make significant alterations to the existing regulatory structure, other than in explicitly repealing the FCC's authority to grant exemptions from antitrust oversight of mergers within the industry. This is discussed in greater detail below in Section III.C.2.b.

3. Comparison and Conclusions

As a general matter, telecommunications in both countries are subject to the primary jurisdiction of the federal governments. Potential conflicts with state regulators remain in both systems. In the United States, the separation between interstate and intrastate authority is somewhat artificial and leads to blurriness between the two jurisdictions. The German system under the *TKG* should avoid this problem by retaining substantial federal control over the industry.

Another area of potential tension exists between different federal regulators. Professors Wernhard Moschel and Ernst-Joachim Mestmacker have expressed concern regarding potential conflict between Cartel Office and NRA decision making given the risk of inconsistent decisions, particularly in the area of competition law, since both have jurisdiction over the industry.¹²⁷ Both professors and *Telekom* have argued that leaving competition law matters to the Cartel Office, rather than creating a whole new agency, would have been a better solution.¹²⁸ The President of the Cartel Office is concerned that a special competition law could develop in the area of telecommunications and that this could constitute a disadvantage to the economy as a whole.¹²⁹ If this develops as a substantial issue in the future, Germany could remedy the problem by taking an approach like the 1996 Act, which explicitly takes antitrust control out of the hands of the FCC and places it with the antitrust division of the Department of Justice.

III. The Primary Focus Areas of the *Telekommunikationsgesetz* and U.S. Law

Broadly speaking, the goal of the *TKG* is to open the telecommunications market in Germany to competition and to position *Telekom* to be able to succeed in the approaching competitive market. To this end, it sets forth the basic structures of a competition-based market and delineates the terms under which *Telekom* competes.

The *TKG* sets forth as its purpose the establishment of regulation that both promotes competition in the telecommunications industry and guarantees broad availability of appropriate and sufficient telecommunications services.¹³⁰ The regulatory goals are to protect consumer interests, establish a competitive market, ensure universal service, ensure proper use of frequency spectrum, and protect the public interest.¹³¹

The *TKG* contains five subject areas of primary importance for voice telecommunications services: licenses [*Lizensen*], universal service [*Universaldienst*], regulation of market dominant providers [*Regulierung marktbeherrschender Anbieter*],¹³² access to public networks and interconnection [*Offener Netzzugang und*

Zusammenschaltung], and use of rights-of-way [*Benutzung der Verkehrswege*].

By contrast, the primary focus of 1996 Act is to open local service to competition. It is expected that cable television companies will be among the first of the major competitors in local markets since most homes are already wired for cable television. Thus, the law aims to facilitate such competition, placing much emphasis upon cable television enterprise entry into telecommunications markets.

A. Licensing

A licensing system is necessary to ensure that various state goals and requirements are established and maintained in a telecommunications system, including ensuring universal service, preventing abuse of a market dominant position, and ensuring interconnection.

1. Germany

a. The Law Leading to the TKG

While private enterprises could obtain licenses for some private, closed telecommunications networks (such as in banking and airline reservations), essentially there was no free market in telecommunications services in Germany, so licensing was not an issue as far as monopoly-provided basic local or long-distance service was concerned.¹³³ However, since 1989, the *BMPT* has approved licenses in competitive markets such as providing mobile telephone service and the sale of satellite transmission devices.¹³⁴

b. The TKG

The goal of the *TKG* is to establish a successful competitive environment in Germany in the telecommunications industry. Because the *TKG* imposes no domestic ownership requirement for entry into the telecommunications market,¹³⁵ this competition will be fully international. The competition goal is based in the belief that a monopoly telecommunications service provider is inadequate to keep up with and properly exploit the myriad of technological advances in telecommunications related fields. This goal is also based on the requirement of the European Commission that speech telephony and other telecommunications services be open to competition by January 1, 1998 in Member States.¹³⁶ Because *Telekom* will remain the sole provider of telecommunications services until January 1, 1998, the government is establishing a regulatory structure to give new entrants an opportunity to compete against the monopoly at that time.

In the wake of the termination of *Telekom's* monopoly over telecommunications, the *TKG* drafters believed that market forces alone would be insufficient to guarantee the establishment of telecommunications service provision that would be in the interests of consumers and of all market participants.¹³⁷ According to the Federal Government, a licensing scheme is necessary because many requirements for market participants, such as provision of universal service elements, must be set forth on an individual basis.¹³⁸ A licensing system will enable the NRA to identify individually the specific duties each market participant must fulfill. Basic requirements or duties include ensuring network security, establishing disaster and crisis provisions and precautions, ensuring data security, protecting long-distance secrecy, and blanket basic telecommunications service coverage.¹³⁹

The *TKG* specifically directs that the overall goals of the law be observed in the granting of licenses.¹⁴⁰ Among these goals are ensuring "equal-opportunity and workable competition" in both rural and urban areas and the availability of affordable universal service.¹⁴¹ Licenses may be individually tailored to ensure achieving those goals. Toward this end, licenses may be amended even after their granting.¹⁴²

The *TKG* mandates the securing of a license for the offering of voice and data transmission services over one's own telecommunications net and for the operation of transmission paths that cross real property and are used

for providing telecommunications services for the general public. Operating transmission lines used by third parties is presumed to constitute the provision of telecommunications services for the general public.¹⁴⁴ However, licenses are not required where one merely resells services over another's network.¹⁴⁵

Licenses are available in four classes: mobile radio telecommunications (Class 1), satellite radio communications service (Class 2), other telecommunications services that do not fall into Classes 1 or 2 (Class 3), and wire telephony service (Class 4).¹⁴⁶ All license holders for speech telecommunications are required to provide access to cost-free emergency services calls.¹⁴⁷

The NRA distributes licenses on the basis of written applications.¹⁴⁸ Licenses are normally granted where the application requirements are satisfied and no reason for denial exists.¹⁴⁹ Ideally, as many licenses will be granted as there are applications to provide a given telecommunications service. However, this may not always be possible. Because the number of frequencies available is limited, and "to ensure effective, interference-free use of frequencies," the NRA shall develop a frequency allocation table and usage plan.¹⁵⁰ The frequency usage plan is to be drafted based upon the table of frequency allocations,¹⁵¹ the overall aims of the *TKG*, and "European harmonisation, technical developments and the compatibility of frequency usages in the transmission media."¹⁵² The plan is also to be drafted with public participation.¹⁵³ Based upon this frequency-usage plan, the NRA may limit the number of licenses for telecommunications markets if frequencies are unavailable to satisfy all requests for licenses.¹⁵⁴

Where the number of licenses are so limited, the NRA, following a hearing from concerned parties, may distribute licenses either by auction or competitive bidding.¹⁵⁵ Auction is preferable to competitive bidding unless auction is for some reason not suitable.¹⁵⁶ In either case, the NRA may exclude some companies from the process where it believes that their participation will prejudice equal opportunity competition in that market.¹⁵⁷ In considering such an exclusion, the NRA must consider companies' legitimate interests in developing new technologies.¹⁵⁸

The intent of an auction is to identify the bidders able to make most efficient use of the radio frequencies so distributed.¹⁵⁹ Prior to holding an auction, the NRA must first identify:

1. the minimum requirements in terms of specialised skills and qualifications bidders shall evidence in order to be admitted to the auction,
2. the relevant product and geographical market for which the radio frequencies bought at auction may be used in observance of the frequency usage plan,
3. the license conditions, including the degree of coverage in respect of frequency usage and the time required to achieve such degree, as well as the frequency usage conditions of the future license that must be observed, [and]
4. the basic number of radio frequencies which the bidder must buy at auction for the startup of the telecommunications service, provided such basic number is necessary.¹⁶⁰

The auction may begin with an identified minimum bid.¹⁶¹

In cases where an auction is unsuitable, licenses shall be distributed by a competitive bidding process.¹⁶² As are auctions, competitive bidding is intended to establish the best provider. Prior to initiating the competitive bidding process, the NRA must first identify:

1. the minimum requirements in terms of specialised qualifications bidders shall evidence in order to be admitted to competitive bidding,

2. the relevant product and geographical market for which the licenses are to be granted,
3. the license conditions, including the degree of coverage in respect of frequency usage and the time required to achieve such degree, as well as the frequency usage conditions of the future license that must be observed, [and]
4. the criteria according to which bidders' eligibility is assessed.¹⁶³

The criteria "shall be the specialised knowledge and efficiency of the bidders, the suitability of plans to be submitted for the provision of the telecommunication service subject to competitive bidding and the promotion of workable competition in the relevant market."¹⁶⁴ Preference will be shown for bidders that can ensure broad coverage of service.¹⁶⁵ Where multiple bidders are equally suitable, licenses shall be granted by drawing lots.¹⁶⁶

As a prerequisite to granting licenses, the NRA will also charge a fee.¹⁶⁷ Under section 16(1), the fee is to be set in agreement with the Ministries of the Interior, Finance, Justice and Economics and in accordance with the requirements of the Administrative Expenses Act.¹⁶⁸ The fee is to be set at a level that represents a reasonable relationship between the economic value of the license and the administrative costs involved.¹⁶⁹ Where licenses are distributed by auction according to section 11(4), if the price arrived at by auction is less than the license fee as set according to the above requirements, then the auction amount may be raised to the fee level arrived at under section 16(1).¹⁷⁰

Although the NRA can supply auxiliary clauses to a license in order to further satisfy the goals of the *TKG* in general-particularly where market dominant providers are concerned-the contents of a license are determined by the applicant.¹⁷¹ However, any such additional clauses' contents should be proportional to the regulatory goals involved.¹⁷² Licenses with conditions may be withdrawn where the conditions are not fulfilled and the auxiliary clauses are to be eliminated where changed market circumstances make them no longer necessary.¹⁷³

The NRA may refuse to grant a license: if the NRA is unable to grant a useable frequency to satisfy the applicant's desired service requirements; if the NRA determines that the applicant has insufficient reliability, efficiency, and specialized knowledge to utilize the license over the long term; or where the applicant otherwise would pose a risk to public security or stability.¹⁷⁴ For example, speculation in licenses is to be discouraged. Accordingly, the NRA may refuse to grant a license to a party where it sees a risk that the party seeks to acquire a license for the purpose of resale rather than long-term use.¹⁷⁵ The NRA must approve in writing any license transfers, utilizing the same criteria as for granting a license in the first place.¹⁷⁶ Licenses may be revoked entirely or in part where the licensee fails to satisfy the license's specific requirements or the *TKG*'s general requirements.¹⁷⁷

2. The United States

a. The Law Leading to the Telecommunications Act of 1996

In the local exchange market, the market has been stable for decades, with no new entrants because of the local service monopoly. Accordingly, a licensing system for new entrants was not necessary. By contrast, for long-distance, since the first opening of long-distance to competition in 1969,¹⁷⁸ carriers have had to obtain licenses from the FCC in order to construct lines or provide service.¹⁷⁹ Section 214 of the 1934 Act allows the FCC to place conditions on licenses that it grants.

In granting licenses, the FCC is guided by the 1934 Act's requirement that "[in] choosing among applicants, the Commission [is] to be guided by the `public interest, convenience, or necessity.'"¹⁸⁰ Public interest is defined as

the interests of the public at large, not of competitors.¹⁸¹ Congress granted the FCC, therefore, wide discretion in approving license applications. However, this is not unbridled: appeal is available. The U.S. Supreme Court has described its responsibility in this area as being "to say whether the Commission has been guided by proper considerations in bringing the deposit of its experience, the disciplined feel of the expert, to bear on applications for licenses in the public interest."¹⁸² Factors to be considered in granting licenses for establishing new lines, for example, include whether more or additional competition in the area is in the public interest and how much added service is desirable or necessary.¹⁸³

State licensing procedures vary among the fifty states. A brief discussion of California law will be used as an example of state licensing regulation. The California State Constitution deems telephone companies to be public utilities subject to state legislature control.¹⁸⁴ As public utilities, they are subject to regulation by the Public Utilities Commission. A provider of telephone services must first obtain a franchise which is, "a special privilege conferred upon a corporation or individual by a government duly empowered legally to grant it."¹⁸⁵ The word franchise is usually used when referring to matters of vital public interest like gas, electricity or telephone services.¹⁸⁶ The grant of a federal franchise entitles a grantee to exercise the franchise without interference by the state.¹⁸⁷

b. The Telecommunications Act of 1996

The 1996 Act does not change the basic licensing rules described above except that section 214 rules are revoked for open video systems.

3. Comparisons and Conclusions

Both pre-existing U.S. law and the *TKG* take very flexible, open-ended approaches to the granting of licenses. In distributing licenses, the FCC is to consider "the public interest, convenience, and necessity" while the NRA is to fulfill the overall purposes of the *TKG*, including safeguarding user interests, and ensuring competition and the availability of affordable service.

As discussed below in section III.B.3 in more detail, licensing issues are closely linked to universal service issues. As discussed in that section, the critical issue for the *TKG* is the scope of the licenses. Local governments are concerned that without sufficient attention to the size and scope of areas covered by licenses, a two-tiered telecommunications system could develop if firms are allowed to carve out the most profitable areas and to neglect less profitable areas.¹⁸⁸ Again, the United States avoids this problem because of the pre-existing, MFJ-imposed LATA system that already covers the Nation.

Another substantial issue for the new German system may be access to the licenses themselves. Early analysis of proposed licensing regulations criticizes them for setting high licensing costs that could serve to exclude or disadvantage all but the most well-financed ventures, particularly those with pre-existing networks.¹⁸⁹

B. Universal Service

Generally speaking, "universal service" refers to the availability to all or nearly all consumers basic telephone service at a reasonable price and with reasonable service quality. This has been a goal of regulators in all systems since telephone service began. The emphasis has been on inexpensive local telephone service. There has been consistent policy in many, if not all, nations of artificially inflating long-distance rates so as to provide subsidies for local service in order to keep the latter's cost low.¹⁹⁰ However, with increased deregulation and increased competition in the long-distance market, market forces pushed toward lower long-distance rates, since those cross-subsidies from long-distance to local service had distorted the market. For example, in the United States large consumers of telecommunications services, such as big corporations, had bypassed local exchanges in order to avoid paying larger fees by connecting their internal systems directly with long-distance providers.¹⁹¹

1. Germany

a. The Law Leading to the TKG

The German Constitution requires universal service; until 1995 the State was required to provide it, since 1995 it must merely guarantee that it is provided.¹⁹² All property owners may demand connection to the local telecommunications network.¹⁹³

The provision of universal service in basic telephony was a major *DBP* policy goal following World War II. By the mid-1980s, saturation had virtually been attained, so the focus shifted to broadening access to new services such as video text, teletex, cable TV, electronic mail, and ISDN services.¹⁹⁴ The Law Regulating Telecommunications and the Post Office¹⁹⁵ states that telecommunications industry regulation is intended to establish and maintain broadly available, modern, and reasonably priced telephone service that is equally available in rural and urban areas, that users have discrimination free access to the system, and that there be effective management of limited resources, attention to social concerns, and guaranteed, effective consumer and data protection.¹⁹⁶ To this end, Germany must also heed the demands of EU Directives in this area.

The EU continues to wrestle with its own definition of universal service. This has implications for the *TKG* and other European telecommunications laws which must be drafted in line with the EU's directives. European Union Industry Commissioner Martin Bangemann stated that universal service should mean that all EU citizens have access to an equal quality of service at a reasonable price.¹⁹⁷

Equally important is the question of who must pay to provide universal service. The European Commission approved a requirement that all network and service providers who have greater than 25 percent market share must contribute to financing universal service within the Community.¹⁹⁸

b. The TKG

The *TKG* provides authority for the federal government to assure universal service.¹⁹⁹ Universal service is defined as a minimum level of telecommunications service, available to persons and businesses at any location, and at an affordable price.²⁰⁰ The federal government is to determine, subject to the consents of the *Bundesrat* and *Bundestag*, what constitutes universal service, the minimum level of quality of service that must be provided to satisfy the requirement, and a reasonable price.²⁰¹ Both social and technical developments are to be considered in defining and determining universal services.²⁰² The NRA is then empowered to determine whether universal service is actually being provided.²⁰³

The Legislative Report to the Original Draft states that the basic operating definition of universal service includes basic voice telephony and the necessary connection to the system that the public has come to expect as available.²⁰⁴ Further, the market penetration rate (the number of telephone hookups) in 1996 constitutes the baseline for universal service. However, the law takes into account that the industry is everchanging and that technological advances regularly continue. Accordingly, what will satisfy the universal service requirement shall vary depending upon what services are prevalent in the market and come to be considered indispensable.²⁰⁵

The *TKG* also begins with the operating assumption that the market will fulfill universal service requirements.²⁰⁶ However the *TKG* also grants the NRA authority to intervene to ensure that universal service requirements are satisfied should the market fail.

If universal service is not being provided, or where it appears likely that universal service will not be provided, all licensees operating in the applicable licensed market and who have at least a 4 percent market share in the relevant market as defined by the Competition Law, are obliged to contribute to ensuring that the universal

service is provided.²⁰⁷ This obligation extends to other companies constituting a single company together with the licensee operating in the market.²⁰⁸

Where the NRA determines that satisfactory universal service is not being provided in a particular market, it must first publish this determination in its official gazette. If within one month following publication no market provider declares its intent to provide service that will satisfy universal service requirements, the NRA may require a licensee holding a market dominant position in the relevant product and geographical market to provide the service.²⁰⁹ Where several licensees hold dominant positions in the relevant market, and after hearing concerned parties, the NRA may choose to obligate one or more licensees to provide part or all of the universal service in question. However, any licensee obligated in this way may not be unduly prejudiced in relation to other licensees.²¹⁰ This potential obligation to provide also extends to other companies constituting a single company together with the licensee(s).²¹¹

Licensees obligated to provide universal service are entitled to receive compensation for actual long-term costs incurred in providing that service.²¹² Such costs are computed following a complete calendar year in which the licensee experiences a deficit based upon providing the universal service.²¹³

In cases where the NRA selects a licensee to provide universal service as described above, the licensee may provide evidence that it will be able to claim compensation for providing the service.²¹⁴ If a licensee furnishes *prima facie* evidence that it will be entitled to compensation, the NRA may, in lieu of obligating one or more companies to provide service as described above, solicit bids for the provision of the service.²¹⁵ In that case, the NRA will select the bidder showing sufficient qualification to provide universal service and requiring the "least financial compensation therefor."²¹⁶ This solicitation process may also be used where the primary selection process is not possible.²¹⁷

All licensees operating in the relevant product market for the licensed telecommunications service in question and that account for at least 4 percent of the total sales in that market, must together provide compensation to a licensee entitled to compensation.²¹⁸ The amount that each licensee must pay is determined pro rata based upon the licensee's share of sales.²¹⁹ Annually, each licensee must report its revenues in that market to the NRA.²²⁰

2. The United States

a. The Law Leading to the Telecommunications Act of 1996

The United States inherited from English common law the principle of the "common carrier," defined as entities that provided essential services in a non-discriminatory manner. In exchange for providing such services-the operation of a ferry boat or wharf, for example-the carrier received a limitation on its liabilities, as befitting for an entity which could not discriminate among its customers.²²¹ By contrast, non-common (private) carriers then provided niche services for private parties.

Difficulties result where there is intermingling of the two types of services-an increasingly common occurrence.²²² For example, noncommon carriers are not burdened by universal service requirements, providing an advantage where there is competition between common and noncommon carriers. Courts, regulators, and Congress have typically attempted to equalize such situations.²²³

The provision of universal service is one of the basic tenets of the common carriage system. As networks are increasingly privatized and particularly where networks can be divided into different market segments, the danger of loss of service in less profitable areas increases. Accordingly, some substitute for the government-imposed universal service previously provided by national telecommunications networks was considered necessary.

The FCC has as a central goal that the telecommunications system provide universal service at reasonable prices. Section 151 of the 1934 Act established the FCC "[f]or the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges" ²²⁴

While achieving universal service is a primary goal of the FCC, no law actually requires universal service. Rather, the 1934 Act disallows the withdrawal of service without FCC or state approval. This effectively creates universal service availability because of the unfavorable political response at the state level that a petition to withdraw service would generate. The federal standard for approval of withdrawal is: "[N]o carrier shall discontinue, reduce, or impair service to a community, or part of a community, unless and until there shall first have been obtained from the Commission a certificate that neither the present nor future public convenience and necessity will be adversely affected thereby." ²²⁵ As a practical matter, no one files applications to withdraw service except for the most esoteric and ancient of services: wire telegraphy services and maritime common carrier operations that often predate the Federal Radio Act of 1926.

However, beyond merely ensuring that service lines remained actually in place, regulators believed that a key to achieving the goal of universal service, or at least near universal, was keeping the cost of local service low. To this end, local service rates were subsidized in three ways. ²²⁶ First, higher long-distance rates were intended to offset lower local rates. ²²⁷ Second, rural rates were subsidized by higher urban rates through rate averaging. And third, business customers subsidized residential customers. ²²⁸ The fear has always been that to increase local rates to bring them in line with actual cost of service would end up causing significant numbers of individuals to give up service. However, a recent study has shown that setting local rates at levels closer to actual cost does not significantly change rates of connection. ²²⁹

b. The Telecommunications Act of 1996

The 1996 Act establishes a Federal-State Joint Board on Universal Service made up of federal and state-appointed representatives and a State-appointed utility consumer advocate. ²³⁰ The Joint Board is to issue recommendations to the FCC concerning: preserving and advancing universal service. It is to focus on availability of quality services at "just, reasonable and affordable rates"; access to advanced service; access in rural and high cost areas; equitable and nondiscriminatory contributions by all telecommunications service providers; specific and predictable support mechanisms for the provision of universal service; access to advanced telecommunications services for schools, health care facilities, and libraries; and such additional principles as the Board and FCC consider "necessary and appropriate for the protection of the public interest, convenience and necessity, and are consistent with [the 1996 Act]." ²³¹ Universal service is to be made available to consumers "at rates that are just, reasonable, and affordable." ²³²

The 1996 Act declares universal service to be an "evolving level of telecommunications services." ²³³ The definition must take into account advances in telecommunications and information technology. Moreover, its decisions:

shall consider the extent to which such telecommunications services-

- (A) are essential to education, public health, or public safety;
- (B) have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers;
- (C) are being deployed in public telecommunications networks by telecommunications carriers; and
- (D) are consistent with the public interest, convenience, and necessity. ²³⁴

All telecommunications carriers that provide interstate telecommunications are obligated to contribute "on an equitable and nondiscriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service." Where a carrier's activities are so small that its contribution would be *de minimus* (that is, where collection costs would exceed the amount the carrier contributed), then the carrier may be exempted. Conversely, other interstate telecommunications providers may also be required to contribute where the FCC finds it in the public interest.²³⁵

Where universal service is not provided in a community, the FCC or the state may select a particular common carrier to provide such service. Such carriers are referred to as "eligible telecommunications carriers."²³⁶ Incumbent LECs are required to make their public switched-network infrastructure, technology, information, and telecommunications facilities and functions available to requesting small universal services providers in its area.²³⁷ An eligible carrier may only relinquish this designation where at least one other carrier serves the area and where the state approves the request.²³⁸

Eligible carriers may then receive support payments to preserve and advance universal service under section 254(e).²³⁹ However, cross-subsidization between competitive and non-competitive services is not allowed; the FCC and the states may establish accounting rules to ensure that costs allocated to facilities used to provide universal service are reasonable.²⁴⁰

The 1996 Act also incorporates the pre-existing practice that rates be subject to geographic averaging and rate integration for long-distance telecommunications in order to ensure that rates for rural and urban customers be comparable. Moreover, long-distance service rates may not vary between states.²⁴¹

The 1996 Act also includes provisions requiring that telecommunications carriers provide affordable access to their services to health care providers in rural areas, elementary and secondary schools, and public libraries. Rural health care providers are to receive services at rates no higher than those afforded urban providers, and schools and public libraries are to receive discounted rates set by the FCC.²⁴²

3. Comparison and Conclusions

Both the *TKG* and the 1996 Act have adopted extremely broad definitions of universal service. The goal is that both systems remain flexible for responding to ever advancing technology: Today's exotic features may well become tomorrow's most common services. This broad definition provides regulators with more flexibility in setting regulations in this area.

Essentially, both the *TKG* and the 1996 Act take the same basic approach to ensuring that universal service is provided. Wherever the NRA or FCC determines that universal service is lacking, it may select one or more carriers in the area to provide the required service, thereby making the burdened carrier eligible to receive funds from the universal service fund. However, differences exist between those that may be required to provide such services. The *TKG* limits carriers that may be required to provide service to those with 4 percent or greater market share while the 1996 Act makes any market participant potentially available to provide service.

The *TKG's* approach to paying for provision of universal service appears to trade breadth of contribution for simplicity. Its requirement that carriers with at least four percent of the market contribute to the common fund may be relatively simple to calculate-in contrast to the U.S. system where all carriers must contribute unless administration costs would be greater than the contribution-but may well exclude a substantial number of market participants, particularly in the early period of growing competition. Although the U.S. system appears more analysis intensive, in practice it will probably be relatively simple to perform basic calculations concerning administration costs, and thereby easy to compare each market participant's required contribution against the pre-calculated costs. Accordingly, the U.S. system probably provides a fairer method of distributing costs. Perhaps once a more competitive environment has been established, Germany may want to set a lower threshold in order to provide for a fairer distribution of universal service burden throughout the industry.

However, the interesting difference between the two systems results from their different starting points. Although the German system has always explicitly required the provision of universal service, until passage of the 1996 Act, the U.S. system had only indirectly required universal service-in that service was already in place in all regions, and that approval was required in order to withdraw services. Conceivably, absent some sort of service provision requirement, upon complete privatization in 1998, *Telekom* could simply stop providing service in unprofitable areas. Although extremely unpopular politically, it could be highly advantageous economically, given varying degrees of profitability between areas and the requirement that service be provided at an affordable price-a requirement that automatically calls for some degree of rate averaging. Here, the provision of universal service becomes linked to licensing. Under a completely unfettered licensing scheme, firms could engage in cherry-picking in order to provide service only to the most cost-effective areas, leaving out those areas where provision of service would be most expensive.²⁴³

The U.S. system should be able to avoid this problem because the United States is already divided into 161 LATAs, each encompassing an average of 1.2 million persons and 600,000 telephone connections.²⁴⁴ These LATAs are already serviced by the various BOCs, which are subject to the section 214(a) requirement of the 1934 Act that service not be withdrawn from an area absent FCC consent. Accordingly, local universal service will remain in place, particularly given that the 1934 Act provides authority for universal service providers to be appointed where service is lacking.

Perhaps establishing some sort of similar framework in Germany could resolve some universal service provision problems. If service regions are established such that more and less expensive regions are linked together in such a way that most service regions had roughly equivalent overall profitability potential, the risk that less densely populated areas would be provided less favorable services would be lessened.

Alternatively, the NRA may invoke its authority under section 18 of the *TKG* to designate carriers in certain areas where universal service is not being provided. On the one hand, this seems to represent a more piece-meal approach than setting up a pre-existing structure. However, on the other hand, it could well be that a regional system devised by a governmental body would not represent economic realities as well as would a market-based system derived from license applications themselves.

C. Market Dominance Regulation

Because it takes some time before alternate networks are established to compete with those of former monopolies, competitors must initially utilize a former monopoly's networks and services. Accordingly, protection against abuse of a market dominant position is necessary in newly liberalized telecommunications industries.²⁴⁵

1. Germany

a. The Law Leading to the TKG

As discussed above in respect to interconnection, historically the market consisted only of the state-run telephone system. Accordingly, whether the state enterprise abused its market position was more a political than a legal question-as the controversy over the telephone rate structure that went into effect on January 1, 1996 showed.²⁴⁶

EU law applies for purposes of ensuring that the state-run telephone system does not violate article 90 or article 30 of the EC Treaty.²⁴⁷ Moreover, EU ministers continue to discuss the definition of a market dominant enterprise within the context of the telecommunications market. To date, the EU Council of Ministers for Telecommunications has apparently agreed in principle that its draft directive will define an enterprise with greater than 25 percent market share as market dominant, but with some flexibility built into the system for individual state implementation.²⁴⁸ The European Commission will continue to exercise authority over the

telecommunications market in Germany and throughout the EU, providing another layer of regulatory oversight beyond the NRA and Cartel Office.²⁴⁹

b. The TKG

While competition is set to begin on January 1, 1998, it will, in all likelihood, be some time before *Telekom* is dislodged from its position as the sole market dominant provider.²⁵⁰ As the incumbent carrier, *Telekom* begins with many advantages over its fledgling competitors, including its existing network and name recognition.²⁵¹

The *TKG* is particularly concerned with protecting the market from the control of a market dominant enterprise-meaning *Telekom*.²⁵² *Telekom* has criticized its special status, arguing that looming competitors like the big energy concerns that have existing networks and have entered into alliances with large international enterprises do not need regulatory protection. However, many observers consider the special regulation necessary to nurture and protect competition in the developing market.²⁵³

The *TKG* pays special attention to market dominant providers and affirms the applicability of antitrust law to telecommunications providers.²⁵⁴ The *TKG* refrains from establishing a unique definition for market dominant position in the telecommunications industry. Rather, it defers to section 22(1) of the Competition Law for the determination of whether an entity is market dominant:²⁵⁵

(1) An enterprise is market dominating within the meaning of this Act if it, either as one offering or calling for a specific kind of goods or commercial services,

1. is without competitors or is subject to no substantial competition; or

2. has a superior market position in relation to its competitors; in this connection, in addition to its market share, regard shall be given in particular to its financial strength, its access to the supply and sales markets, its inter-relationships with other enterprises as well as to legal or factual barriers to the entry of other enterprises into the market, the ability to direct its supply or demand to other goods or commercial services, as well as the possibility of the opposite market side to change to other enterprises.²⁵⁶

Part III of the Original Draft was entitled "Regulation of Market Dominant Providers" but was renamed as "Rates Regulation" in the law as passed.²⁵⁷ A comparison of the changes to Part III, however, shows relatively little difference between the January Draft and June Draft beyond the title change. As evidenced by the *Bundesrat's* proposals, some objected to the part's limitation in scope merely to dominant providers.²⁵⁸ Accordingly, the rules in this section, while to a large extent focused upon large market participants, do not always apply exclusively to market dominators. For example, all terms and conditions for licensed telecommunications services and for universal service are subject to NRA scrutiny to ensure that they comply with EU requirements, regardless of an enterprise's size.²⁵⁹

The *TKG* provides corporate structuring rules for market dominant providers in general and special rules and obligations for market dominant providers, variously defined, in the areas of provision of universal services, rates regulation, and open network provision and interconnection. These sector-specific market position abuse regulations, however, create a potentially cumbersome and conflict-creating situation for an enterprise. In some situations, a telecommunications enterprise operating in a nonlicensed area is governed merely by Competition Law requirements and is subject to Federal Cartel Office oversight. However, where it is operating in licensed areas it is subject to NRA oversight and possibly to Cartel Office oversight as well.²⁶⁰

Turning now to specific sections of the *TKG*, section 14(1) provides that companies enjoying a market dominant position in markets other than telecommunications must establish legally independent companies for the carrying of telecommunications services. Market dominance is again defined according to section 22 of the

Competition Law.²⁶¹ Moreover, section 14(2) provides that companies dominating a telecommunications market segregate their accounting for services provided in a licensed sector from those provided in nonlicensed sectors. The NRA may dictate the structure of accounting practices for services subject to license. The goal is to avoid cross-subsidization particularly where proceeds from licensed, monopoly services could be used to subsidize services in nonlicensed, competitive sectors.²⁶²

As discussed above,²⁶³ section 18(1) provides that where an element of universal service is not provided as required under section 17(1), every licensee that is active in the relevant area of the telecommunications market and either (1) holds at least 4 percent of the market that falls within the *TKG's* scope of coverage or (2) holds a market dominant position in the relevant geographical market as defined under section 22 of the Competition Law, is obligated to assist with assuring that the element of universal service is provided in that market. This section applies not only to a telecommunications provider itself but also to any other entity which is connected to the telecommunications provider so as to constitute a single entity within the meaning of section 23 of the Competition Law.²⁶⁴

By contrast, section 19(2) narrows the pool of companies potentially obligated to provide service under section 18(1); section 19(2) provides that companies holding a dominant position under section 22 of the Competition Law in "the relevant product and geographical market" may be obligated to provide a universal service that is lacking. Section 21(1) provides that licensees operating in the relevant product market and who hold at least 4 percent of that market must contribute to the compensation of eligible companies based on their provision of a universal service.

Part III also imposes rate regulation upon those holding a market dominant position within the relevant market.²⁶⁵ Proposed rates will be evaluated based upon either the costs of efficiently providing the individual service in question or upon a prescribed average change in rates for a basket of combined services.²⁶⁶ Moreover, as an overall matter, all rates, not just those of market dominant providers, must not be based upon abuse of a market dominant position, contain discounts that unfairly prejudice some market participants, or create advantages for some market participants in relation to identically situated market participants.²⁶⁷

Finally, Part III prohibits certain mergers among market dominant providers. Where the number of licenses granted has been limited pursuant to section 10, section 23 authorizes the NRA to condition a license granted to a market dominant provider upon the provider's refraining from merging with another service provider.²⁶⁸ Combination is defined in terms of section 23 of the Competition Law.²⁶⁹

Part IV, Open Network Provision and Interconnection, focuses special attention on providers that hold a market dominant position in telecommunications markets. Section 33(1) requires that such providers allow competitors non-discriminatory access to essential services that the provider itself uses. Access may only be restricted to the extent allowed under EU requirements.²⁷⁰ Abuse of a market dominant position will be presumed where a provider holding a dominant position in the relevant market fails to provide such access.²⁷¹ Moreover, a provider of telecommunications services to the public that is dominant in such market must allow other users access to its network or to parts thereof.²⁷² This requirement is extended to other companies that together constitute a single company with the provider as defined by section 23 of the Competition Law. All agreements granting access under this section are also subject to this restriction-that they may not be likely to prejudice the "competitive opportunities" of other companies unless there is an objective justification for such prejudicial effect.²⁷³

2. The United States

a. The Law Leading to the Telecommunications Act of 1996

Section 2 of the Sherman Act prohibits monopolistic behavior,²⁷⁴ and abuse of a market dominant position is
²⁷⁵

regulated under this category. Dominant carriers were considered those with "market power," defined as the ability to set prices independently.²⁷⁶ While antitrust laws were not inapplicable to the Bell system, it received special treatment vis-B-vis antitrust law requirements because it was a state-sanctioned monopoly. Nonetheless, throughout its history, the Bell System was subject to antitrust suits, threats of suits, and consent decree requirements based on its dominance in the telecommunications market. Many of these suits concerned mergers and potential mergers in various market segments.

Regulation of market dominant carriers had been simple to categorize until recently: The BOCs and the independents were monopoly LECs in their regions, and AT&T was the dominant international and domestic long-distance carrier.²⁷⁷ As such, they have been subject to a complex set of antitrust rules based on the fact that telephone service was traditionally treated as a public utility. This resulted in a mixture of special legal rules which provided both advantages and disadvantages for these market dominators.²⁷⁸

One of these special rules was FCC authority to grant immunity from antitrust laws for some mergers and consolidations within the telecommunications industry. In deciding whether to grant antitrust immunity, "[i]n general, the public interest is to be considered in light of the overall purpose of the Communications Act `to make available, so far as possible, to all people of the United States a rapid, efficient, Nationwide, and world-wide wire and radio communication service with adequate facilities at reasonable charges'"²⁷⁹ Where the FCC found that a "proposed consolidation, acquisition, or control will be of advantage to the persons to whom service is to be rendered and in the public interest, it shall certify to that effect; and thereupon any Act or Acts of Congress making the proposed transaction unlawful shall not apply."²⁸⁰ The 1996 Act repealed this section.

One important aspect of regulating market dominant actors has been cross-subsidization rules aimed at preventing dominant carriers from using revenues from basic regulated services to subsidize provision of non-regulated services (in other words, enhanced services). Accordingly, dominant carriers have been required to adopt FCC-approved accounting rules to allow for adequate oversight over this potential problem.²⁸¹

b. The Telecommunications Act of 1996

The 1996 Act focuses on the BOCs with regard to regulating market dominance. It seeks to ensure a workable transition from the present situation where the BOCs are the sole LECs to a competitive future since a major purpose of the 1996 Act is to open local exchange service to competition. Correspondingly, the BOCs are now able to enter the interLATA market. However, given the dominance of the BOCs in the local exchange market, special rules require that actual competition exist in a BOC's region before the BOC would be allowed to offer interLATA service that originates in its local exchange service area.²⁸²

Specifically, a BOC must obtain FCC authorization prior to offering interLATA services within its region. In order to obtain authorization, the BOC must satisfy interconnection requirements and the "in-region" test.

Section 271(c) first requires that either the BOC has entered into one or more binding agreements concerning access and interconnection with a "facilities-based competitor" that exists in the BOC's region, or that no competitor has requested access and interconnection within the region.²⁸³ A facilities-based competitor is one that offers either telephone exchange service exclusively over its own facilities or predominately over its own with some resale of another carrier's services. The competitor must be operational, actually offering competitive services and not merely having entered into agreements with the BOC.²⁸⁴ Congress sought to ensure that an unaffiliated competing provider exists in the region; not just a reseller of the BOC's services.²⁸⁵ Alternatively, the section is satisfied where, despite the BOC's offering interconnection and access to its network, no other carrier applies to enter the region within ten months of the 1996 Act's enactment.²⁸⁶ In addition, the actual access and interconnection either provided or offered must include reasonable and nondiscriminatory terms for interconnection, unbundled service access, and nondiscriminatory access to ducts, poles, conduits and rights-of-way of the BOC.²⁸⁷

However, a sufficiently separate affiliate of a BOC which is an incumbent LEC may provide interLATA services, even where the above interconnection and in-region requirements are not met. Section 272 allows provision of such services, and other BOC-prohibited services such as manufacturing and interLATA information services, where they are carried out through an affiliate and all transactions are at arm's length and without any special preference for the affiliate's services.²⁸⁸

Significantly, the 1996 Act also repealed section 221(a) of the 1934 Act, which gave the FCC the power to provide antitrust exceptions to mergers within the industry, to avoid circumvention of the antitrust laws. This was done largely in anticipation of anticipated mergers between telephone and cable television companies. Congress was concerned that distinctions between the two industries will become less clear and it wanted to preserve adequate antitrust supervision where increasing industry consolidation could raise concerns about potential remonopolization.²⁸⁹

Mergers between [cable and telephone] companies should not be allowed to go through without a thorough antitrust review under the normal Hart-Scott-Rodino process By returning review of mergers in a competitive industry to the DOJ, this repeal would be consistent with one of the underlying themes of the bill-to get both agencies back to their proper roles and to end government by consent decree. The Commission should be carrying out the policies of the Communications Act, and the DOJ should be carrying out the policies of the antitrust laws.²⁹⁰

3. Comparison and Conclusions

The *TKG* and 1996 Act take similar approaches regarding general regulatory oversight and seeking to prevent cross-subsidization. Both the German and U.S. systems begin with readily identifiable market dominators: *Telekom* in Germany and AT&T in international long-distance service and the BOCs in local exchange service in the United States.²⁹¹ However, while the *TKG* needed to address virtually the entire telecommunications industry in Germany, because the U.S. long-distance market has been open to competition for more than a decade, the 1996 Act could focus its attention on local service.

In terms of defining a market dominant enterprise, like U.S. law, the *TKG* sometimes takes a more flexible approach than that of the EU. The former looks to the size and power of the enterprise in relation to the market while the EU appears ready to set down 25 percent of market share as the base line. This 25 percent base line was proposed and rejected early in the *TKG* legislative process.²⁹² However, as evidenced above in the discussion of the rules requiring market dominant companies to provide universal services, the *TKG* provides varying market dominance definitions for different aspects of the requirement to provide universal service. This seems like a recipe for confusion. While this series of definitions undoubtedly is intended to most appropriately distribute responsibilities among the players in various telecommunications markets, it may serve to create artificial, market-distorting distinctions among companies within the industry.

The 1996 Act resolves a potential problem that remains a part of the *TKG*, that of conflicts between cartel regulators and telecommunications regulators. The 1996 Act explicitly takes antitrust waiver authority away from the FCC and places antitrust regulation of the industry squarely in the hands of the Department of Justice. This is particularly important given that cable television, telecommunications, and other media companies will become increasingly intermixed, requiring antitrust oversight by one agency that is capable of such a broad task. By contrast, the *TKG* establishes a dual regulatory system that could lead to inconsistent decisions coming from the NRA and the Cartel Office. As the telecommunications market becomes more and more a "normal" private undertaking, and less a government-owned or oriented utility, special competition law treatment at the hands of a telecommunications regulatory body as opposed to regular competition law authorities makes less sense. A recent "White Book" commissioned by the NRA on the *TKG* criticizes this situation: It suggests that the Cartel Authority is better qualified to oversee the new telecommunications market than is the NRA.²⁹³ The German Monopoly Commission has also expressed its concern that this separation could lead to divergence between general and sector-specific competition law. It noted as well that the

overarching application of European competition law further complicates the situation.²⁹⁴

The White Book also repeats the argument set forth earlier that the regulator overseeing competition in the telecommunications market must be politically independent.²⁹⁵ This is particularly important given the Federal Government's potentially conflicting goals of establishing and maintaining a successful competitive market on one hand and of maximizing the revenues it generates as it gradually sells shares of *Telekom* to the public over the next several years on the other. Enormous sums of money are at issue-*Telekom's* annual turnover was DM 66 billion in 1995²⁹⁶ and its initial public offering in November of 1996 raised \$11.4 billion.²⁹⁷ Competitors have already expressed criticism that the liberal telecommunications regime the *TKG* is supposed to establish is being undercut by the government's interest in *Telekom's* successful entry into the stock market and continued health for purposes of further share sales.²⁹⁸

The split between local and long-distance service in the U.S. market has allowed the 1996 Act to take an incentive-based approach to diminishing the risk of continued market dominance in the local markets. The BOCs want to be able to enter the extremely lucrative long-distance service market,²⁹⁹ but to do so there must first exist substantial competition in the local market (or at least the opportunity for it). Accordingly, the BOCs have strong incentive to remove existing barriers to competitor entry in local service because the rewards of successful competition in long-distance are so great. There does not seem to be any comparable incentive system that could work in the German market since *Telekom* does not remain excluded from any segment of the market.

D. Interconnection

While the U.S. and German telecommunications markets are moving from state-run or sanctioned monopolies to competition, it will take considerable time and capital expenditures before competitors to the incumbent systems have complete, alternate networks in place.³⁰⁰ In the meantime, they will have to rely, to lesser or greater extents, upon interconnection of their equipment and services with those of the incumbent providers. Moreover, even with fully functioning alternative networks, interconnection is necessary in order that the customers of each provider will be able to communicate with the customers of other providers-something of particular importance in the multi-national EU telecommunications market.³⁰¹ Accordingly, enacting effective, practical interconnection requirements and rules is critical to establishing real competition in telecommunications markets.³⁰²

1. Germany

a. The Law Leading to the TKG

Because of its status as a state-run monopoly, until recently, the German telecommunications system did not have to confront interconnection issues, other than connecting its network with international long-distance systems. With the advent of mobile systems, ISDN, and other newer technologies offered at least in part by competitors to *Telekom*, interconnection rules for those areas became necessary. However, local and long-distance service, which remained in the hands of the state system, had no interconnection requirements.

b. The TKG

In particular, the *TKG* is concerned that all networks interconnect. "Interconnection" is defined as "network access establishing the physical and logical connection of telecommunications networks to allow users connected to different telecommunications networks to communicate directly or indirectly."³⁰³ "Network access" is defined as

the physical and logical connection of terminal equipment or other equipment to a telecommunications network or parts thereof as well as the physical and logical connection of a

telecommunications network to another telecommunications network or parts thereof for the purpose of obtaining access to functions of such telecommunications network or to the telecommunications services provided via such network.³⁰⁴

All operators of telecommunications networks who occupy a market dominant position in telecommunications markets are obligated to provide competitors the opportunity to connect with their network or with parts of the network.³⁰⁵ "Such access may be granted via connections provided for all users (general network access) or by special connections (special network access)."³⁰⁶

All agreements concerning this interconnection must be based on objective criteria, be understandable, and guarantee equal access to telecommunications nets. All conditions contained within such agreements must comply with the contents of the EC's Open Network Provisions (ONP) Directive³⁰⁷ and may not be designed to restrict competition.³⁰⁸ Copies of interconnection agreements must be provided to the NRA which will publish them in its official gazette.³⁰⁹ Where parties cannot come to agreement on interconnection the NRA may set technical, operational, and economic terms for the agreement.³¹⁰ The Federal Government shall set forth, with the consent of the *Bundesrat*, rules governing the granting of special network access.³¹¹

A network operator may only limit interconnection to the extent allowed under EU directives.³¹² A provider of telecommunications services, which holds a market dominant position in the telecommunications services market, must provide competitors with connection to those services used internally and offered on the market and that are essential for the provider to offer telecommunications service. If a network operator gives itself better terms for connection to its own network than it does others, abuse of a market dominant position is assumed unless the operator provides objectively justifiable reasons for the different treatment.³¹³ Where a user demands a special interconnection to a network, the NRA may investigate whether the user is sufficiently capable of making effective use of the connection.³¹⁴

Essentially, the basic rule regarding interconnection for market dominant enterprises is that internal treatment must equal external treatment. Otherwise, a market dominant provider that provides both licensed and nonlicensed services could offer its own nonlicensed services access to required services on better terms than it offers those required services to competing providers of the nonlicensed service. Exceptions to this requirement are only allowed where they are objectively justifiable.³¹⁵

Where an enterprise violates interconnection requirements the NRA must demand that the enterprise cease its objectionable conduct. The NRA may then enjoin or prohibit the conduct in question and may declare relevant contracts to be completely or in part invalid to the extent that the enterprise abuses a market dominant position.³¹⁶ This authority is roughly comparable to that provided in the Competition Law,³¹⁷ except that it allows enjoining of the conduct, rather than merely subjecting it to a condition (for example, selling off a subsidiary).³¹⁸

Where a market dominant provider is affiliated with other enterprises such that they form a single enterprise within the meaning of the Competition Law, the NRA may exercise its authority over the single enterprise and each of its parts.³¹⁹

If a market dominant provider does not comply with European Commission or Council ONP requirements, the NRA has authority to demand that the enterprise cease its objectionable conduct, and may then enjoin or prohibit the conduct, and may declare relevant contracts completely or in part to be invalid.³²⁰ It is to be assumed that behavior complying with requirements published in the Official Journal satisfies basic interconnection requirements.³²¹ Where the EC has not published in its Official Journal regulations concerning what constitutes compliance with interconnection requirements, the NRA may require telecommunications service providers to prove that they are in compliance with the law.³²²

2. The United States

a. The Law Leading to the Telecommunications Act of 1996

From the infancy of the telephone industry, interconnection was a critical issue. Switching equipment was developed shortly after the telephone's invention in 1876, when it immediately became clear that a switching exchange was necessary to connect phones to other phones in the same network.³²³ Moreover, small patchwork networks, even if each customer could talk with other customers within a network, were obviously much more effective if they allowed access to other networks.

With the expiration of the Bell Company's major patents on the telephone in 1895, competition began to grow. By 1907, "independent" companies, those not affiliated with Bell, owned nearly the same number of telephone stations as Bell.³²⁴ However, because Bell owned the patents to superior long-distance service technology and refused to sell equipment or interconnection to anyone other than its affiliates, independents rapidly went bankrupt or were acquired; because there was no requirement that Bell provide interconnection to its superior long-distance network, a monopoly was born.³²⁵

Federal court cases that differentiated between telegraph owners—who were required to provide interconnection to competitors—and telephone companies, and the silence of the Mann-Elkins Act of 1910, which defined telecommunications companies as common carriers, established that there was no interconnection requirement.³²⁶ The 1934 Act required interconnection between the Bell system and other carriers only where the FCC found "such necessary or desirable in the public interest."³²⁷ However, given that the 1934 Act had as an underlying premise that the telephone system was a natural monopoly,³²⁸ interconnection was not found to be in the public

interest until much later, when the FCC and the courts began taking a greater interest in competition.³²⁹ A degree of interconnection was required as of 1976 when the FCC required domestic common carriers to allow competitors to resell private line transmission services, including long-distance services.³³⁰

Prior to the enactment of the 1996 Act, interconnection requirements had been based on the FCC's changed attitude regarding what constitute's the "public interest" per the 1934 Act and judicial decisions—most notably the "essential facilities doctrine" and the AT&T and GTE consent decrees.³³¹ The MFJ required LECs to provide customers with access to the IXC's of their choice and to provide equally efficient interconnections between local customers and all IXC's. The MFJ called for functional rather than technical equality in the interconnections.³³² The ideal was that there would be "equal access" to all IXC's; in other words, it would be as easy—and involve dialing the same number of digits—to place a call through AT&T as through any of its competitors. The intent was to overcome the natural initial advantage AT&T possessed over its competitors following divestiture since all the LEC's were already connected to the AT&T Long Lines system. Also, it was believed that by severing any relationship between the LEC's and AT&T, there would be no incentive for the former to provide any more favorable connections to AT&T than to any of its competitors.³³³

Equal access was phased in over several years to allow LEC's time to upgrade their equipment to be able to accomplish this goal.³³⁴ Alternatively, customers—usually large businesses—could contract with competitive access providers (CAPS) that would connect the customer with the IXC of their choice or could enter a "special access" arrangement with the LEC whereby the customer is connected to the LEC's central facility via dedicated lines.³³⁵

In order to enhance competitive opportunity, the FCC also imposed collocation rules on Tier 1 LEC's—those with annual revenues of \$100 million or more from regulated telecommunications operations³³⁶—that required them to permit CAPs, IXC's, and others offering interstate service to lease space in their facilities. This saved the interstate service providers from the necessity of running lines from each customer to their own premises.³³⁷ The regulations required that collocation be either physical, where the interstate provider's equipment is located

on the LEC's facilities, or virtual, where the provider's equipment is physically located adjacent to the LEC facility. Virtual collocation connections must be both technically and economically comparable to physical collocation connections.³³⁸

Because the BOCs and the few independents provided basic phone service on an exclusive basis and therefore controlled the lines, for other companies to be able to provide so-called "enhanced" services, like voice-messaging, information, on-line and other services, required access to the local phone lines. The Commission therefore set up the Open Network Architecture (ONA) framework whereby such enhanced service providers (ESP) could receive access to the basic telephone service necessary to provide their enhanced services, such as switching, signaling, and billing.³³⁹ Accordingly, subject to FCC and state regulatory oversight, BOCs were to provide basic services to ESPs on an equal basis and for the same tariffs as they provided such services to their own enhanced services. Any basic service they provided to their own enhanced services had to be made available to other ESPs, and they were required to respond promptly to requests from ESPs for new or different basic services to match their needs.³⁴⁰ Moreover, accounting rules requiring separation of regulated from nonregulated services apply to prevent cross-subsidization.³⁴¹

b. The Telecommunications Act of 1996

The 1996 Act inserts a new section 251 into the 1934 Act that imposes an interconnection requirement on all telecommunications carriers. Telecommunications carriers are defined broadly, as any provider of telecommunication services.³⁴² All such carriers are required to "interconnect directly or indirectly with the facilities and equipment of other telecommunications carriers" and to refrain from installing any network features and functions that fail to comply with the requirements of new sections 255 and 256.³⁴³

The 1996 Act imposes special duties on LECs, both incumbents³⁴⁴ and new entrants: (1) LECs may not prohibit resale of their services, (2) they must provide telephone number portability, (3) they must provide dialing parity, (4) they must allow access to rights-of-way and other pathway points consistent with section 224 of the 1934 Act, and (5) they must set up reciprocal compensation arrangements with other carriers.³⁴⁵

Incumbent LECs incur further duties that require them: to enter into agreements with other carriers in good faith, to provide interconnection to other carriers on the same terms and conditions they provide them internally,³⁴⁶ to offer access on an unbundled basis, to sell to telecommunications carriers at wholesale rates the telecommunications services provided at retail to subscribers, to provide reasonable public notice of network changes, and to provide physical collocation, or virtual collocation if the former is not practical.³⁴⁷ Exemptions are available from some duties for rural telephone companies and other small LECs.³⁴⁸

Incumbent LECs are also required to make public switched-network infrastructure, technology, information, and telecommunications facilities and functions available to qualifying carriers such as are necessary for providing telecommunications services or access to information services.³⁴⁹ However, regulations implementing this requirement may not force LECs to take action that is economically unreasonable or that is contrary to the public interest.³⁵⁰ Moreover, the section permits but does not require joint ownership of public switched network infrastructure and services by or among LECs and qualifying telecommunications carriers.³⁵¹

Agreements for interconnection must be negotiated in good faith and must be submitted to the relevant state commission for approval.³⁵² The state commission shall act as arbitrator for the resolution of differences in negotiations and for compulsory arbitration.³⁵³ The FCC may step in where the state commission fails to fulfill its obligations in this regard.³⁵⁴

3. Comparison and Conclusions

Essentially, both the German and U.S. systems aim for the same goals: that all telecommunications equipment

and services be interconnected and that incumbent monopolies provide competitors with access to their services on the same terms as they do to themselves. Not surprisingly, both the German and U.S. systems have very similar rules to these ends.

In the *TKG*, while all providers must set up their systems to be able to interconnect with all others, the requirement that competitors be able to use an existing network applies to market dominant providers, in this case *Telekom*. Similarly, the pre-1996 Act system in the United States provided that all LECs were obliged to offer access on equal terms to all competitors who supplied telecommunications service other than basic local service, for which the LECs held a monopoly. Now, the 1996 Act provides the same requirement as the *TKG*: that all telecommunications carriers interconnect with all others.

In the *TKG*, "market dominant provider" basically refers to *Telekom* given the present state of the industry, but the concept is rather open, at least theoretically leaving open the possibility that another provider could take *Telekom*'s place. By contrast, the 1996 Act's special rules concerning competition in the local markets refers to the "incumbent" LECs. Accordingly, the 1996 Act seems less concerned with the possibility of new entrants becoming dominant in the local exchange market.

E. Rights-of-Way

Utilities in general, like gas, water, and electricity providers, must supply their product to consumers. This involves a complex system of networks carrying each item across long distances to its final destination. Supply lines often must cross federal, state, municipal and private land. The rights to use of paths must be obtained in a fair manner that offers equal access for all market participants.

Establishing and maintaining a network's right of way system is an enormous undertaking. In the last 15 years in the United States, IXCs have spent many billions of dollars building, maintaining, and upgrading their networks, including building and upgrading networks, obtaining local zoning approvals and waivers, and obtaining access to rights-of-way.³⁵⁵

1. Germany

a. The Law Leading to the TKG

Telekom's access to public traffic paths for the purposes of laying its telecommunications lines is authorized in section 1 of the Telegraph Route Law.³⁵⁶ It may not be charged for its access and does not require further authorization from municipalities for its access. Private telecommunications providers-those setting up alternative infrastructures-must enter into individual contracts with municipalities and other public entities concerning access and charges. Accordingly, *Telekom* enjoys a substantial advantage at this time over other telecommunications enterprises,³⁵⁷ though, as discussed below, this will change once other enterprises obtain the right to establish networks.

Current law governing *Telekom* access to private property for purposes of laying and maintaining its network is governed by private law and consists of contractual relationships between the various parties. Here, both *Telekom* and fully private enterprises are on the same footing.

Similarly, both private users and *Telekom* must enter into individual contracts with the federal government, the states, and municipalities concerning concurrent use of pre-existing paths, such as tunnels and pipes, for telecommunications lines that are owned by the public entity.³⁵⁸

b. The TKG

The *TKG* bestows on the federal government authorization to use public trafficways for telecommunications lines that are for public purposes. This authority is necessary to ensure the provision of full coverage of telecommunications services in accordance with the requirements of article 87(f) of the German Constitution.³⁵⁹

The government may not be charged for this use so long as it does not constitute a lasting encroachment on the normal use of the infrastructure.³⁶⁰ In order that all enterprises engaged in providing telecommunications networks may compete on an equal footing, the federal government transfers this right to all telecommunications license holders.³⁶¹ Telecommunications lines, however, must be laid in such a manner that they comply with existing safety laws, public policy, and technical requirements. The laying of new lines or the alteration of pre-existing lines requires agreement of the authority responsible for constructing and maintaining public ways [*Trager der Wegebau*].³⁶² Approval of an application to lay or alter lines may only be withheld on technical grounds.³⁶³

Where lines are laid above ground, the interests of the license holder, the infrastructure maintainer, and the city planning authorities must all be balanced.³⁶⁴ Some conflicts may arise between municipal authorities seeking to limit construction in their areas and those establishing telecommunications networks because the balancing of interests requirement does

not apply to the laying of underground cables.³⁶⁵ Those seeking to lay telecommunications lines may be required to satisfy technical requirements, but such requirements must be applied in a nondiscriminatory manner.³⁶⁶

In cases where a licenseholder is the entity responsible for maintaining the public way, or if one of the two holds an ownership stake of 25 percent or more of the other,³⁶⁷ then, for purposes of providing approval, the NRA stands in for the latter entity where another licenseholder seeks to make use of that pathway.³⁶⁸ In cases where an entity has a right under section 50 to utilize traffic infrastructure, but where added construction or alteration of existing networks are either impossible or prohibitively expensive, then the entity has a right to demand that the existing network tolerate concurrent use of its pathway. This is only possible where the concurrent use is reasonable and does not require the pathway owner to perform additional construction on the path. Reasonable charges for concurrent use may be demanded.³⁶⁹ The intent of this section is that decisions regarding establishing independent lines versus making use of pre-existing lines should be market driven; where additional construction is wastefully expensive, parties should reach agreements for concurrent use.³⁷⁰

Those using traffic infrastructure must avoid interference with infrastructure maintenance and must minimize their encroachment on the primary purpose of the infrastructure. Where use increases maintenance costs, then the user must pay those additional costs. Moreover, a user performing construction work must return the infrastructure to proper working order as quickly as possible, unless the entity responsible for maintaining the infrastructure chooses to repair the path itself. The user must pay for any additional costs imposed on the path maintainer and must pay for any damages caused to an existing telecommunications line.³⁷¹

A telecommunications line must be altered or removed when it substantially encroaches upon the use of the traffic infrastructure, or when the path's purposes are impaired. When traffic infrastructure is removed the authorization to use the path for telecommunications purposes expires.³⁷²

One who constructs a telecommunications line must avoid creating difficulties for those who hold pre-existing special installations, those "serving to maintain public ways, canalisation, water and gas lines, tracks, electrical installations, and the like."³⁷³ The telecommunications provider must pay any additional costs its line incurs upon pre-existing installation operators' pathways. The license holder may only demand that a special installation operator make changes to existing lines where the telecommunications line otherwise could not be established and where the purposes of the original installation may still be fulfilled. However, where establishing the telecommunication lines would subject the special installation operator to unreasonably high costs, the line may not be established.³⁷⁴ Conversely, where special installations are established after a telecommunications line is put in, they must be established in such a way so as not to disturb the telecommunications line.³⁷⁵ However, where a telecommunications line precedes establishment of a special installation that is in the public interest, particularly for economic or traffic purposes, the telecommunications user must pay the costs for any

necessary alterations to or removal of its own lines.³⁷⁶ The telecommunications line operator must also bear its own costs where the construction of a special installation requires protective upgrades to the telecommunications line.³⁷⁷ Where an existing telecommunications line serves areas other than the local region, it may only be removed (based on special installation needs) when it can be moved to another location without incurring disproportionately high costs.³⁷⁸

Where an entity holding the burden of maintaining traffic infrastructure transfers its rights to a third party that has no such burden, the transferring entity must reimburse a telecommunications user for the added costs involved, including changes to and added protection to the line.³⁷⁹ Where an existing telecommunications line is disturbed by the later addition of a special installation that is not designated as being in the public interest, the telecommunications provider is entitled to reimbursement for the costs incurred.³⁸⁰

An owner of property that is not a public trafficway may not block the use of, construction of, or improvements to telecommunications lines where the property is already used for telecommunications purposes or where the added use does not or only immaterially impedes the use of the property on a short-term basis.³⁸¹ However, the landowner may demand pecuniary compensation for costs involved in the use of the property and loss of income derived therefrom, where such costs and losses exceed that which would normally be associated with the operation of the telecommunications line. Moreover, for ongoing use of the property for telecommunications purposes, where the property was not previously used for telecommunications purposes, non-recurring pecuniary compensation is available.³⁸² This paragraph is intended to assist new private telecommunications enterprises in competing with public utilities who already possess rights-of-way upon which they could lay their own cable. It is believed that because public utilities had previously obtained cost-free rights to lay cable across private land, new entrants would be unfairly disadvantaged if they were required to pay market rates for the same privilege.³⁸³ Such an imbalance would inhibit competition. Claims arising concerning rights-of-way have a limitations period of two years, beginning at the end of the year in which the claim arises.³⁸⁴

2. The United States

a. The Law Leading to the Telecommunications Act of 1996

While the federal government holds considerable authority under the 1934 Act, the states may also regulate and control telecommunications entities. Moreover, a state may delegate this power to cities and other political subdivisions and properly constituted boards or commissions.³⁸⁵

The 1934 Act, as modified by the Pole Attachment Act, grants to the FCC power to regulate pole attachments by utilities. However, in practice, issues concerning rights are predominantly played out at the state and local level.³⁸⁶ The federal government may grant franchises, and a state may not interfere with such a franchise, though states and municipalities have the right to receive compensation for use.³⁸⁷

State regulation of rights-of-way varies among the fifty states. By way of example, again, California law is examined. In California, the holder of a state franchise to operate a telephone company is entitled to construct its lines along and upon public roads and highways, along or across waters or land within the state, and to erect poles and other devices for supporting its lines as necessary, so long as such does not interfere with the use of the streets, waters, or land.³⁸⁸ The right to use public streets and other places entails a commensurate obligation to provide adequate service in the area served. This includes an obligation to extend service to newly developed areas in response to demand.³⁸⁹ Moreover, like all utilities, telephone service providers must provide services and maintain facilities so as to promote safety and the convenience of patrons, employees, and the public.³⁹⁰

The holder of a state franchise to use streets and other public places for telephone services need not also obtain a franchise from local authorities. However, the holder may not exercise its franchise rights in such a way as to

unreasonably encroach on the use of the streets or other public places. Moreover, a telephone company is subject to an implied obligation to bear the costs of relocating its facilities based upon a proper governmental use of the streets.³⁹¹

A telephone company right-of-way over private land is usually characterized as an easement appurtenant to the land, absent another agreement by the parties. Moreover, the company has the right to condemn any property necessary for construction and maintenance of telephone lines.³⁹² With these rights comes the commensurate duties to repair and maintain the lines.

b. The Telecommunications Act of 1996

The 1996 Act's treatment of rights-of-way is sparse. It amends section 224 of the 1934 Act which regulates "pole attachments," defined as "any attachment by a cable television system or provider of telecommunications service to a pole, duct, conduit, or right-of-way owned or controlled by a utility."³⁹³ Parties may negotiate rates, terms, and conditions for attachments to poles, ducts, conduits, and rights-of-way. For cases where the parties cannot reach agreement to ensure that utilities charge just, reasonable, and nondiscriminatory rates for pole attachments, the FCC is to prescribe regulations to govern charges for pole attachments necessary for the provision of telecommunications services.³⁹⁴

3. Comparison and Conclusions

A fundamental issue underlying rights-of-way questions is who shall pay for the installation, maintenance, and related costs associated with laying telecommunications lines on public rights-of-way. Should all community members bear such costs, or only those actually using a particular line or service? Given universal service, interconnection, emergency services communications access, and other generalized requirements, it is not always possible to clearly distinguish between those who do and do not make use of available telecommunications services and networks.

To ensure a truly competitive market requires attention to the differences between those entities possessing pre-existing lines and those that would lay new lines. In Germany, *Telekom* has had the benefit of free access to public rights-of-way for its lines, as have the rail system and the energy providers who are emerging as primary competitors to *Telekom*. By contrast, new entrants do not have the benefit of pre-existing lines. Accordingly, the *TKG* provides to new entrants cost-free access to public traffic ways to the extent that the lines do not encroach upon normal use of the infrastructure. Moreover, both the *TKG* and the 1996 Act seek to avoid wasteful duplication by establishing mechanisms by which regulators may facilitate agreements between parties for concurrent use of existing pathways.

With regard to access to private land, the issue becomes more complex in both the United States and Germany as the telecommunications market moves from a publicly operated or sanctioned utility model to a private model. In both countries, the telephone companies have had access to private land, with or without compensation in different circumstances, for their operations. However, arguments for special treatment vis-à-vis private land have lost force: Why should a private, profit-driven telecommunications company have any more claim to the use of Mrs. Smith's or Herr Schmidt's land than, say, the neighboring supermarket that desires to expand its parking lot to attract more customers? The community's interest in benefits such as availability of universal service, interconnection of telecommunications networks, and emergency services communications access provide a basis for some degree of special treatment. And again, there is the need to provide new market entrants with similar opportunities as those possessed by pre-existing telecommunications entities.

The *TKG* approach seeks to balance between private property ownership interests and telecommunications enterprise access to land. The *TKG* provides telecommunications companies guaranteed access to private land only to the extent that use would have no substantial impact on the use of the private land, or where the land is already used for telecommunications purposes.³⁹⁵ However, this access to private land may meet constitutional

challenges based on private property ownership rights and "substantial impact" has yet to be defined in practice.

At least in theory, there should be less of a need for laying of new lines for competition in the United States than in Germany because the prime competitors to incumbent LECs are expected to be the cable television companies: multiple long-distance networks have been in place for years and the vast majority of homes in the United States are already connected to cable TV lines. More modern cable connections laid in anticipation of eventual competition in local telephony should already be relatively ready to be used to provide alternate service by cable companies. However, given various technical difficulties, and the age of some existing cable lines, access to alternative local service providers will not come quickly or cheaply in all regions.³⁹⁷

IV. Conclusion

The opening of local service to competition in the United States represents a major upheaval in the market—particularly with the entry of cable television companies into telecommunications service provision and vice-versa. However, the truly radical change is to take place in Germany, where virtually the entire system will be transformed at the stroke of midnight on December 31, 1997. With an estimated \$80 billion at stake in the German telecommunications market by the year 2000, and given the dramatic liberalization taking place in that market, companies from around the world have been positioning themselves to most effectively compete in Germany in 1998 and on into the twenty-first century. Of course, the full practical effects of this radical change will not be felt from one day to the next. It will take considerable time for new networks to be established and, as importantly, for consumers to become aware of and try these networks and to enjoy the benefits of a competitive environment.

German regulators must also come to terms with a completely new role: Overseeing a competitive market consisting of a broad array of telecommunications service providers. This is in sharp contrast to its current role of overseeing *Telekom* and a few other providers, and to its prior role of both regulating and operating the entire system.

Both the *TKG* and the 1996 Act are responses to international and domestic political and market pressures toward greater liberalization of telecommunications markets. Accordingly, for all the differences between the existing systems in each country, it is not surprising that the intended results of each law are very similar. However, because of the substantial differences between the existing systems, "full competition" in each market will undoubtedly take different forms. The challenge facing both regulators and market participants is to anticipate and to adapt to those different forms.

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1. Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 47 U.S.C.).

2. *See German Government Tries to Keep Telecoms Legislation on Track*, *Telecom Markets*, Apr. 25, 1996, available in 1996 WL 8688041.

3. *Telekommunikationsgesetz (TKG)*, v. 1.8.1996 (BGBl. I S.1120) (F.R.G.). The TKG, in German and in English, is posted on the World Wide Web at the German Federal Ministry for Posts and Telecommunications' web site: <<http://www.bundesregierung.de/bin/lay/inland/ministerien/post/tkg.html>>. Unless otherwise noted, English quotations of the TKG are taken from the ATelecommunications "ct Translation" by the German Federal Ministry of Posts and Telecommunications. Comparisons of wording between drafts are to the

following: the "June Draft" (Draft from June 5, 1996), contained in BT-Drucksache 13/3609; the "January Draft" (Draft from Jan. 30, 1996), available on the Internet at <http://userpage.fu-berlin.de/-stern89/politik/tkg_1.html>; and the "Original Draft" that the Chancellor sent to the Parliament on Feb. 9, 1996, which is contained in Bundesrat, Entwurf eines Telekommunikationsgesetz (TKG), Gesetzentwurf der Bundesregierung, Drucksache 80/96, [Draft of a Telecommunications Act, Bill of the Federal Government, Circular 80/96] (09.02.96) also available on the Internet at <<http://www.fu-berlin.de/POLWISS/mdb-projekt/tauss/dokumente/telekom.html>>. A Legislative Report [*Begründung*] was published along with the Original Draft of the TKG [hereinafter *TKG* Legislative Report].

4. For discussion of natural monopoly in telecommunications and changes in thinking, see, for example, Harald Sondhof & Michael

Theurer, *Wettbewerb in den lokalen Fernmeldemärkten* [*Competition in Local Telecommunications Markets*], *Wirtschaft und Wettbewerb* (WuW), Mar. 1996, at 177, 179. For discussion of national security concerns, see, for example, Steve Coll, *The Deal of the Century: The Break Up of AT&T* 186B87, 271B72 (1986) (describing Secretary of Defense Caspar Weinberger's national security objections to the AT&T breakup); Steven Gliberman, *Foreign Ownership in Telecommunications*, 19 *Telecomm. Pol'y* 21, 22 (1995) (citing Canadian national security arguments against leaving control over telecommunications to "the rigors of the market").

5. See, e.g., Ghanther Knieps, *Die Telekommunikation als Gegenstand der Industriepolitik in Europa, den USA und Japan aus wirtschaftswissenschaftlicher Sicht* [*Telecommunications as a Subject of Industrial Policy in Europe, the USA, and Japan from an Economic View*], in *Kommunikation ohne Monopole II* [*Communications without Monopolies*] 239, 252 (Ernst-Joachim Mestmacker ed., 1995) (arguing that European monopolies that are protected from competition will not be efficient, leading to a poor competitive position that disadvantages national equipment manufacturers); Bernard Amory, *Telecommunications in the European Communities*, *Europäisches Zeitschrift für Wirtschaftsrecht* (EuZW Heft) [*European Journal of Economic Law*], Feb. 1992, at 75 (arguing that threat of rapidly developing United States and Japanese telecommunications industries, resulting from liberalization, spurred the EC to act); 2 Alfred Eidenmüller, *Kommentar, Post- und Fernmeldewesen* [*Mail and Telecommunications*] 26 (1991) (liberalization in other western countries pushed Germany's deregulation); *Teleconglomeration: Why Governments Should let Foreign Telecoms Giants into their own Backyards*, *Economist*, Apr. 6, 1996, at 18; *EU Telecom Ministers Take Steps Toward European Telecom Deregulation*, Reuters Textline, Agence Europe (German Language Full Text), Mar. 22, 1996, available in LEXIS, Legnews Library, Curnews File (reporting EU Commission spokesman's observation that countries with more liberalized telecom sectors have seen tremendous growth in private-sector telecom jobs and overall benefits to consumers).

6. Eidenmüller, *supra* note 5, at 26. For discussion of the effects of deregulation and liberalization in the telecommunications markets, see, for example, Jill Hills, *Deregulating Telecoms* 203B06 (1986) (arguing that deregulation has worked to the benefit of big business and to the detriment of consumers).

7. Christoph Hiltl & Klaus Großmann, *Grundfragen des Neuen Deutschen Telekommunikationsrechts* [*Basic Questions of the New German Telecommunications Law*], *Zeitschrift für Recht und Wirtschaft* [*Journal for Law and Economy*], Jan. 25, 1996, at 169.

8. Reinhard Ellger & Thomas-Sonke Kluth, *Das Wirtschaftsrecht der Internationalen Telekommunikation in der Bundesrepublik Deutschland* [*Economic Law of International Telecommunications in the Federal Republic of Germany*] 239B40 (1992).

9. Michael Kellogg et al., *Federal Communications Law* § 1.11 (1992).

10. This in particular is a major issue in the United States, as can be seen from its significant treatment in the 1996 Act. See 47 U.S.C.A. §§ 250B60 (West Supp. 1996). The legal status of cable television in Germany and its relationship to the telephone service market remains extremely murky and the subject of considerable debate at this time.

11. See *infra* Part II.B.2.

12. For example, because of issues such as how to treat civil servants who work for the postal service, there was considerable debate over whether to modernize the telecommunications system on a British private or French public model. Martin Bullinger, *Organisationsformen und Staatsaufsicht in der Telekommunikation* [*Forms of Organization and State Control In Telecommunications*], in *Kommunikation ohne Monopole II*, *supra* note 5, at 349, 353.

13. Grundgesetz [Constitution] [GG] art. 87(f) (superseded version) (F.R.G.); Bullinger, *supra* note 12, at 349, 350.

14. For example, the contents of the EC's Green Book on Telecommunications figured prominently in the debates preceding passage of Post Reform I. Gudula Deipenbrock, *Die Deutsche Bundespost auf dem Europäischen Binnenmarkt* [The German Federal Postal System in the European Home Market] 43 (1991).

The European Union became effective in November of 1993 pursuant to the terms of the Maastricht Treaty. Delegation of the European Commission, Office of Press and Public Affairs, *The European Union* (1996).

15. Treaty Establishing the European Community, Feb. 7, 1992, O.J. (C224) 1 (1992), [1992] 1 C.M.L.R. 573, 629 (1992) [hereinafter EEC Treaty].

16. Nicholas Higham & Leonie Gordon, *EC Telecommunications Law* § 1.21 (1994). *See* *Towards a Dynamic European Economy: Green Paper on the development of the common market for telecommunications services and equipment*, COM(87)290 final at A7.9(2) [hereinafter Green Paper] (Articles 85, 86, and 90 lead the list of Treaty provisions that are relevant for reform of telecommunications markets).

17. GG art. 85 § 1 (F.R.G.).

18. Brigitte Haar, *Marktoffnung in der Telekommunikation durch Normen gegen Wettbewerbsbeschränkungen* [*Opening Telecommunications Markets Through Norms Against Restraints of Competition*], in *Kommunikation ohne Monopole II*, *supra* note 5, at 527, 555B56.

19. *Id.* at 555.

20. Application of EEC Competition Rules in the Telecommunications Sector, Guidelines. 91/C233/02, para 15. However, these are not binding on the Commission. Higham & Gordon, *supra* note 16, § 7.17.

21. *Id.* §§ 2.2B2.3.

22. *Id.* § 2.4.

23. *See* Green Paper, *supra* note 16.

24. *Id.*

25. Commission Directive 90/388 of 28 June 1990 on competition in the markets for telecommunications services, 1990 O.J. (L 192) 10.

Directives are issued by the Council and the Commission and are addressed to Member States who are themselves responsible for individually achieving the result intended. EEC Treaty art. 189(3). Accordingly, there is some flexibility in how each Member State may implement the Directive. D. Lasok & J.W. Bridge, *Law and Institutions of the European Communities* 122 (6th ed. 1993). Each Directive sets out a deadline by which the Member States must implement its goals. Should a country fail to implement a Directive, in principal, the directive could automatically become law in the country upon expiration of the deadline. Higham & Gordon, *supra* note 16, § 1.55.

26. Communication by the Commission to the European Parliament and the Council on the status and implementation of Directive 90/388/EEC on competition in the markets for telecommunications services, 1995 O.J. (C 275) 2.
27. Commission Directive 90/387 on establishment of open network provisions, 1990 O.J. (L 192) 10.
28. See Commission Directive 90/388, art. 2. While article 2 has subsequently been completely rewritten, the basic purpose and general effect remains. See Commission Directive 96/19 of 13 March 1996 amending Directive 90/388 with regard to the implementation of full competition in telecommunications markets, 1996 O.J. (L 74) at 21B22.
29. Commission Directive 96/19 of 13 March 1996 amending Directive 90/388 with regard to the implementation of full competition in telecommunications markets, 1996 O.J. (L 74) at 21. This directive added new article 2(2). States with less developed networks (defined as Spain, Ireland, Greece, and Portugal) are allowed up to five additional years to comply. Small states (Luxembourg) may be allowed up to two additional years to comply. Communication by the Commission, 1995 O.J. (C 275) 2 n.6.
30. Higham & Gordon, *supra* note 16, § 3.35.
31. Commission Directive 90/388, art. 2, cl. 6.
32. Commission Directive 90/388, art. 3, cl. 1.
33. 1997th Council Meeting-Telecommunications-Brussels, RAPID, Mar. 6, 1997, available in LEXIS, Eurcom Library, RAPID File. The proposed directive will replace EP and Council Directive 95/62/EC. The draft text is available on the EU's web site at <<http://europa.eu.int/en/comm/opoce/395/r3513.html>>.
34. GG art. 87 I.1 (F.R.G.).
35. Klaus W. Riehmer, *Organisation und Regulierung der Telekommunikation in Deutschland [Organization and Regulation of Telecommunications in Germany]*, in *Kommunikation Ohne Monopole II*, *supra* note 5, at 369, 374.
36. Eidenmüller, *supra* note 5, at 5.
37. *Id.* at 29.
38. Gesetz zur Neustrukturierung des Post- und Fernmeldewesens und der Deutschen Bundespost [Law on Restructuring the Postal and Telecommunications Services and the Federal Postal System] (PostStruktG), v. 8.6.1989 (BGBl. I S.1026) (F.R.G.).
39. Brigitte Haar, *Marktoffnung in der Telekommunikation [Opening Markets in Telecommunications]* 290 (1995) (citing *Bundesminister fhr das Post und Fernmeldewesen: Reform des Post und Fernmeldewesens [Federal Minister for the Postal Service and Telecommunications: Reforming the Postal Service and Telecommunications]* p. 4).
40. *Id.* at 287.
41. Riehmer, *supra* note 35, at 370.
42. PostStruktG § 65 (III); Postverfassungsgesetz (PostVerfG), § 9 I 1, v. 8.6.1989 (BGBl. I S.1026); Gesetz über Fernmeldeanlagen (FAG) [Law on Telecommunications Equipment] § 8 v. 3.7.1989 (BGBl. I S.1455); Riehmer, *supra* note 35, at 369, 381.
43. See Haar, *supra* note 39, at 290.

44. *See id.* at 305.

45. *Id.* at 306; PostVerfG § 37, sentence 1.

46. Gesetz zur Neuordnung des Postwesens und der Telekommunikation: Postneuordnungsgesetz [Law on Restructuring the Postal Services and Telecommunications] (PTNeuOG), 27.6.1994 (BGBl. I S.2325).

47. Haar, *supra* note 39, at 314. A former high official of the Bundespost is quoted as saying, "You must be a lunatic to think that the German communications industry could successfully compete with American industry internationally." Ernst-Joachim Mestmacker, *Competing Goals of National Telecommunications Policies, in The Law and Economics of Transborder Telecommunications*, at 13, 23 (Mestmacker ed., 1987).

48. Art. 3 PTNeuOG, Gesetz zur Umwandlung der Unternehmen der Deutschen Bundespost in die Rechtsform der Aktiengesellschaft [Law on Converting the Businesses of the German Federal Postal System to Joint Stock Companies] (Postumwandlungsgesetz: PostUmwG). *See* Haar, *supra* note 39, at 287.

49. Post Reform II amended article 87(f) sentence 1 of the German constitution. Now, rather than both guaranteeing and providing adequate service that is broadly available (*flachendekend angemessene und ausreichende Dienstleistungen*), the federal government is merely required to guarantee that such are available. Haar, *supra* note 39, at 314.

50. Gesetz über das Postwesen (BAPostG) § 1 v. 3.7.1989 (BGBl. I S.1449).

51. Axel Kammholz, *Bundeskartellamt, Das Bundeskartellamt als Regulierer? [The Federal Cartel Office as Regulator?]*, in Vortrag im Rahmen der Euroforum-Konferenz: Telecommarkt Deutschland vor der Lizenzvergabe [Speech at the Euroforum Conference: The German Telecommunications Market Before the Awarding of Licenses] [hereinafter Speech at Euroforum Conference] § 12, p. 18 (Feb. 26B28, 1996, Cologne, Germany).

52. The law will supersede the four earlier laws governing telecommunications in Germany, PRegG, FAG, PRegG, and TWG, which all expire on December 31, 1997, in accordance with the provisions of Post Reform II. TKG Legislative Report, *supra* note 3, at 33.

53. Hiltl & Großmann, *supra* note 7, at 169.

54. Kellogg et al., *supra* note 9, § 1.16.

55. *See* 47 U.S.C.A. § 153(26) (West Supp. 1996).

56. Alternative "bypass" systems exist, however, usually for businesses, like point-to-point microwave, DTS, etc. Stephen R. Barnett et al., *Law of International Telecommunications in the United States* 29B30 (1988). Eli M. Noam, *Private Local Networks: The Next Frontier of Competition in U.S. Telecommunications*, in *The Law and Economics of Transborder Telecommunications*, *supra* note 47, at 207.

57. Charles H. Kennedy, *An Introduction to U.S. Telecommunications Law* 3 (1994).

58. *Id.* at 55.

59. S. Rep. No. 104-230, at 1 (1996).

60. Alfred Haid & Jürgen Müller, *Telecommunications in the Federal Republic of Germany, in European Telecommunications Organizations* § 6.1.2.1 (James Foreman-Peck & Jürgen Müller eds., 1988).

61. Günther Pfeiffer & Bernhard Wieland, *Telecommunications in Germany* § 2.1.1 (1990).

62. Haid & Müller, *supra* note 60, § 6.1.2.1.

63. Riehmer, *supra* note 35, at 371.

64. There will remain some overlap in that the *BMPT* will continue to approve *Telekom* rates for the foreseeable future. *Id.* at 372.

65. *Id.* at 375.

66. Postverfassungsgesetz (PostVerfG) § 25, v. 8.6.1989 (BGBl. I S.1026).

67. Ellger & Kluth, *supra* note 8, at 61.

68. *Id.* at 62.

69. Gesetz über die Regulierung der Telekommunikation und des Postwesens [Law on Regulating the Postal Services and Telecommunications] (PTRegG) § 11, sentence 1, v. 14.9.1994 (BGBl. I S.2325).

70. *Id.* § 13, sentence (1).

71. *Id.* § 15, sentence (1).

72. Gesetz gegen Wettbewerbsbeschränkungen [Law on Restraints Against Competition] (GWB) v. 24.9.1980 (BGBl. I S.1761) [hereinafter Competition Law]; *see also* Ellger & Kluth, *supra* note 8, at 283.

73. Kammholz, *supra* note 51, at 4.

74. NRA is the term used in EC Directives referring to state telecommunications regulators.

75. Telekommunikationsgesetz (TKG) § 66, v. 1.8.1996 (BGBl. I S.1120).

76. Stellungnahme des Bundesrats: Entwurf eines Telekommunikationsgesetzes, Bundesrat, Drucksache 80/96 (Beschluss) [Opinion of the Bundesrat: Draft of a Telecommunications Law, Circular 80/96 (resolution)] (22.03.96) § 72 [hereinafter Bundesrat Opinion].

77. Jochen Schuster, *Die Wut der Jungen Wilden* [*The Rage of the Young Wild Ones*], Die Woche, Nov. 1, 1996, at 16.

78. TKG § 66(2).

79. Commentators had expressed concern with the original rules with regard to political control over the President and Vice-Presidents. The NRA is theoretically intended to be relatively independent of political forces, but some political control remains. *See, e.g.*, Kammholz, *supra* note 51, at 20.

80. TKG § 67(1). In its opinion, the *Bundesrat* had recommended the addition of an oversight council made up of representatives of each of the states. Because the states also carry political responsibility for satisfaction of constitutional norms, including the existence of telecommunications services, the *Bundesrat* considered it appropriate that the states have some say in how the NRA fulfills its duties. Bundesrat Opinion, *supra* note 76, § 73.

The *Bundesrat* is made up of representatives of each state. GG art. 51 (F.R.G.).

81. TKG § 69.

82. TKG Legislative Report, *supra* note 3, § 67.

83. TKG § 70.

84. *Id.* § 69(1). The law refers to "enterprises and groups of enterprises" [*Unternehmen und Vereinigungen von Unternehmen*] as subject to reporting requirements. The Competition Law is to define these terms. *TKG Legislative Report, supra* note 3, § 69.

85. *TKG* § 69(4). Firms may seek reimbursement for all costs where an inspection is illegal. *Id.* § 69(9).

86. *Id.* § 69(5).

87. *Id.* § 69(8).

88. *Id.* § 68. The potentially high fines are based on the expectancy that turnover rates will be high in the industry. *TKG Legislative Report, supra* note 3, § 93.

89. *TKG* § 96(2).

90. *TKG Legislative Report, supra* note 3, § 68.

91. *TKG* § 73(1). There is some concern that the decision-making of such bodies, particularly where they make decisions implicating competition law questions, could result in contradictory and perhaps improper decisions. *Kammholz, supra* note 51, at 22.

The *Bundesrat* sought to limit the authority of these Chambers to multi-party disputes. *Bundesrat Opinion, supra* note 76, § 75.

92. *TKG* § 73(1). The final version of the *TKG* represents a reduction in the scope of the Chambers' authority: the prior version had delegated all decisionmaking apart from communications secrecy, data security and safeguards, to the Chambers. January Draft, *supra* note 3, § 70(1).

93. *TKG* § 75(2).

94. *Id.* § 75(3).

95. *Id.* § 76(2).

96. *Id.* § 77(1).

97. *Id.* § 79(1).

98. *Id.* § 76(1).

99. *Id.* § 78.

100. The NRA has a strong interest in the immediate enforceability of its decisions. This is particularly true in conflicts between competitors where, given heavy capital investments, delay could financially harm a party. *Id.* § 80(2). *TKG Legislative Report, supra* note 3, § 77.

101. *TKG* § 81(1).

102. *Id.* § 81.

103. The Cartel Office would be responsible for resolving matters concerning market dominant positions and Competition Law matters generally, while the state cartel offices would remain responsible for local and regional cartel law questions. *Id.* § 82. The *Bundesrat* found the overlapping jurisdiction between the NRA and Cartel Office to be wasteful and pointless. *Bundesrat Opinion, supra* note 76, § 2. It sought to eliminate this problem by taking all market dominance questions out of the hands of the NRA and putting them in the hands of the appropriate federal or state cartel authorities.

104. TKG § 82.

105. *Id.* § 82.

106. *Id.* § 82.

107. For more thorough treatment of EC powers in this area, see, for example, Higham & Gordon, *supra* note 16, § 1.1; Joachim Scherer, *Telecommunications Laws in Europe* 1B5 (1993).

108. Ellger & Kluth, *supra* note 8, at 283.

109. EEC Treaty art. 100a(1).

110. *Business Transactions in Germany* § 2.06[3] (Dennis Campbell ed., 1995).

111. *Id.*

112. Kennedy, *supra* note 57, at xv.

113. *United States v. AT&T*, 461 F. Supp. 1314, 1349B50 (D.D.C. 1974) (citation and emphasis omitted).

114. *See, e.g., Kellogg et al., supra* note 9, § 2.7 (discussing difficulties of dividing federal versus state jurisdiction based on the 1934 Act).

115. Richard E. Nohe, *A Different Time, a Different Place: Breaking up Telephone Companies in the United States and Japan*, 48 Fed. Comm. L.J. 307, 313 (1996).

116. Communications Act of 1934, ch. 652, 48 Stat. 1064 (codified as amended at 47 U.S.C. § 152(a)B(b) (1995)).

117. Walter Saprnov, *A Primer on Telecommunications Law and Regulation*, in *Telecommunications and the Law* 1, 5 (Sapranov ed., 1988).

118. *See Kennedy, supra* note 57, at 43.

119. 47 U.S.C. § 151 (1995). For further discussion of the FCC's authority and activities, see Barnett et al., *supra* note 56, at 19.

120. *See, e.g., Kellogg et al., supra* note 9, §§ 1.1B1.7 (describing development of the industry).

121. 552 F. Supp. 131 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983).

122. The 1996 Act refers to the MFJ as the "AT&T Consent Decree." H.R. Conf. Rep. 104-458, at 198.

123. Kellogg et al., *supra* note 9, § 4.4.

124. Kennedy, *supra* note 57, at 50B51. *See id.* at 52B54, for a practical explanation of the specific decree restrictions that apply to BOC operations.

125. Kellogg et al., *supra* note 9, § 4.6 (citations omitted).

126. Saprnov, *supra* note 117, at 21.

127. *Telekom befürchtet gberregulierung auf dem Weg in den Wettbewerb [Telecom Fears Overregulation on the Road to Competition]*, *Frankfurter Allgemeine Zeitung*, Mar. 13, 1996, at 19.

128. *Id.*
129. *Id.*
130. Telekommunikationsgesetz (TKG) § 1, v. 1.8.1996 (BGBl.I S.1120).
131. *Id.* § 2(2).
132. Part III of the Original Draft was entitled Regulation of Market Dominant Providers, although individual rules concerning market dominance were also scattered throughout. With the June Draft this section was retitled as "Regulation of Remuneration" [*Entgeltregulierung*]. See June Draft § 22, *supra* note 3.
133. Pfeiffer & Wieland, *supra* note 61, at 22B23.
134. Riehmer, *supra* note 35, at 385.
135. See Hiltl & Großmann, *supra* note 7, at 172. See also, *Germany to U.S.: Join the Telecom Party in 1998*, Telecomm. News, Apr. 10, 1995 (on file with author) (reporting German Federal Minister of Posts and Telecommunications Wolfgang Boetsch's challenge to the U.S. to open its telecommunications markets to foreign companies to the same degree that Germany is opening its markets).
136. TKG Legislative Report, *supra* note 3, at 33.
137. Hiltl & Großmann, *supra* note 7, at 170.
138. TKG Legislative Report, *supra* note 3, at 34.
139. *Id.*
140. Telekommunikationsgesetz (TKG) § 8(2), v. 1.8.1996 (BGBl. I S.1120) (referring to section 2(2)). This specific direction was added in the final version of the law. Compare *id.* § 8(2) with June Draft, *supra* note 3, § 8(2).
141. TKG § 2(2).
142. *Id.* § 8(2).
143. *Id.* § 6(1).
144. *Id.* § 6(3).
145. TKG Legislative Report, *supra* note 3, § 6.
146. TKG § 6(2). It is assumed that the operation of a transmission path that is used by third parties is a public telecommunications service. *Id.* § 6(3).
147. *Id.* § 13(1).
148. *Id.* § 8(1).
149. TKG Legislative Report, *supra* note 3, § 8. The *Bundesrat* sought to provide that the granting of Class 4 licenses (voice telephony) be made explicitly with broad-based coverage in mind—in other words, to avoid cherry picking. *Bundesrat Opinion*, *supra* note 76, § 16. The TKG directs that licenses be granted with the explicit overall goal of providing affordable universal service to both rural and urban customers. See *supra* note 140 (discussing section 8(2)).

150. TKG § 44(1).

151. *Id.* § 45.

152. *Id.* § 46(1).

153. *Id.* § 46(3).

154. *Id.* § 10.

155. *Id.* § 11(1).

156. *Id.* §§ 11(2), 11(5).

157. *Id.* § 11(3).

158. *Id.* § 11(3).

159. *Id.* § 11(4).

160. *Id.* § 11(4).

161. *Id.*

162. *Id.* § 11(5).

163. *Id.* § 11(6).

164. *Id.*

165. *Id.*

166. *Id.*

167. *Id.* § 16(1).

168. TKG § 16(1).

169. TKG Legislative Report, *supra* note 3, § 15.

170. TKG § 15(2).

171. TKG Legislative Report, *supra* note 3, § 8(1).

172. *Id.* § 8(2).

173. TKG §§ 8(2), 15.

174. *Id.* § 8(3). The legal requirements referred to in connection with reliability include the demands of European law, German telecommunications secrecy law, and data protection law. TKG Legislative Report, *supra* note 3, § 8(3).

175. Hiltl & Großmann, *supra* note 7, at 171.

176. TKG § 9(1) (referring to grounds for denial of license application in sections 8(3) and 11(3)).

177. *Id.* § 15.

178. In *Re MCI, Decision*, 18 F.C.C. 2d 953, 16 Rad. Reg. 2d (P & F) 1037 (1969), *reh'g denied, Memorandum Opinion and Order*, 21 F.C.C. 2d 190, 18 Rad. Reg. 2d (P & F) 226 (1970).

179. The Commission must approve construction of new lines and will only do so where it concludes they will serve the "public convenience and necessity." 47 U.S.C. § 214. *See Kellogg et al., supra* note 9, § 12.3.

180. *FCC v. RCA Comm., Inc.*, 346 U.S. 86, 90 (1953).

181. *Hawaiian Tel. Co. v. FCC*, 498 F.2d 771, 776 (D.C. Cir. 1974).

182. *RCA Comm., Inc.*, 346 U.S. at 91.

183. *Hawaiian Tel. Co.*, 498 F.2d at 776. *See also Kellogg et al., supra* note 9, § 12.4.

184. Cal. Const. art. XII, § 3.

185. 59 Cal. Jur. 3d *Telephones and Telegraphs* § 3 (1980).

186. *Id.*

187. *Id.*

188. Bundesrat Opinion, *supra* note 76, at 1.

189. Gerhard Hennemann, *Hhrden fhr Newcomer [Hurdles for Newcomers]*, *Shddeutsche Zeitung*, Dec. 12, 1996, *available in* LEXIS, News Library, SDZ File.

190. Germany explicitly wanted to exempt *Deutsche Telekom* from EC efforts to eliminate national restrictions in telecommunication services because of the desire that the phone system be able to use its long-distance revenues to expand the national network and to cross-subsidize local services. *Globerman, supra* note 4, at 22.

191. *Sondhof & Theurer, supra* note 4, at 181.

192. GG art. 87(f) (F.R.G.).

193. Gesetz hber Fernmeldeanlagen [Law on Telecommunications Equipment] (FAG) § 8 v. 3.7.1989 (BGBl. I S.1455).

194. *Haid & Mhller, supra* note 60, § 6.1.

195. Gesetz hber die Regulierung der Telekommunikation und des Postwesens [Law on Regulating the Postal Services and Telecommunications] (PTRegG) § 16, v. 14.9.1994 (BGBl. I S.2325). The TKG as of December 31, 1997, will supersede this law.

196. *Id.* § 2(2).

197. *European Parliament Draft Directive Moves EU Closer to Open Telecom Networks*, *Daily Report for Executives* (BNA) at 3 (Feb. 15, 1996) (Minister Bangemann stated that universal service did not "necessarily mean a public service, but rather that all EU citizens, wherever they may be, should have the same quality of service at an affordable price. It's a civil right to participate in the services offered by the information network- and a public service is not necessarily the best way of achieving that objective.').

198. *EU Telecom Ministers Take Steps Toward European Telecom Deregulation, supra* note 5, at 2.

199. *Telekommunikationsgesetz (TKG) § 17(2)*, v. 1.8.1996 (BGBl. I S.1120).

200. *Id.* § 17(1). The *Bundesrat* sought to remove "minimum" from the description and to keep the definition as broad as possible. *Bundesrat Opinion, supra* note 76, § 32.
201. TKG § 17(2).
202. *Id.* § 17(2). This sentence was added in the final version of the TKG. *Compare* TKG § 17(2) with June Draft, *supra* note 3, § 16(2).
203. TKG § 17(2).
204. TKG Legislative Report, *supra* note 3, at 34-35.
205. TKG § 17(1).
206. TKG Legislative Report, *supra* note 3, § 17.
207. TKG § 18(1). The January Draft required participation of providers with 5% or greater market participation. January Draft, *supra* note 3, § 17(1). The *Bundesrat* had suggested considering a figure lower than 5% in order to broaden participation. *Bundesrat Opinion, supra* note 76, § 37.
208. TKG § 18(2). *See infra* note 254 and accompanying text (discussing definition of a single company).
209. TKG § 19(2).
210. *Id.* § 19(3).
211. *Id.* § 19(4) (referring to the creation of a single company through linkage of companies within section 23 of the Competition Law).
212. *Id.* § 20(1).
213. *Id.* § 20(2). This could lead to a great deal of accounting problems as market participants may try to shift competitive costs into this area in order to get reimbursement. Raimund Schtz & Michael Esser-WelliJ, *Wettbewerb in der Telekommunikation? [Competition in Telecommunications?]*, AFP, Mar. 1995, at 580, 584.
214. TKG § 19(5).
215. *Id.* § 19(5).
216. *Id.* § 19(5).
217. *Id.* § 19(6).
218. *Id.* § 21(1).
219. *Id.* § 21(2).
220. *Id.* § 22(1).
221. Kellogg et al., *supra* note 9, § 1.3.1.
222. Rob Frieden, *Contamination of the Common Carrier Concept in Telecommunications*, Telecomm. Pol'y 685 (1996). Attempts by the FCC to establish "bright line" distinctions between basic common carrier functions and enhanced service functions which are not regulated failed. Instead, the FCC opted for safeguards involving accounting standards and a complaint process in place of structural separation and safeguards. *Id.* n.10.

223. *Id.* at 686.

224. 47 U.S.C. § 151 (1995).

225. 47 U.S.C. § 214(a) (1995).

226. Telephone subsidies to local service towards the end of keeping costs low is estimated at between \$17.5B-\$20 billion per year. Craig D. Dingwall, *The Last Mile: A Race for Local Telecommunications Competition Policy*, 48 Fed. Comm. L.J. 105, 120 (1995).

227. For example, a study showed that Pacific Bell charged \$8.35 per month for basic service, while its marginal costs were estimated to be \$22 per month for that service. The subsidization was provided by inflated interLATA toll charges, access charges, and yellow pages rates. Bhaskar Chakravorti & Yossef Spiegel, *The Political Economy of Entry Into Local Exchange Markets, in Quality and Reliability in Telecommunications Infrastructure* 43, at 44 (William Lehr ed., 1995).

228. See Peter K. Pitsch & David P. Teolis, *Price Reform & Universal Service: Not Mutually Exclusive*, Pub. Util. Rep., Mar. 15, 1996, at 29 (reporting that where rate restructuring took place in Illinois no statistically significant drop in household penetration rates took place).

However, adding competition in the local market reverses the business to residential subsidy. Because a small number of large business customers provide a LEC's greatest revenues, the LEC must offer significant cost savings as incentives to prevent the large customers from utilizing a bypass and thereby depriving the LEC of these revenues. Eli M. Noam, *supra* note 56, at 221.

229. Chakravorti & Spiegel, *supra* note 227, at 44.

230. 47 U.S.C.A. § 254(a)(1) (West Supp. 1996).

231. *Id.* § 254(b).

232. *Id.* § 254(i).

233. *Id.* § 254(c)(1). Apparently, too much flexibility may not be a good thing: House Telecommunications and Finance Subcommittee Chairman Jack Fields (R-Tex.) questioned FCC Chairman Reed Hundt regarding alleged FCC consideration of a plan to provide pagers to the homeless as a part of the FCC's implementation of the 1996 Act's universal service provisions. Chris McConnell, *FCC Grilled on New Role*, Brdcast. & Cable, Apr. 1, 1996, at 18 (reporting congressional interest in overhauling FCC).

234. 47 U.S.C.A. § 254(c)(1).

235. *Id.* § 254(d).

236. *Id.* § 214(e)(2).

237. *Id.* § 259(a).

238. *Id.* § 214(e)(4).

239. *Id.* § 214(e)(1).

240. *Id.* § 254(k).

241. *Id.* § 254(g).

242. *Id.* § 254(h).

243. *See, e.g., Bundesrat Opinion, supra* note 76, § 1.

244. Sondhof & Theurer, *supra* note 4, at 180.

245. Both AT&T and British Telecom have maintained their status as primary providers despite the passage of more than eleven years since the end of their monopolies. Kammholz, *supra* note 51, at 29.

246. Imposition of new telephone rates resulted in a major public uproar because of questions concerning the new rates. *Telekom* advertised the new rates as a substantial rate reduction because it reduced the basic cost of a basic telephone calling "unit" [*einheit*]. Controversy arose over whether or not, in combination with other changes in the rate calculation system, the overall result was a net increase or decrease in calling prices for consumers. *See, e.g., Postminister verlangt gberprhfung neuer Ortsgesprachsgebhhren [Minister for Postal Service Demands Review of New Local Call Rates]*, AP Worldstream-German, Jan. 4, 1996, available in LEXIS, News Library, APGRMN File.

All telephone calls in Germany are billed on the basis of how many units [*einheiten*] the customer uses. All calls use at least one unit-there is no flat rate for unlimited local calling. Customers pay DM 0,12 (approximately 8 cents) for each unit. Depending upon the time of day, each unit is of a different length. For example, one unit lasts four minutes if a customer calls the store across the street between 12:00 midnight and 5:00 a.m. (the least expensive calling period). By contrast, a unit would last only 45 seconds if the same call is placed between 9:00 a.m. and 12:00 noon (the most expensive calling period). The customer receives a bill indicating the number of units used during the month and pays DM 0,12 per unit. In contrast to U.S. telephone company bills, there is no list of telephone numbers called. Most German telephones have a unit counter that indicates the units as they are used during a telephone call and keeps a running total.

247. For discussion of EU law application, see Haar, *supra* note 18, 550B56.

248. *See EU's Council of Ministers reaches agreement on interconnection*, Telecom Markets, Mar. 28, 1996, available in 1996 WL 8687912 (reporting March 21, 1996 EU Council of Ministers for Telecommunications meeting). *See* Legislative resolution embodying Parliament's opinion on the proposal for a European Parliament and Council Directive on interconnection in telecommunications with regard to ensuring universal service and interoperability through application of the principles on open network provision (ONP), 1996 O.J. (C 65).

249. *See, e.g., Schuster, supra* note 77 (reporting the European Commission's involvement following competitor complaints that *Telekom* was abusing its market dominant position in offering customer rebates in 1996).

250. One estimate expects *Telekom* to maintain a 77.5% domestic market share in the year 2000. Kammholz, *supra* note 51, at 29.

251. However, it has the drawback of having to cope with pre-existing enormous debts and pension obligations and how to rid itself of its vastly excessive force of state workers who are entitled to keep their jobs. Haar, *supra* note 39, at 320.

252. *Telekom* is the third largest telecommunications provider in the world, after NTT and AT&T. Joachim Sondermann, *Dem Riesen Telekom stehen spannende Zeiten bevor [The Giant Telekom to Experience Exciting Times]*, AP Worldstream-German, Oct. 17, 1996, available in LEXIS, News Library, APGRMN File.

253. *Telekom befhrchtet gberregulierung auf dem Weg in den Wettbewerb, supra* note 127, at 19.

254. *See* Haar, *supra* note 18, at 528 (arguing that the U.S. experience shows that a functioning competitive market requires effective antitrust law regulating the structure of the market, and that mere individual legal protections are insufficient).

255. *See* Telekommunikationsgesetz (TKG) §§ 14, 19, 24, 25, 32, 33, 34, 35 v. 1.8.1996 (BGBl. I S.1120). Earlier

drafts considered using 25% market share as a trigger for market-dominant position, but the utility of such a bright-line definition was questionable. Alternatively, a definition that considered whether a market-participant controlled a choke-point for other users' access to networks might have been useful. Hiltl & Großmann, *supra* note 7, at 173, n.36.

A recent proposal to the EC in this area would use 25% market share as the point triggering a presumption of a market dominant position. *EU Telecom Ministers Take Steps Toward European Telecom Deregulation*, *supra* note 5, at 5. See Proposal for a European Parliament and Council Directive amending Council Directives 90/387 and 92/44 for the purpose of adaptation to a competitive environment in telecommunications, 96/C 62/04, No. C 62/C, Mar. 1, 1996.

256. I Business Transactions in Germany, *supra* note 110, at app. 3-16 to -17. The section continues:

(2) Furthermore, two or more enterprises shall be deemed to be market dominating insofar as, for factual reasons, substantial competition between them for a specific kind of goods or commercial services does not exist, either generally or in specific markets, and insofar as they in their entirety fulfill the conditions of subsection (1).

(3) It shall be presumed that

1. an enterprise is market dominating within the meaning of subsection (1) if it has a market share of at least one-third for a specific kind of goods or commercial services; this presumption shall not apply if the turnover proceeds of the enterprise during the last preceding business year amounted to less than 250 million Deutsche Marks;

2. the conditions specified in subsection (2) are fulfilled if, with respect to a specific kind of goods or commercial services,

a) three or fewer enterprises together have a market share of 50 percent or more; or

b) five or fewer enterprises together have a market share of two-thirds or more;

this presumption shall not apply insofar as enterprises are concerned whose turnover proceeds during the last preceding business year amounted to less than 100 million Deutsche Marks. § 23(1), sentences 2B10, shall apply analogously to the computation of market shares and turnover proceeds.

Id. at app. 3-17.

257. See *supra* note 132.

258. Bundesrat Opinion, *supra* note 76.

259. TKG § 23(1).

260. Kammholz, *supra* note 51, at 21.

261. See *supra* note 256 and accompanying text.

262. *But cf.* Alexander C. Larson, *Reforming Telecommunications Policy in Response to Entry into Local Exchange Markets*, 18 Hastings Comm. & Ent. L.J. 1, 21 (1995) (arguing that "leverage theory," whereby dominance in one market is used to assist in another market, is relatively discredited in antitrust theory).

263. See *supra* Part III.B.1.b.

264. Telekommunikationsgesetz (TKG) § 18(2), v. 1.8.1996 (BGBl. I S.1120). Section 18(2) refers to sections

23(1) sentence 2 and (2) and (3) of the Competition Law for the definition of a "linkage of companies." Section 23 of the Competition Law, entitled "Report of Mergers" contains definitions of combinations of companies and mergers. Business Transactions in Germany, *supra* note 110, at app. 3-18 to -22.

265. TKG § 25(1). The qualification "in the relevant market" was added to the June 5, 1996 Draft. Under the earlier draft, rate regulation under this section was to be applied to those holding a market dominant position in any market. *Compare* January Draft, *supra* note 3, § 24(1)B(2) with June Draft, *supra* note 3, § 24. Old section 24 is renumbered as section 25 in the TKG.

266. TKG § 27(1). Consistent with its goal of establishing greater authority over the regulation process, the *Bundesrat* sought to have the NRA's regulations concerning remuneration be subject to its approval. *Bundesrat* Opinion, *supra* note 76, § 43. The *TKG* explicitly states that regulations in this area that are promulgated by the German federal government do not require the approval of the *Bundesrat*. TKG § 27(4).

267. TKG § 24.

268. Again, the *Bundesrat* unsuccessfully sought to have this authority apply to all providers, not merely market dominant enterprises. *Bundesrat* Opinion, *supra* note 76, § 46. The *Bundesrat* also unsuccessfully proposed that regulations in this area be subject to *Bundesrat* approval. *Id.* § 48.

269. *See supra* note 264 and accompanying text.

270. TKG § 33(1).

271. *Id.* § 33(2). The June Draft added some flexibility to this presumption, allowing such a provider to show objective justification for the less favorable conditions. *See* June Draft, *supra* note 3, at 25. This flexibility remains in the TKG as passed.

272. TKG § 35(1).

273. *Id.* § 38(1).

274. 15 U.S.C. § 2 (1995).

275. Philip Areeda & Donald F. Turner, III *Antitrust Law & 600B30* (1987).

276. Herbert E. Marks, *Two Decades of Telecommunications Regulation: An Historical Perspective*, in *Telecommunications and the Law*, *supra* note 117, at 111, 120.

277. FCC regulation divides IXCs into two groups: dominant and nondominant carriers. Until recently, AT&T was the dominant carrier and all others were nondominant. Kennedy, *supra* note 57, at 85. Today, AT&T is only considered dominant for purposes of international communications. *In re* Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier, *Order*, 11 FCC Rcd. 3271, 1 Comm. Reg. (P & F) 63 (1995).

278. For example, while AT&T enjoyed certain benefits in being the designated monopoly in certain areas, it became increasingly interested in the potential benefits of a competitive environment because it could gain access to markets from which it was denied access based on its special status. Marks, *supra* note 272, at 119B20.

For explanation and analysis of U.S. antitrust law generally and its specific application to the telecommunications industry, see, for example, Haar, *supra* note 39, at 96B105.

279. *Mid-Texas Comm. v. AT&T*, 615 F.2d 1372, 1379 (5th Cir. 1980).

280. 47 U.S.C. § 221(a) (1995), *repealed by* Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (to be codified at scattered sections of 47 U.S.C.).

281. Kennedy, *supra* note 57, at 68.

282. InterLATA services that originate outside its in-region state and incidental interLATA services are not included in this requirement. 47 U.S.C.A. § 271(6)(2)(B) (West Supp. 1996).

283. *Id.* § 271(c)(1)(A).

284. S. Rep. No. 104-230, at 148 (1996).

285. *Id.*

286. 47 U.S.C.A. § 271(c)(1)(B).

287. *Id.* § 271(c)(2)(B). Section 271(c) also prohibits a BOC from offering interLATA services jointly with another telecommunications carrier that has more than 5% of the nation's presubscribed access lines for three years after the date of enactment, or until the BOC receives permission to offer interLATA services within its state.

288. *Id.* § 272.

289. S. Rep. No. 104-230, at 200B01.

290. *Id.* at 201.

291. *See* text accompanying *supra* note 277 (discussing classification of AT&T as market dominant in long-distance markets).

292. This could lead to a conflict between German and EU law since, at least theoretically, an enterprise could have greater than the 25% market share yet not qualify as a market dominant enterprise under the Competition Law.

293. Sabine Ranft, *TK-Markt: "Vom Monopol zum Wettbewerb"* [*Telecommunications Market: "From Monopoly to Competition"*], *Computerwoche*, Nov. 22, 1996, at 36.

294. Monopolkommission, *Die Telekommunikation im Wettbewerb, Sondergutachten der Monopolkommission* [*Telecommunications in Competition, Special Report of the Monopoly Commission*] 24, at 34 (1996).

295. Ranft, *supra* note 293.

296. Sondermann, *supra* note 252.

297. *Deutsche Telekom IPO a Success*, *Telecomm. Alert*, Nov. 19, 1996, available in LEXIS Market Library, IACNWS File.

298. Schuster, *supra* note 77, at 16. Peter Bross, Mannesmann-Eurokom's chief, complained that regulatory decisions are not made without the agreement of the Finance Minister. *Id.*

299. *See The Lure of Distance*, *Economist*, Apr. 6, 1996, at 63.

300. It has been estimated that introducing competition in voice telephony will require investment of between \$800 to \$1100 per subscriber. Dingwall, *supra* note 224, at 119 (citing *Cable Strategies for Competitive Telephony: Assessing the Sprint/Cable Alliance*, Yankeevision Consumer Comm., Dec. 1994, at 1, 12).

301. *See Kellogg et al., supra* note 9, § 1.5 (discussing how the problem of alternate telephone systems during the infancy of the industry in the United States coupled with no interconnection requirement led to the monopolization of the industry).

302. Sondhof & Theurer, *supra* note 4, at 186.

303. TKG § 3(24).

304. *Id.* § 3(9).

305. *Id.* § 33(1). Earlier drafts contained broader language: All offerors of networks were to be obligated to provide interconnection to their networks. *See* January Draft, *supra* note 3, § 34(1).

306. TKG § 35(1). The TKG also imposes another "interconnection" requirement, with "Security Authorities." All commercial providers of telecommunications services must maintain data on all customers, including numbers, names and addresses. Such data must be maintained in such a manner that the NRA can retrieve data without the knowledge of the provider. The NRA will provide such information as necessary to courts, prosecutors, and other judicial authorities, to state and federal police for purposes of "averting danger", to customs officials for criminal proceedings, and to federal and state constitution protection authorities, the Federal Armed Forces Counter-Intelligence Office and the Federal Intelligence Service. *Id.* § 90.

307. *Id.* § 35(2).

308. *Id.* § 38(1).

309. *Id.* § 35(2).

310. *Id.* § 37.

311. *Id.* § 35(5). The rules shall include framework agreement provisions and instructions for obtaining approval from the NRA. *Id.* § 35(5).

Earlier drafts included broader language here, extending this rulemaking authority to all connections, not just "special" connections. These rules were not to require the consent of the *Bundesrat*. June Draft, *supra* note 3, at § 34(3). The *Bundesrat* had pressed for these rules to require its consent. *Bundesrat* Opinion, *supra* note 76, § 48.

312. ONP EG Nr. L 192, S.1 (art. 3, sentence 2).

313. TKG § 33(2). This opportunity to provide objective justification was added in the June Draft. Abuse of a market dominant position was merely assumed in the earlier draft. *See* January Draft, *supra* note 3, § 32(2).

314. TKG § 35(3).

315. TKG Legislative Report, *supra* note 3, § 32(1).

316. TKG § 33(2).

317. Competition Law, *supra* note 72, § 22(5).

318. TKG Legislative Report, *supra* note 3, § 32(2).

319. TKG § 33(3). Single enterprises within the meaning of § 23, sentence 1, line 2, and sentences 2 & 3 of the Competition Law are covered here.

320. *Id.* § 34(1). The *Bundesrat* requested clarification in this area: The EU norms should be applicable to all market participants. *Bundesrat* Opinion, *supra* note 76, § 46.

321. TKG § 34(2).

322. *Id.* § 34(3).

323. Kellogg et al., *supra* note 9, § 1.2.2.

324. *Id.* § 1.3.

325. *Id.*

326. *See id.* § 1.3.2 for detailed analysis.

327. 47 U.S.C. § 201(a) (1995).

328. Kellogg et al., *supra* note 9, § 1.5. *See* Areeda & Turner, *supra* note 275, & 621a (describing natural monopoly).

329. *See* Kellogg et al., *supra* note 9, § 3.4 (discussing development of interconnection requirement).

330. *Id.* § 12.6; Marks, *supra* note 276, at 118.

331. Kennedy, *supra* note 57, at 31.

332. Kellogg et al., *supra* note 9, § 5.2.

333. Kennedy, *supra* note 57, at 54.

334. *Id.* at 34.

335. *Id.* at 36.

336. *Id.* at 37.

337. *Id.*

338. *Id.* at 38.

339. *Id.* at 65. The ONA model was developed in the FCC's *Computer III* decisions. Kellogg et al., *supra* note 9, § 12.5.

340. Kennedy, *supra* note 57, at 66. The FCC instituted further technical requirements in order to ensure that the quality, cost, and efficiency of the connections provided by the BOCs to ESPs were virtually equal to those provided to their own services. However, the equality standard was to be interpreted reasonably and in an efficient manner in order to avoid wasteful attempts at absolute equality. Kellogg et al., *supra* note 9, § 11.7.1.

341. Kennedy, *supra* note 57, at 68.

342. 47 U.S.C.A. § 3(a)(49) (West Supp. 1996).

343. *Id.* § 251(a).

344. Defined in 47 U.S.C.A. § 251(h).

345. *Id.* § 251(b).

346. *Id.* § 251(c)(2)(D).

347. *Id.* § 251(c).

348. *Id.* § 251(f).

349. *Id.* § 259(a).

350. *Id.* § 259(b)(1).

351. *Id.* § 259(b)(2).

352. *Id.* § 252(a), (e).

353. *Id.* § 252(a).

354. *Id.* § 252(e)(5).

355. Dingwall, *supra* note 226, at 129.

356. Telegraphenwegegesetz [Telegraph Route Law] (TWG) § 1, v. 24.4.1991 (BGBl. I S.1053).

357. Sven-Erik Heun, *Wegerechte* [Rights-of-Way], Speech at the Euroforum Conference, *supra* note 51, at 2.

358. *Id.* at 12.

359. TKG Legislative Report, *supra* note 3, at 33.

360. Telekommunikationsgesetz (TKG) § 50(1), v. 1.8.1996 (BGBl. I S.1120). The issue of charges for use of rights-of-way remained extremely contentious. *See* Anhorung zum neuen TK-Gesetz und Diskussion im Bundesrat, 3 (reporting continued debate over this question in Bundestag Committee hearings). Here, the *Bundesrat* recommended a substantial change: It would have eliminated the government's right to cost-free use of traffic infrastructure. Rather, the entity who carries the burden of maintaining the infrastructure would have a right to claim compensation for use. The *Bundesrat* argued that the interests of communities were not properly considered in the provisions of the TKG. Cost-free access, based on the *Bundespost's* prior cost-free access, is not appropriate because the *DBP's* access was based upon its special status as a state-run monopoly. Accordingly, after the full privatization of the telecommunications system after January 1, 1998, the status of telecommunications carriers should be viewed as comparable to that of energy providers who must pay for their use of traffic infrastructure in providing service. Bundesrat Opinion, *supra* note 76, § 61. However, an executive from *Telekom* argued in response that the comparison with energy providers is inapt: telecommunications providers bear various universal service and interconnection burdens which benefit the public that energy providers do not, and cost-free use of the infrastructure is appropriate for provision of such service. Hans-Willi Hefekauer, *Telekom im Fairen Wettbewerb?* [Telekom in Fair Competition?], Speech at the Euroforum Conference, *supra* note 51, at 7.

The *Bundesrat* also sought to strike the word "lasting" [*dauernd*] from the Draft in order to emphasize that the use of traffic infrastructure is not to be encroached upon by telecommunications use per the TKG. Bundesrat Opinion, *supra* note 76, § 60.

361. TKG § 50(2). *See* Schhtz & Esser-WelliJ, *supra* note 213 at 587.

362. TKG § 50(3). In its comments, the *Bundesrat* argues that this approval requirement is too vague given the multiple legitimate interests that would be implicated in such questions. Accordingly, the *Bundesrat* recommended that approval authority be placed explicitly in the hands of the relevant state authority because it has better experience and understanding of local needs than would a federal regulator. Bundesrat Opinion, *supra* note 76, § 62. Moreover, the state authority would have a right to charge fees for its decisionmaking in this area. *Id.* § 63.

363. TKG § 50(3). The *Bundesrat* sought that this section provide that approval be granted where the entity

bearing maintenance duties agrees; where legitimate public interests have been properly considered; and where the private rights of third parties do not stand in the way. *Bundesrat Opinion, supra* note 76, § 62.

364. TKG § 50(3).

365. *TKG Legislative Report, supra* note 3, § 49. Hiltl discusses a potential conflict between licenseholders and the federal government on one side, and local communities on the other, where the latter want to maintain significant limits on construction of and upgrades to networks as a means of avoiding having their streets torn up too regularly. Some communities have laws limiting excavation to every three or five years. Hiltl & Großmann, *supra* note 7, at 175.

366. TKG § 50(3).

367. As defined in § 23, sentence 2 or 3 of the Competition Law. *TKG Legislative Report, supra* note 3, § 49(4).

368. TKG § 50(4).

369. *Id.* § 51.

370. *TKG Legislative Report, supra* note 3, § 50. The *Bundesrat* sought that concurrent use be explicitly preferred over the laying of new lines. The goal was to limit burdens on existing infrastructure, *i.e.* to minimize the amount of excavation necessary. *Bundesrat Opinion, supra* note 76, § 65.

371. TKG § 52(3). Paragraphs 51B55 merely reflect pre-existing law. Paragraphs 51 through 55 correspond to §§ 2B6 TelWegG, respectively. *TKG Legislative Report, supra* note 3, §§ 51B55.

372. TKG § 53(2).

373. *Id.* § 55(1).

374. *Id.* § 55(1).

375. *Id.* § 56(1).

376. *Id.* § 56(2).

377. *Id.* § 56(3).

378. *Id.* § 56(2).

379. *Id.* § 56(4).

380. *Id.* § 56(5).

381. *Id.* § 57(1). The *Bundesrat* sought to change this section to strengthen the rights of private land owners. Under the *Bundesrat* proposal, a private land owner could only be required to provide access where his or her land was already being used for telecommunications-related purposes. *Bundesrat Opinion, supra* note 76, § 68. The *Bundesrat* also questioned whether these provisions concerning use of private land are constitutional. *Id.* § 69.

382. TKG § 57(2).

383. *TKG Legislative Report, supra* note 3, § 56.

384. TKG § 58.

385. 74 Am. Jur. 2d *Telephones and Telegraphs* § 19 (1974).

386. 47 U.S.C. § 224 (1995).

387. 59 Cal. Jur. 3d *Telephones and Telegraphs* § 3 (1980).

388. 59 Cal. Jur. 3d *Telephones and Telegraphs* § 5.

389. *Id.* § 7.

390. *Id.* § 13.

391. *Id.* § 8

392. *Id.* § 19

393. 47 U.S.C. 224(a)(4) (as amended by section 703 of 1996 Act). The definition of "utility" is amended to include LECs. *Id.*

394. 47 U.S.C.A. 703(7) (West Supp. 1996) (amending 47 U.S.C. 224 by adding new section (e)(1)).

395. A similar rule appears to exist in older American law. *See* 74 Am. Jur. 2d *Telephones and Telegraphs* § 15 n.12 (citing *Ft. Worth & Rio Grande Ry. Co. v. S.W. Tel. & Tel. Co.*, 71 S.W. 270 (Tex. 1903)).

396. *See supra* note 381 and accompanying text.

397. *See* *Dingwall*, *supra* note 276, at 111.