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FEDERAL TELECOMMUNICATIONS LAW:
A LEGISLATIVE HISTORY OF
THE TELECOMMUNICATIONS ACT
OF 1996
PUB. L. NO. 104-104, 110 STAT. 56 (1996)
INCLUDING
THE COMMUNICATIONS DECENCY ACT

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INTRODUCTION

AN OVERVIEW OF THE TELECOMMUNICATIONS ACT OF 1996

The "Telecommunications Act of 1996," signed into law on February 8, 1996, opens up competition between local telephone companies, long-distance providers, and cable companies; expands the reach of advanced telecommunications services to schools, libraries, and hospitals; and requires the use of the new V-chip technology to enable families to exercise greater control over the television programming that comes into their homes. This Act lays the foundation for the investment and development that will ultimately create a national information superhighway to serve both the private sector and the public interest.

President Clinton noted that the Act will continue the efforts of his administration in ensuring that the American public has access to many different sources of news and information in their communities. The Act increases, from 25 to 35 percent, the cap on the national audience that television stations owned by one person or entity can reach. This cap will prevent a single broadcast group owner from dominating the national media market.

Rates for cable programming services and equipment used solely to receive such services will, in general, be deregulated in about three years. Cable rates will be deregulated more quickly in communities where a phone company offers programming to a comparable number of households, providing effective competition to the cable operator. In such circumstances, consumers will be protected from price hikes because the cable system faces real competition.

This Act also makes it possible for the regional Bell companies to offer long-distance service, provided that, in the judgment of the Federal Communications Commission (FCC), they have opened up their local networks to competitors such as long-distance companies, cable operators, and others. In order to protect the public, the FCC must evaluate any application for entry into the long-distance business in light of its public interest test, which gives the FCC discretion to consider a broad range of issues, such as the adequacy of interconnection arrangements to

permit vigorous competition. Furthermore, in deciding whether to grant the application of a regional Bell company to offer long-distance service, the FCC must accord "substantial weight" to the views of the Attorney General. This special legal standard ensures that the FCC and the courts will accord full weight to the special competition expertise of the Justice Department's Antitrust Division--especially its expertise in making predictive judgments about the effect that entry by a bell company into long-distance may have on competition in local and long-distance markets.

Title V of the Act is entitled the "Communications Decency Act of 1996." This section is specifically aimed at curtailing the communication of violent and indecent material. The Act requires new televisions to be outfitted with the V-chip, a measure which President Clinton said, "will empower families to choose the kind of programming suitable for their children." The V-chip provision relies on the broadcast networks to produce a rating system and to implement the system in a manner compatible with V-chip technology. By relying on the television industry to establish and implement the ratings, the Act serves the interest of the families without infringing upon the First Amendment rights of the television programmers and producers.

President Clinton signed this Act into law in an effort to strengthen the economy, society, families, and democracy. It promotes competition as the key to opening new markets and new opportunities. This Act will enable us to ride safely into the twenty-first century on the information superhighway.

We wish to acknowledge the contribution of Loris Zeppieri, a third year law student, who helped in gathering these materials.

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April 1997

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- Doc. No. 164** - Telecommunications Equipment Research and Manufacturing Competition Act of 1991 - S. Rep. 102-41 - Report submitted by Sen. Hollings of the Senate Committee on Commerce, Science, and Transportation, together with additional and minority views on S. 173 (April 19, 1991).
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tional views to accompany H.R.3636 (June 24, 1994).

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Document No. 163

TELECOMMUNICATIONS EQUIPMENT RE-
SEARCH AND MANUFACTURING ACT OF
1990

Mr. HOLLINGS, from the Committee on Commerce, Science,
and Transportation, submitted the following

R E P O R T

together with

ADDITIONAL AND MINORITY VIEWS

OF THE

SENATE COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION

ON

S. 1981



JUNE 29, 1990.—Ordered to be printed

Filed under authority of the order of the Senate of June 29 (legislative
day, June 11), 1990

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(11)

TELECOMMUNICATIONS EQUIPMENT RESEARCH AND
MANUFACTURING COMPETITION ACT OF 1990

JUNE 29, 1990.—Ordered to be printed

Filed under the authority of the order of the Senate of June 29 (legislative day,
June 11), 1990

Mr. HOLLINGS, from the Committee on Commerce, Science, and
Transportation, submitted the following

REPORT

together with

ADDITIONAL AND MINORITY VIEWS

[To accompany S. 1981]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 1981) to permit the Bell Telephone Companies to conduct research on, design, and manufacture telecommunications equipment, and for other purposes, having considered the same, reports favorably thereon with an amendment in the nature of a substitute and recommends that the bill as amended do pass.

PURPOSE OF BILL

The purpose of the bill, S. 1981, as reported, is to permit the Bell Telephone Companies to enter the businesses of manufacturing telecommunications and customer premises telephone equipment and providing telecommunications equipment. The bill is intended to promote United States competitiveness in global telecommunications markets, stimulate employment opportunities in the United States telecommunications equipment industry, and preserve United States leadership in developing innovative new telecommunications technologies. The bill includes several regulatory measures con-

cerning the Bell Companies' participation in these new businesses. These provisions are intended to protect against the possibility that the Bell Companies might engage in anticompetitive conduct.

BACKGROUND AND NEEDS

I. ORIGIN AND HISTORY OF THE MANUFACTURING RESTRICTION

A. Events Leading to the AT&T Consent Decree

1. History of concern over AT&T's monopoly.

For most of this century, and most of AT&T's history, AT&T was both a horizontally- and vertically-integrated monopoly. AT&T Long Lines provided the only long distance telephone service throughout the country; the 22 Bell Operating Companies (BOCs) that AT&T owned provided the only local telephone service to 80 percent of the Nation's population; AT&T's Western Electric subsidiary manufactured almost all the equipment needed for the operation of the telephone network; and AT&T's Bell Laboratories (Bell Labs) conducted the most extensive research involving high technologies and telecommunications of any research center in the world. AT&T was not just the world's largest provider of telephone service; it was also the largest corporation in the world.

The strength of AT&T's monopoly, and AT&T's attempts to extend this monopoly into other businesses, were, until recently, a constant concern of United States policy-makers. The government has made several attempts to control AT&T through antitrust actions and by regulation. In 1913, the Department of Justice (DOJ) reached an out-of-court settlement agreement with AT&T that required it to stop purchasing competing telephone companies and to allow them to interconnect with the AT&T network. This agreement also required AT&T to sell its shares in Western Union, the monopoly provider of telegraph service in the country, which AT&T had recently purchased.¹ In the 1920's, the government pressured AT&T to relinquish its ownership of movie theaters, again based on antitrust law principles. In 1934, Congress passed the Communications Act of 1934 (the Act) and created the Federal Communications Commission (FCC) to regulate AT&T's provision of telephone service on an ongoing basis.² AT&T, in part, welcomed this legislation, hoping that it would forestall any future antitrust actions against it.

2. The antitrust case of 1949.

In 1949, the Federal Government again filed an antitrust action against AT&T, alleging that AT&T was abusing its control over the telephone network to discriminate against competitive manufacturers of telephone equipment.³ The government contended that AT&T purchased all its equipment needs from its Western Electric subsidiary regardless of the equipment price or quality. Since AT&T accounted for as much as 75 percent of the total market for

¹ *United States v. AT&T*, No. 6082, U.S. Dist. Ct., Dist. of Oregon, *Original Petition*, July 24, 1913; Nathan C. Kingsbury to James C. McReynolds, December 19, 1913; *United States v. AT&T*, No. 6082 (D. Or. 1914) (Decree).

² 47 U.S.C. 151, et seq.

³ *United States v. Western Electric*, No. 17-49 (D.N.J. 1949).

telephone equipment, competing manufacturers had little opportunity to find a market for their products. The suit thus sought to separate Western Electric from AT&T's telephone services business and to bar AT&T from engaging in any future telephone manufacturing activity. That suit was settled in 1956. The agreement required no structural change in AT&T's operations, but it did bar AT&T from participating in the emerging computer and data processing businesses.⁴

3. The growth of competition and the origins of the 1974 anti-trust case.

Beginning in the 1960's and continuing into the 1970's, the FCC and the courts slowly but deliberately introduced greater competition to AT&T's monopoly businesses. In 1968, over AT&T's objection, the FCC ordered AT&T to permit customers to attach non-Bell telephone equipment to the telephone network.⁵ Three years later, the FCC also issued an order permitting "specialized" common carriers, such as MCI, to compete with AT&T in the provision of certain long distance services.⁶ The courts subsequently upheld these decisions and further recognized the right of long distance companies to compete against the full range of AT&T's long distance services.⁷

AT&T's new equipment and long distance competitors, however, soon found that regulatory approval was not enough to overcome AT&T's market power. The competitors complained that AT&T was using its control over the monopoly of local telephone carriers to discriminate against them and prevent them from gaining a foothold in their markets.⁸ For instance, the long distance competitors alleged that the BOCs would not give them the same quality of connections to the local telephone company, and thus to the end user, that they gave to AT&T. The equipment manufacturers alleged that AT&T would not purchase their equipment. The DOJ found merit in these complaints and filed another antitrust suit against AT&T in 1974, alleging harm to both the long distance and manufacturing markets.

4. Rationale for the antitrust action regarding AT&T's manufacturing activities.

With regard to the telephone equipment manufacturing market, the DOJ alleged that AT&T, through its ownership of the BOCs, engaged in three unlawful activities: 1) AT&T and the BOCs pur-

⁴ *United States v. Western Electric Co.*, CA No. 17-49 *Final Judgment*, 1956 Trade Cas. 68,246 (D.N.J. 1956).

⁵ FCC Docket 16942, adopted June 26, 1968, 13 FCC 2d 420 ("Carterphone" decision).

⁶ *First Report and Order*, FCC Docket 18920, "Specialized Common Carriers," June 3, 1971, 29 FCC 2d 870, *aff'd sub nom. Wash. Util. & Trans. Comm'n v. FCC*, 513 F.2d 1142 (9th Cir. 1975), *cert. denied*, 423 U.S. 836 (1975) (Specialized Common Carrier decision).

⁷ *MCI v. FCC*, No. 75-1635, 561 F.2d 365 (D.C. Cir.), *cert. denied*, 434 U.S. 1040 (1978) ("Execunet" decision).

⁸ To reach a customer, also known as an "end user", all telecommunications service providers, including long distance companies and information service companies, must almost always connect with the local telephone network. While there are a few companies offering competitive "bypass" services to business customers in some major cities, it is virtually impossible to duplicate the millions of miles of copper cable strung beneath the street and on telephone poles controlled by the telephone companies. The competitors argued that, without this alternative, the BOCs were able to exercise "bottleneck" control over the services and rates of long distance companies.

chased all of their telephone equipment for their long distance and local networks from Western Electric, regardless of the relative cost or quality of that equipment;⁹ 2) AT&T subsidized its equipment manufacturing activities with revenues earned from its telephone service businesses, thereby forcing telephone service customers to pay higher telephone rates than necessary and allowing Western Electric to sell equipment below its actual costs of manufacturing that equipment; and 3) AT&T manipulated the design of its telephone network so that only equipment manufactured by Western Electric would be compatible with the telephone network.

5. *The court proceedings.*

After several years of pre-trial procedures, DOJ began presenting its case in 1981. Later that year, Judge Harold Greene ruled, in a detailed order, that DOJ had presented sufficient evidence of antitrust activity to satisfy its initial burden of proof. The Judge thus denied AT&T's request for a dismissal of the case and ordered AT&T to present its defense. About three weeks before the trial was to conclude, however, DOJ and AT&T agreed to settle the case. After their agreement was submitted to the court for review, Judge Greene accepted the decree, with several alterations, on August 24, 1982.

6. *The Consent Decree.*

The settlement agreement is today known as the "Modification of Final Judgment" (MFJ) or the AT&T "Consent Decree".¹⁰ The theory behind the settlement was that it was necessary to separate AT&T's competitive businesses (long distance and manufacturing) from its monopoly services (local exchange telephone service). The agreement required AT&T to spin off the twenty-two BOCs into separate companies. AT&T was permitted to retain its long distance operations, its Western Electric manufacturing subsidiary, and its Bell Labs research facilities. In exchange for relinquishing the BOCs, AT&T received DOJ's commitment to seek the lifting of the restriction in the 1956 decree which barred AT&T from participating in the computer and data processing markets.

DOJ remained concerned, however, that the BOCs would retain their dominance over local telephone service even after their divestiture from AT&T. The parties thus agreed, and the court accepted, that the BOCs would be bound by several restrictions and obligations to protect against future antitrust abuse. Among these provisions, for instance, was a requirement that the BOCs provide "equal access" to all long distance carriers. The decree directed the BOCs to make available to other, competitive long distance companies the same quality of access to the customer that they provided to AT&T.

⁹ Since AT&T purchased up to 75 percent of the telephone equipment in the country, there was little opportunity for competing manufacturers to sell their equipment elsewhere if AT&T was not a buyer.

¹⁰ The "Modification of Final Judgment" modifies the Final Judgment that concluded the government's earlier antitrust action begun in 1949 and settled in 1956. *United States v. Western Electric Company*, 552 F.Supp. 131 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983).

The agreement submitted by AT&T and DOJ would have barred the BOCs permanently from providing information services, long distance telephone services, and telephone equipment manufacturing and provision. Another part of the agreement further bound the BOCs to providing only local telephone exchange services to prevent the BOCs from leveraging their dominance over local telephone service to gain an unfair advantage over participants in competitive markets.

Pursuant to the Tunney Act,¹¹ Judge Greene took extensive comment on the proposed settlement agreement to determine whether it was supported by the evidence introduced at trial and consistent with the public interest. After his review, Judge Greene suggested several changes. He permitted the BOCs to publish and distribute "Yellow Pages" directories, and he permitted the BOCs to distribute (but not manufacture) "customer premises equipment."¹² He also loosened the line of business restrictions. He allowed the BOCs to apply for waivers of the restrictions and accepted the DOJ's commitment to report to the Court every three years after the decree on the continuing need for these restrictions. The Judge also established a standard, discussed in more detail below, for determining whether the restrictions continue to be warranted.¹³ Finally, the Judge retained jurisdiction over the decree to consider waivers to the restrictions and to the decree in general.

B. Enforcement and Interpretations of the Decree

1. The Plan of Reorganization

The Consent Decree, accepted by the court in August 1982 provided that the divestiture by AT&T of its Bell Companies would take effect on January 1, 1984. To comply with this deadline, AT&T submitted to DOJ and then to the court a detailed "Plan of Reorganization" which set forth its plan for dividing its assets between itself and the BOCs. Since the vast majority of the investment in the Bell System consisted of wires and switches used for local service, AT&T lost almost three-quarters of its assets (\$112 million out of a \$155 billion total).

The twenty-two Bell Companies were organized into seven Regional Bell Operating Companies (RBOCs) or Regional Holding Companies (RHCs), each of relatively equal size in terms of assets and revenues, but not in terms of geographic area.¹⁴ Each of the

¹¹ Antitrust Procedures and Penalties Act, 15 U.S.C. 16b4(f) (hereinafter referred to as the Tunney Act).

¹² The decree defines two types of telephone equipment: "telecommunications equipment" refers to equipment used in the telephone network and includes central office switches and transmission equipment such as fiber optic cable; "customer premises equipment" (or "CPE") refers to equipment used at the customer's location and includes telephones and telephone switches installed by businesses on their premises. For purposes of convenience, telecommunications equipment and CPE will be collectively referred to as "communications equipment".

¹³ This standard essentially permits the BOCs to enter the three prohibited lines of business when there is significant competition to their local exchange services or when there are other reasons for believing that the BOCs could not harm competition in the market they seek to enter.

¹⁴ The seven RBOCs, and the BOCs they control, are as follows: NYNEX Corp. (including New England Telephone Company and the New York Telephone Company); Bell Atlantic (including New Jersey Bell Telephone Company; the Bell Telephone Company of Pennsylvania; the Diamond State Telephone Company; and the Chesapeake and Potomac Telephone Companies of Washington, D.C., Virginia, Maryland, and West Virginia); BellSouth Corp. (including Southern

Continued

RBOCs is roughly equal in size to the largest independent telephone company, the General Telephone and Electric Company (GTE).

2. *The waiver process.*

Shortly after the divestiture on January 1, 1984, several BOCs filed motions requesting waivers of the line of business restrictions. DOJ noted that the waiver applicants did not attempt to demonstrate that the relevant economic conditions had significantly changed since the divestiture, and the court denied the motions. The court indicated that it would not consider waivers by the BOCs to enter the long distance, information services and manufacturing markets unless there was evidence of significantly diminished competitive risks. Judge Greene indicated that waivers to enter other lines of business would generally be easy to obtain, as long as the total revenues from these competitive lines of business did not exceed 10 percent of the RBOCs' total revenues.

Judge Greene also required that waiver requests be submitted first to DOJ for review, that DOJ make a recommendation on those requests, and that they then be forwarded to the court. As of January 27, 1987, the BOCs had submitted approximately 160 waivers to DOJ for review before being submitted to the court. One hundred and three of these had been decided, 30 were pending with DOJ, and 13 were pending with the court.¹⁵ The court noted at the time that the number of waiver applications was greater than the court initially expected.¹⁶

3. *The First Triennial Review.*

On February 2, 1987, three years after the divestiture, DOJ submitted its report and recommendations to the court concerning the continued need for the line of business restrictions. In a fundamental shift from its earlier position, DOJ recommended complete removal of the restrictions on information services, manufacturing, and on the BOCs' entry into other, non-telecommunications lines of business. DOJ further recommended that the long distance restrictions be substantially modified to permit each BOC to provide long distance service outside of the region in which it provides local telephone service.¹⁷ DOJ also submitted a lengthy study of the telecommunications marketplace prepared under contract by Dr. Peter

Bell Telephone and Telegraph Co. and South Central Bell Telephone Co.); Ameritech Corp. (including Ohio Bell Telephone Co.; Michigan Bell Telephone Co.; Indiana Bell Telephone Co.; Illinois Bell Telephone Co.; and Wisconsin Telephone Co.); US West Corp. (including Northwestern Bell Telephone Co.; the Mountain States Telephone and Telegraph Co.; and Pacific Northwest Bell Telephone Co.); Pacific Telesis Corp. (including Pacific Bell Telephone and Telegraph Co. and Bell Telephone Company of Nevada); and Southwestern Bell (including the Southwestern Bell Telephone Co.)

¹⁵ As of that date, only one waiver request supported by DOJ had been denied. "Report and Recommendations of the United States Concerning the Line of Business Restrictions Imposed on the Bell Operating Companies by the Modification of Final Judgment", Civil Action No. 82-0192, p. 25.

¹⁶ See, *United States v. Western Elec. Co.*, 592 F.Supp. 846, 858 (D.D.C. 1984), *appeal dismissed*, 777 F.2d 23 (D.C. Cir. 1985).

¹⁷ DOJ later altered this recommendation by suggesting that the restriction on long distance should be retained but that the court should entertain requests for waivers of the restriction as soon as state and local regulations limiting competition in the local exchange market were lifted.

Huber (known as the "Huber Report") to support its recommendations.

i. DOJ's Views on Manufacturing

Regarding the manufacturing restriction,¹⁸ DOJ argued that several changes had occurred since 1982 that made it unlikely that the BOCs could harm the manufacturing market. The most significant change, in DOJ's view, was the divestiture itself. One vertically-integrated monopoly had been replaced by eight companies (the seven RBOCs and AT&T). Whereas the former Bell System purchased about 80 percent of the central office switching and network transmission equipment, "no one BOC accounts for more than a relatively small percentage of the purchases in any equipment market."¹⁹ DOJ further noted that the markets for communications equipment were competitive, with both several strong firms and numerous "fringe" firms, including several large, vertically-integrated foreign firms.

DOJ found that these market changes were accompanied by regulatory changes that reduced the ability of any BOC to engage in anticompetitive activity. Primary among these were the FCC's adoption of standards governing the interconnection of terminal equipment and rules governing the disclosure of network design information. In addition, private national and international interconnection standards also had been promulgated. Finally, the FCC had adopted new cost allocation rules designed to prevent cross-subsidization. Finally, DOJ pointed out that the BOCs would remain subject to the antitrust laws even after the manufacturing restriction was lifted and that it would prohibit any anticompetitive attempt to recreate the old Bell System.

DOJ further argued that continuing the manufacturing restriction could impose direct costs on society. The BOCs could lose the benefit of potential efficiencies between the provision of telephone service and manufacturing, such as the sharing of joint or common costs, especially joint research costs. DOJ also noted that the "gray areas" between "manufacturing" and "providing" customer premises equipment, between permitted network design and the manufacturing of telecommunications equipment used in the network, and the ambiguities in the definition of the term "manufacturing" could all require the expenditure of considerable litigation and judicial resources for little competitive gain.

ii. The District Court's Opinion

After taking extensive comment on DOJ's recommendations, the court granted the request to remove the restriction on non-telecommunications businesses and modified the restriction on information

¹⁸From this point on, unless otherwise noted, the term "manufacturing restriction" will be used to describe the restriction contained in the AT&T Consent Decree that bars the BOCs from manufacturing telecommunications equipment and customer premises equipment and from providing telecommunications equipment.

¹⁹DOJ Recommendations, p. 161. DOJ noted that Dr. Huber had found that "no single BOC's purchasing decisions . . . can have much impact on competition in the market as a whole." DOJ Recommendations, p. 162, note 318, quoting Hubert, *The Geodesic Network*, at 116.

services. But the court made no change in the long distance of manufacturing restrictions.²⁰

The court began its analysis by noting that section VIII(C) of the Consent Decree provides that the restrictions may be removed only if the BOCs demonstrate that "there is no substantial possibility that they could use their monopoly powers to impede competition in the markets they seek to enter". The court explained that this standard imposes a burden on the BOCs to demonstrate that events have changed to such a degree that the restrictions are no longer warranted. The court found the three changes claimed by the BOCs were not substantiated. First, it found that the BOCs still controlled a monopoly over local telephone service. Second, it found that the divestiture was not a relevant change because the divestiture was anticipated by the decree and that the BOCs collectively were about equal to the old Bell System in terms of their monopoly power. Third, it found that FCC regulation was actually less stringent than it was prior to the divestiture due to the FCC's loss of staff and change in regulatory philosophy.

Regarding manufacturing, the court found that no changes had occurred in the previous three years that warranted removal of the restriction. It found:

(1) the Regional Companies still have an ironclad hold on the local exchanges; (2) collectively they account for the purchases of what may be estimated at seventy percent of the national output of telecommunications equipment, only slightly less than the share of the pre-divestiture Bell System; (3) if the restriction were lifted, the Regional Companies may be expected to act as did the Bell System; they would buy all, or almost all, of their equipment requirements from their own manufacturing units rather than from outsiders; (4) no measures, regulatory or otherwise, are available effectively to counteract such activities; and (5) in short order following removal of the restriction, a return to the monopolistic, anticompetitive character of the telecommunications equipment market would be likely, if not inevitable.²¹

iii. The Circuit Court of Appeals Decision

The BOCs appealed this decision of the District Court. On appeal, the United States Court of Appeals for the District of Columbia Circuit upheld the District Court's finding that the BOCs had not carried their burden of proof regarding the need to lift the manufacturing restriction and thus affirmed the District Court's decision. The Circuit Court, however, clarified the section VIII(C) standard and the District Court's responsibilities under that standard.²²

²⁰ 673 F.Supp. 525 (D.D.C. 1987).

²¹ 673 F.Supp. 525, 573 (D.D.C. 1987).

²² *United States v. Western Electric*, Slip Opinion, No. 87-5388 (April 3, 1990). The Circuit Court also upheld the District Court's refusal to lift the ban on long distance services but remanded the District Court's decision not to lift the restriction on information services. The Circuit Court held that the District Court had applied the wrong standard to review the informa-

Continued

Specifically, the Circuit Court found that the Judge erred in determining that the BOCs were required to show an unforeseen change in circumstances to satisfy the section VIII(C) standard. The Circuit Court said that the divestiture and the practices of the BOCs were significant factors that Judge Greene could have considered in reviewing the restrictions. Also, the Circuit Court expressly noted that Judge Greene was not authorized to review the effect of the restrictions on the interests of consumers or on trade concerns. The Circuit Court emphasized that the District Court could not deny the BOCs motions "for any other reason not related to the antitrust laws."²³

Regarding the manufacture of telecommunications equipment, the Circuit Court upheld the District Court, relying principally on DOJ admissions that (1) the BOCs would likely purchase substantially all of their equipment requirements from their manufacturing affiliates regardless of price or quality, thereby foreclosing some "substantial portion (5-15%) of the equipment market", and (2) that the BOCs would possess both the incentive *and the ability* to cross-subsidize, at least somewhat." (emphasis in original).²⁴ The Circuit Court determined that "it is not enough for the BOCs . . . to show that a significant number of stable competitors will be able to survive BOC entry."²⁵ The Circuit Court stated that it was "inclined to think that the question [for CPE] is much closer than it was for telecommunications equipment." Since the BOCs petitioned for complete removal of the manufacturing restriction and urged the District Court not to separate telecommunications equipment from CPE, however, the Circuit Court found that the BOCs had failed to carry their burden under the section VIII(C) standard.

4. *The Definition of Manufacturing*

The Consent Decree does not contain a definition of the term "manufacturing", a point which has caused great confusion in the industry. In April 1985, AT&T and several other companies reported to DOJ that the several BOCs were violating the manufacturing prohibition by engaging in the design and development of telecommunications products. Two years later, after DOJ refused to act on AT&T's complaint, AT&T filed a motion with the District Court for a declaration that the Consent Decree prohibits design and development as well as fabrication. The BOCs opposed the motion, arguing that this expansive definition went beyond the plain meaning of the word "manufacture" and the expectations of the parties in entering the Consent Decree.

tion services restriction and remanded to the District Court the issue of whether the information services restriction should remain in effect under the correct standard. This decision has been appealed to the Supreme Court.

²³ Slip Op., at 36. The Circuit Court noted that the district court considered the impact of removing the restrictions on various public policies, including the welfare of local ratepayers, innovation in the manufacturing market, the goal of universal telephone service, first amendment values, and the United States' position in international trade. The district court explained its discussion of these factors by noting that "the same standards may be applied in proceedings addressing continued viability of the restrictions as were used in determining whether the restrictions were to be imposed in the first place." 673 F.Supp. at 583. We disagree. Slip Op., at 35-36.

²⁴ Slip Op., at 44.

²⁵ Slip Op., at 46.

The District Court granted AT&T's motion.²⁶ Judge Greene stated that "[t]here is no valid basis for the position that only fabrication is prohibited by section II(D)(2)." The Judge determined that defining "manufacturing" to include design and development as well as fabrication was consistent with the parties' intent at the time the decree was entered. He noted that the design and development of telecommunications products were even more instrumental to the anticompetitive behavior attributed to AT&T than was the company's actual fabrication of such products. The Judge further applied this definition to the design and development of software integral to telecommunications equipment.

On appeal, the United States Court of Appeals for the District of Columbia Circuit upheld Judge Greene's ruling.²⁷ The Circuit Court found that the contemporaneous statements of the Consent Decree's objectives left no question that the parties intended to prohibit design and development. The Circuit Court noted that much of the anticompetitive behavior attributed to AT&T involved AT&T's design and development activities, not just its fabrication activities. If permitted to engage in design and development, the Circuit Court speculated that a BOC could use its network information to design unique products, contract out the fabrication work, and then purchase them at inflated prices.²⁸ Finally, the Circuit Court also determined that the District Court's inclusion of software design in the prohibited manufacturing activities was fully consistent with the court's definition of manufacturing as including design and development.

II. THE MANUFACTURING MARKET TODAY

A. *The World Market*

The annual world-wide market for communications equipment is now about \$113 billion.²⁹ The United States market, at about \$30 billion, is by far the largest in the world and twice the size of the second largest market (the Soviet Union). The North American market as a whole, however, is roughly as large as the European market.³⁰

The market for high-technology products (such as central office switches, private branch exchanges (PBXs) and fiber optic transmission equipment) is becoming increasingly concentrated among a few firms.³¹ Experts predict that, by the end of this decade, there will be no more than six major switch manufacturers in the world.

²⁶ *United States v. Western Elec. Co.*, 657 F.Supp. 655 (D.D.C. 1987).

²⁷ *United States v. Western Electric*, Slip Opinion, No. 88-5050 (February 2, 1990).

²⁸ Ironically, the Circuit Court also noted that the decree intended to include design and development in the definition of manufacturing so as to avoid future legal disputes concerning the BOCs' compliance with the antitrust laws. Slip Op., at 11.

²⁹ "International Telecommunications", *Financial Times Survey*, July 19, 1989, Section III, p. 1.

³⁰ *Telecommunications Equipment*, The Freedonia Group (1986), in 1988 Telephone Industry Directory and Sourcebook.

³¹ In the past several years, Siemens has purchased Rolm, a manufacturer of PBXs, from IBM, Siemens combined with GEC (a U.K. company) to acquire Pleassey in the U.K. and Stromberg-Carlsson in the U.S., AT&T has entered joint ventures with Philips in the Netherlands and with Italtel in Italy, and has purchased a controlling interest in GTE's manufacturing facilities in the U.S., and Ericsson acquired CGCT, a French equipment manufacturer.

This is primarily due to the extremely high research and development costs necessary to remain competitive in this market.³²

The suppliers of "low-end" customer premises equipment (telephones, fax machines, cordless telephones, telephone answering machines, etc.) are much more numerous. This market is highly competitive and manufacturers must be satisfied with low profit margins. Most suppliers have thus chosen to locate their manufacturing facilities in areas of the world with low labor costs (such as Mexico and East Asia). Sales of simple voice telephones are growing slowly (about 4 percent per year) while sales of data equipment (computers, facsimile, and telex machines), mobile equipment (cellular and cordless telephones), and fiber optic equipment are growing quickly (up to 20 percent a year).³³

AT&T is the largest manufacturer of communications equipment in the world, supplying about 20% of the world's needs.³⁴ In 1986, the top ten manufacturers included three from the United States (AT&T, IBM, and Motorola), four from Europe (Alcatel, Siemens, Ericsson, and Philips), two from Japan (NEC and Fujitsu), and one based on Canada (Northern Telecom).³⁵

B. The United States Market

1. Trends in the United States Market

The United States market for communications equipment is the largest of any country in the world and comprises about one-quarter of the world market. The United States market grew at rate of about 10 per cent a year from 1984 to 1987, but has slowed recently to about 8 percent. This growth is being driven by new technologies (such as cellular radios, facsimile machines, and fiber optic systems) and the conversion from analog to digital transmission modes.

In his report for DOJ, Dr. Huber noted two "overarching" trends in the equipment markets: "the continued dispersal of equipment consumption, and the steady consolidation of equipment production."³⁶ He noted that the dispersal of equipment consumption was caused not just by the break-up of AT&T into eight independent companies, but also by the growth of private buyers. He states, for instance, that private buyers and non-telephone company carriers "but much more equipment in almost every category than any single RBOC".³⁷

Regarding the consolidation of equipment production, Dr. Huber noted that AT&T and Northern Telecom controlled over 80 percent of the central office switching market in the United States, that the three largest manufacturers supply over 80 percent of

³² It will cost between \$1 billion to \$1.5 billion for each switchmaker to develop the next family of switches. According to Siemens, the world's third-largest switchmaker, a supplier needs at least 15% of the world market. That leaves room for roughly six switchmakers. There are ten. "A Tale of Too Many," *The Economist*, March 10, 1989.

³³ "A Tale of Too Many," *The Economist*, March 10, 1989.

³⁴ "DealMakers are Burning Up to the Phone Lines," *Business Week*, March 13, 1989, p. 149.

³⁵ These figures are based on 1986 sales. *Financial Times*, Survey, Section III, July 19, 1989, p. 1.

³⁶ *Huber Report*, at 119.

³⁷ *Huber Report*, at 119.

fiber optic cable, 85 percent of cellular switching systems, and 60 percent of PBXs.³⁸

AT&T alone supplies over 50% of the total United States communications equipment needs and leads in almost every category of communications equipment. It employs about 60,000 people in 25 manufacturing plants throughout the country and employs another 30,000 employees in research, sales, and other manufacturing related activities. All the equipment that AT&T sells in the United States is manufactured in the United States, except for telephones, which AT&T now manufactures in a plant in Singapore. AT&T also owns 11 other plants overseas, employing 17,500 people, which manufacture equipment for sale in foreign markets.

The amount of equipment supplied by other United States suppliers varies depending upon the market segment. For instance, the market for transmission equipment and customer premises equipment is scattered among 50-100 firms, each serving particular niches. Foreign-based manufacturers, however, have made significant inroads in most of the high-technology and high growth products.³⁹ For instance, Northern Telecom increased its share of the central office switch market by a compound annual growth rate of 20.3 percent per year from 1984 through 1989, while AT&T's sales increased only 2.3 percent per year.⁴⁰ In the exploding market for facsimile machines, not one of the dozens of suppliers is based on the United States. In the PBX market, AT&T captured 22 percent of the market in 1988 but was closely followed by Northern Telecom (19 percent), Polm (recently purchased by Siemens, 16 percent), NEC (8 percent), Mitel (a Canadian-based company recently sold by British Telecom, 8 percent) and Siemens (5 percent).⁴¹

2. The United States Trade Position

The United States market is very open to foreign competitors compared to many other nations. The result has been increasing foreign penetration of the United States market both in terms of sales and investment. The United States trade balance in communications equipment has shifted from a surplus of over \$800 million in 1981 to a deficit of about \$2.6 billion in 1988 and \$1.9 billion in 1989. Foreign manufacturers supplied 21 percent of the United States telecommunications market in 1988, up from 17 percent in 1984.⁴²

Foreign-based firms are also increasing their purchases of United States manufacturers of high-technology products.⁴³ Annual for-

³⁸ Huber Report, 111-112.

³⁹ It should be noted that some of these foreign-based firms, including Northern Telecom and Siemens, have a substantial manufacturing presence in the United States and employ several thousand American workers.

⁴⁰ "Telecommunications Market Review and Forecast: Annual Report of the Telecommunications Industry", 1990 Edition, North American Telecommunications Association (NATA Report), p. 81.

⁴¹ NATA Report, p. 111, Figure 31.

⁴² NATA Report, p. 3.

⁴³ In testimony before the Communications Subcommittee, Alfred Sikes, Chairman of the FCC, noted that there had been about \$12 billion in purchases of high-technology equipment firms by Japanese companies in the last two years, and that Japanese companies purchased 26 companies during 1989 alone. Transcript of the Hearings Before the Communications Subcommittee, Committee on Commerce, Science and Transportation, on S. 1981, The Telecommunications Equipment Research and Manufacturing Competition Act, May 9, 1990, pp. 18-19.

foreign investment in the United States high technology industries has increased from \$214 million in 1985 to \$3.3 billion in 1988. From 1984 to 1989, 66 different United States-based computer and telecommunications equipment companies have been bought by or merged with foreign based firms.⁴⁴

The United States suffers a particularly acute trade imbalance in the market for low-end customer premises equipment. Of the \$2.6 billion deficit in 1988, \$2.4 billion was due to an imbalance in the CPE market. This market has been increasing by dominated by foreign suppliers, especially from Japan and lately from Korea. For instance, although there are sixteen United States-based manufacturers of key telephone systems, the market share of these firms combined is less than 35 percent.⁴⁵

The United States faced a trade deficit in communications equipment with the five major East Asian countries of \$3.9 billion in 1988.⁴⁶ The United States had a deficit of \$71 million in 1988 with France but had a trade surplus with Europe as a whole.

3. United States Research and Development

United States firms in the communications industry are spending more on research and development (R&D) than ever before, but United States spending on R&D lags behind several other nations in terms of percentage of sales. Total United States R&R expenditures (\$95 billion in 1988) are greater than that of Japan, West Germany, France, and Britain combined (\$80 billion). But the United States trails other countries in non-defense R&D when expressed in terms of percentages of Gross National Product (GNP); according to the National Science Foundation, in 1987, the United States spent 1.8 percent, Japan 2.8 percent, and West Germany 2.6 percent of their respective GNPs on R&D.⁴⁷

AT&T devotes more resources to communications equipment R&D than any other communications equipment manufacturer. Its R&D budget has grown 35 percent since sales divestiture, from \$2 billion in 1983 to approximately \$2.7 billion in 1988 (about 7 percent of total revenues). The BOCs spent over \$1 billion in R&D activities in 1988, including research done at Bellcore and at the BOCs' own independent research facilities.⁴⁸ When combined, the total R&D budget for AT&T and the BOCs is almost twice as large as the R&D budget before divestiture, a growth rate of almost 20 percent per year.

The R&D budget of the BOCs alone, however, lag behind the typical R&D expenditures of other firms, and especially high-technology firms. The BOCs committed only 1.4 percent of their revenues to

⁴⁴ The home country of the acquiring firms and the number of transactions for each are as follows: Canada 11; Japan 9; Hong Kong 1; Australia 1; Great Britain 21; West Germany 7; Italy 6; France 4; Switzerland 3; The Netherlands 2; and Israel 1. DATABASE: Dun & Bradstreet, Prompt, IAD, Securities Data Co. and Salomon Bros.

⁴⁵ AT&T pleading before the International Trade Commission (ITC): AT&T recently obtained a ruling from the ITC on this complaint that Japan and Korea had engaged in unlawful dumping of their products in the U.S.

⁴⁶ "U.S. Seeks Larger Market Share of Telecommunications Industry," *Investor's Daily*, April 25, 1989, p. 10.

⁴⁷ "Research and Development Spending to Rise 4.8 percent in 1990, Battelle Predicts," *The Wall Street Journal*, Thursday, December 28, 1989, p. 12.

⁴⁸ Four BOCs NYNEX, Amcotech, USWest and Southwestern Bell have established their own research facilities.

R&D in 1987. This is less than one-half the average of all United States industry (3.4 percent) and much less than the average for the typical telecommunications and computer firms (average 6 percent to 10 percent).

II REASONS FOR REPLACING THE MANUFACTURING RESTRICTION WITH REGULATORY SAFEGUARDS.

A *The Congress and the FCC, not the Federal courts, should be setting telecommunications policy*

As a result of the peculiar history of the growth of competition in communications and the antitrust case against AT&T, a Federal court judge is now responsible for regulating much of the communications industry. Even though the Consent Decree only governs the BOCs, the BOCs have such a strong presence in the industry that their activities inevitably affect the entire communications industry.⁴⁹ Judge Greene's decisions concerning the permissible lines of business that the BOCs may enter thus have the effect of setting national telecommunications policy.⁵⁰

There is no question that Judge Greene has acted within the bounds of the law. Judge Greene's responsibilities to oversee the Consent Decree derive directly from an act of Congress. In passing the Tunney Act of 1973, Congress specifically directed Federal court judges to review antitrust settlement decrees to determine whether they would be in the public interest.⁵¹ Judge Greene has shown flexibility in administering the decree, and has often made changes to the decree that have favored the interests of the RBOCs.⁵²

Nonetheless, there is considerable question whether it is appropriate public policy for a single Federal court judge to be exercising such control over the communications industry. As familiar as Judge Greene may be with the issues involved in the Consent Decree, there are several reasons why the Judge is not the most qualified person to be making Federal communications policy.

(1) The Judge has a small staff compared with the amount of work involved in enforcing the decree. As the Judge himself has

⁴⁹ Collectively, the BOCs control about 60 percent of the nation's telecommunications assets or slightly more than half a trillion dollars in embedded capital investment. The BOCs employ more than one percent of the total United States workforce and earn revenues of over \$75 billion annually. They purchase about 70 to 80 percent of the central office switches sold in this country, and collectively purchase about 50 percent of all telecommunications equipment sold in this country. Further, they serve 80 percent of the country's telephone customers and carry an even greater percentage of actual traffic. In short, the activities of the BOCs, and the constraints on those activities, have a substantial effect on the United States communications industry and, indeed, the entire economy.

⁵⁰ It is interesting to note that, in choosing the top 25 most influential telecommunications leaders in the world in 1988, *Communications Week* listed Judge Greene second, just after Richard Butler, Secretary General of the International Telecommunications Union, and just before Robert Allen, Chairman of AT&T. In 1989, *Communications Week* listed Judge Green fifth, three spots ahead of Alfred Sikes, Chairman of the FCC. See *Communications Week*, October 24, 1988, p. C1; *Communications Week* November 13, 1989, p. C2.

⁵¹ Antitrust Procedures and Penalties Act, 15 U.S.C. 16(b)-(f) (hereinafter referred to as the Tunney Act).

⁵² For instance, Judge Greene refused to accept the DOJ's proposal to make the line of business restrictions permanent (by allowing them to file for waivers and agreeing to review the need for the restrictions every three years); he permitted the BOCs to provide "Yellow Pages" directories and to market CPÉ; he removed the limitation that barred the BOCs from taking in more than 10 percent of their total revenues from non-communications ventures, and he loosened the information services restriction to permit the BOCs to provide "gateway" functions.

admitted, it is taxing for him to resolve all questions related to the decree with a limited staff of a few clerks at the same time that he handles a full judicial caseload.⁵³ The BOCs have filed over 200 waiver requests since the decree was entered. In addition, the Judge has been required to rule on numerous petitions for clarification and declaratory rulings concerning the terms of the decree, and he is also involved in several enforcement proceedings concerning possible violations of the MFJ by the BOCs. The sheer scope of these activities would make it difficult for any single person to devote the time and attention to these issues that they deserve.

(2) The Judge's mandate is to enforce antitrust law standards, not "public interest" standards. As the United States Court of Appeals for the D.C. Circuit recently ruled, the Judge may not consider ratepayer concerns or international trade concerns in enforcing or interpreting the decree. As a result, the Judge must make his rulings based upon one aspect of the law. The setting of communications policy, on the other hand, requires a consideration of all relevant factors that affect the "public interest".

(3) The Consent Decree requires the court to make a number of decisions based on communications economics, technology, and marketing. No Federal court judge can be expected to be an expert on these matters. For instance, the Court must make decisions based on the distinction between design of the telephone network and design of equipment that is used in the network, between providing customer equipment and manufacturing customer equipment,⁵⁴ and between engaging in applied research for the issuance of generic product specifications and engaging in the design and development of specific products. Even assuming a rational basis for these rules, a district court judge, with a staff of a few law clerks, is not the proper person to be drawing such distinctions that depend so heavily on a detailed understanding of technology and the market.

(4) The Court is beyond the control of Congress and the President, the two branches of government established by the Constitution to be responsible for passing and enforcing laws. The judicial branch was created to act as an independent check on the behavior of the legislative and executive branches of government. As a result, and in contrast with the officials of the Executive Branch and independent agencies, the courts are immune from congressional influence.⁵⁵ This is contrary to the Federal scheme of a tripartite government.

⁵³ The enforcement of the AT&T decree by my court is a considerable personal burden, for the work exists on top of a normal judicial caseload, and that burden is rarely accompanied by the opportunity to consider and decide novel or otherwise interesting legal issues that would balance the extra work in an intellectual sense. Yet I have a sworn obligation as a member of the judiciary to enforce laws and judgments even if some of the work is burdensome, or if it is accompanied by criticism from the sidelines by those with an economic or ideological axe to grind. Unless and until the laws are changed, I will carry out my responsibilities. "The Antitrust Laws, Telecommunications, and Consumers", an address by Judge Harold H. Greene, February 5, 1988.

⁵⁴ The BOCs argued in petitions before the Judge that the process of "providing" CPE permits them to perform research and design engineering. If not allowed to perform such functions, the BOCs argued, they could not market distinctive lines of CPE, as the court intended them to do.

⁵⁵ As Chairman Sikes of the FCC pointed out at the May 9th hearing, "I would add additionally that if you do not think I am doing a good job, you will not hesitate, I know, to call me in here [to testify]. And I would doubt that Judge Greene has even been up here [to testify before a Congressional committee]." Hearing Transcript, p. 19.

Only Congress can consider all the relevant factors in deciding whether the BOCs should be permitted to manufacture. It is much more consistent with our political structure for Congress to decide whether these restrictions should exist, and, if so, for the FCC to implement the necessary safeguards.

The FCC is the expert agency created by Congress specifically for the purpose of regulating the communications industry. The FCC has an extensive staff of professionals, including economists, engineers, lawyers, and telephone industry analysts, with many years of experience in the industry. It is responsible for monitoring and regulating the telephone industry, and it has developed sophisticated rules governing the industry's operations. The FCC also has authority to take into account antitrust laws in making its decisions. Thus, the Commission is far better situated than Federal court judges to understand the technical operations of the telephone network, take into account the principles of antitrust laws, consider the concerns of telephone service ratepayers, and integrate these findings into a decision that represents the "public interest." This bill reasserts authority for regulating the communications industry with Congress and the expert agency created to carry out that task.

B. Lifting the manufacturing restriction will promote the international competitiveness of the United States in high technology industries

The competitive position of the United States' manufacturing industry is facing a serious challenge.⁵⁶ This appears to be especially true in the field of the communications equipment⁵⁷ manufacturing industry. There is substantial evidence indicating that the United States has already begun to lose its world leadership position in this market. The amount of funds spent by United States companies on research and development is well below the proportional amounts spent by other countries; the United States trade position has declined rapidly since the divestiture; foreign firms are increasing their share of the United States equipment market, their investment in United States high-technology companies, and the percentage of United States patents that they own; and more United States jobs are being moved overseas.

The market for communications equipment is a global one, and several large, foreign-based equipment manufacturers are rapidly consolidating to divide up the world market among them. A large, worldwide market share is becoming increasingly important to the development of new technology because of the heavy research and development costs that are necessary to developing "state-of-the-art" technology. Unless the United States takes a more active role in permitting its companies to compete fully in these international markets, the United States faces the possibility that it will be shut out of the world market.

⁵⁶ See, "Paying the Bill: Manufacturing & America's Trade Deficit," Office of Technology Assessment, Congress of the United States, June 1988. This report finds, among other things, that " . . . America's relative decline [in manufacturing] is not just the natural effect of growth in other countries but also reveals a fundamental weakening in our ability to use technology to make things cheaply and well." *Id.*, at 26.

⁵⁷ For purposes of convenience, the term "communications equipment" will be used to include both "telecommunications equipment" and "customer premises equipment."

Lifting the manufacturing restriction on the BOCs may help the United States reverse course in several ways. Because of their intimate knowledge of the communications equipment industry and their tremendous resources, the BOCs may themselves be able to become strong international players. The BOCs' ability to work closely with existing United States manufacturers could help these manufacturers grow into world powers. Lifting the restriction may also stimulate spending on R&D that could spawn new and innovative technologies based in the United States. At a minimum, lifting the restriction will ensure that the United States is not holding back resources that could have a significant impact on the Nation's ability to compete.

Because of their years of experience in the telecommunications business, the BOCs can be expected to make a significant contribution to the development of new and sophisticated communications technology. That there are substantial efficiencies between the operation of the local exchange network and the design and development of equipment used in the network and to connect with the network is without question.⁵⁸ Allowing the BOCs to manufacture should allow them to take full advantage of their expertise and their efficiencies by investing in and developing new manufacturing entities to satisfy their needs and the needs of their customers. Such efficiencies include the BOCs' sharing of joint costs, their knowledge of the network, their familiarity with customers' needs, and the ease of administration. Allowing the BOCs to participate in the equipment manufacturing business could also benefit the services customer, as the BOCs will be able to develop and install equipment and add new features to their telephone networks more quickly if they can contribute to designing equipment that will satisfy the needs of their customers.

The following provides a more detailed explanation of the challenge faced by the United States in the communications equipment industry and the reasons that lifting the manufacturing restriction on the BOCs may improve the Nation's ability to compete on a worldwide basis.

Research and Development Expenditures.—R&D is particularly important to industrial competitiveness. Highly developed research laboratories are one of the key foundations of a healthy and growing industry. For instance, many experts attribute AT&T's dominance over the telecommunications equipment marketplace to its

⁵⁸ In denying a request to separate Western Electric and Bell Laboratories from AT&T, Judge Greene recognized that the nation had benefited greatly from the AT&T's joint ownership of its communications services businesses and its manufacturing businesses.

AT&T argued vigorously that the present structure of the Bell System was in significant part responsible for this admirable record [of innovation in the telecommunications industry] because the researchers were linked with a manufacturer—Western Electric—and with two service organizations—the Operating Companies and the Long Lines Department.

The Court is of the opinion that there is considerable merit to these contentions. Bell Laboratories has been a positive force both in basic and in applied research, and this research has had a beneficial effect on the nation's economic position in all of its varied aspects. It also seems to be true that the links between Bell Laboratories and the manufacturing and service arms of the Bell System have been of assistance in the achievement of these technological successes (footnotes omitted).

In a footnote, the Judge recognized that these benefits to the nation's economic position included basic scientific advance, cheaper and better products for consumers, foreign trade, and national defense. 552 F. Supp. at 167.

outstanding research facilities at Bell Laboratories. Billions of dollars in government funds are spent on research every year.

Total research and development spending in the United States, however, is in decline and lags that of foreign countries.⁵⁹ This trend is particularly apparent in the telecommunications industry. The mounting trade surpluses in telecommunications equipment enjoyed by foreign manufacturers have enabled them to underwrite substantially higher levels of R&D spending on communications and related technologies, unmatched by leading United States manufacturers and the BOCs. Between 1982 and 1987, for instance, Japan's six leading manufacturers of computers, communications, and electronics—NEC, Matsushita Electric, Toshiba, Pioneer Electronic, Sony and Hitachi—were able to increase annual outlays on R&D from \$2.5 billion to \$9.3 billion, or an average compounded rate of nearly 25 percent per year. Similarly, between 1985 and 1988, the five leading high technology manufacturers in Europe—Siemens, Philips, Plessey, Ericsson, and Thomson—increased their annual investment in R&D from nearly \$4 billion to \$7.1 billion, an average annual rate of about 22 percent.

By comparison, United States industrial R&D spending on these same technologies has remained relatively flat. Between 1982 and 1988, AT&T's reported annual outlays on R&D rose from \$1.8 billion to \$2.6 billion, an average annual rate of only 6 percent. Spending by the BOC's on R&D is well below the average high technology firm. While the BOCs spend about 1.4 percent of their sales revenues on R&D, the average high technology firm spends between 6 and 8 percent on R&D.

The trends in R&D spending have had an impact on the ability of United States firms to obtain patents in new telecommunications technologies. Between 1980 and 1988, for instance, the percentage of telecommunications patents awarded by the United States Patent Office to United States inventors fell from 58 percent to 48 percent of the total, whereas the percentage of such patents awarded to Japanese interests rose from 18 percent to 31 percent. In both years, Europeans accounted for the remaining 24 percent of all telecommunications patents awarded in the United States.⁶⁰

The MFJ restriction discourages the BOCs from conducting such research for several reasons:

(A) If a BOC develops a new technology or product, the manufacturing restriction bars the BOC from manufacturing that product and bringing it to market. Thus a BOC has no incentive to engage in research because its ability to profit from that investment is limited. If the restriction is lifted, the BOCs can develop, design, and fabricate a product based upon their research discoveries. The opportunity to make a profit from the manufacture of a product they develop thus should encour-

⁵⁹ (T)he U.S. is lagging its toughest foreign competitors [in research and development (R&D) spending]. Latest figures from the National Science Foundation show that in 1987 the U.S. spent 2.6% of its gross national product on R&D, slightly below 2.8% for West Germany and 2.9% for Japan. However, the U.S. spent only 1.8% of GNP (Gross National Product) on nondefense R&D in 1987, far below 2.6% for West Germany and 2.8% for Japan. France and the U.K. invested about the same share of GNP in nondefense R&D as the U.S. did.

"Research and Development Spending to Rise 4.8% in 1990, Battelle Predicts", *The Wall Street Journal*, Thursday, December 28, 1989, p. 12.

⁶⁰ U.S. Patent Office, "Technology Profile Report: Telecommunications," July 19, 1989, p. A3.

age the BOCs to spend more of their resources on research than they have since the divestiture.

(B) The court's interpretation of "manufacturing" makes it very difficult for the BOCs to know what research activities are permitted. The court's decision effectively drew a line between R (research) and D (development). This has reduced any efficiencies of conducting joint research and design and development activities and has created substantial uncertainty for the BOCs. For instance, the BOCs may conduct applied research and issue generic product specifications but may not design particular products that meet those specifications. The BOCs may also design software for their telephone network, but may not design software for equipment that is installed in the network. Because of the severe penalties that can apply if the BOCs cross the line into prohibited "manufacturing" activities, the BOCs are discouraged from engaging in any research activities at all.⁶¹

Lifting the manufacturing restriction should have a positive effect on the amount of research conducted by the BOCs and by the entire communications industry. There will be no doubt as to what research the BOCs may conduct. It will also allow the BOCs to profit from that research by bringing a new product to market. The BOC's increased spending on research and development, and its ability to coordinate its R&D activities with its operation of the network should also, of course, improve their chances of developing new technologies and acquiring patents.

Further, BOC entry may encourage AT&T and other manufacturers to devote more resources to research in order to stay competitive with the BOCs' manufacturing affiliates. Finally, lifting the manufacturing restriction might allow the United States to shift some of the responsibility and desire to conduct greater research onto private industry and, possibly, reduce the pressure on the United States Treasury to fund such research activities.

Trade Balance in Communications Equipment.—The United States market is very open to foreign competitors compared to many other nations. The result has been increasing foreign penetration of the United States market both in terms of sales and investment. The United States trade balance in communications equipment has shifted from a surplus of over \$800 million in 1981 to a deficit of about \$2.6 billion in 1988 and \$1.9 billion in 1989. The deficit in communications equipment fell at a rate nearly four times faster than the decline in the Nation's overall trade balance in recent years.

Whether the BOCs' entry into manufacturing will reverse the country's trade deficit, of course, cannot be predicted. The balance

⁶¹ Bell Atlantic brought this confusion concerning the scope of the manufacturing restriction to light in its recent filing with NTIA. Bell Atlantic notes that, after Judge Greene's order interpreting the meaning of the term "manufacturing", it submitted to the court a detailed description of the engineering and software development activities in which it was engaged. The court found that some of these activities "may be forbidden" and might subject Bell Atlantic to an enforcement proceeding. Rather than specifying which activities were potentially in violation of the Decree, the court directed Bell Atlantic to seek guidance from DOJ. In commenting on Bell Atlantic's request, however, DOJ refused to provide any guidance because, it said, it "has neither the obligations nor the resources" to do so. Bell Atlantic's Response to NTIA Notice of Inquiry, Docket #1267-9267, January 1989, at 6, n. 21.

of trade depends upon many factors unrelated to the quality and price of the products produced, such as exchange rates, trade barriers and tariffs, the telephone network standards in that country, etc. But it is clear that permitting the BOCs to enter the market, especially with the requirement that they make all their products in the United States, can only help the United States trade position.

BOC participation in manufacturing could help the trade deficit in at least two ways. First, the BOCs may generate significant exports of communications equipment from their own manufacturing activities. Second, BOC manufacturing may also stimulate AT&T to become more competitive, thereby improving AT&T's productivity and export potential. Several of the BOCs have complained that AT&T has not been responsive to their equipment needs because its leadership among United States manufacturing firms is unchallenged. As a consequence, the BOCs have had to turn to foreign suppliers to satisfy some of their equipment needs.

It is true that the United States trade deficit in telecommunications equipment is primarily due to the import of "low-end", low-profit customer premises equipment (telephones, cordless telephones, fax machines, etc.) that the BOCs are unlikely to manufacture. It is also true that the United States has a trade surplus in the "high-end" equipment market, that of intelligent switching equipment.

These facts do not tell the whole story, however. For one thing, the United States trade surplus in "high-end" switching equipment is partly due to the exports of switch-manufacturing plants in the United States owned by foreign-based companies such as Northern Telecom and Siemens. There is considerable question as to whether the United States should be satisfied with this overall surplus if it results from exports by foreign-based companies. Also, even if the BOCs forsake the "low-end" equipment market and enter the "high-end" equipment market, the BOCs' manufacturing activities might result in additional exports of this "high-end" equipment, resulting in an improvement in the overall balance of trade.

Decline in Market Share by United States Firms.—The market share of United States companies has fallen dramatically in several key equipment markets related to communications. According to a recent speech by the Assistant Secretary of Commerce for Communications and Information, Janice Obuchowski, reporting on a study by the Department of Commerce, the United States industry's global market share from 1984 to 1987 dropped by the following amounts: central office switching equipment fell from 30 percent to 24 percent; fiber optics fell from 75 percent to 50 percent; data PBXs fell from 100 percent to 36 percent; statistical multiplexers fell from 94 percent to 35 percent; key telephone sets fell from 28 percent to 22 percent; and semiconductor fell from 54 percent to 41 percent.⁶² United States firms produce no facsimile machines sold in the United States. Similar figures also apply to other consumer electronics equipment, such as phonographs, televisions, audio tape recorders, video cassette recorders, and machine tools

⁶² "Telecommunications Study Finds Mixed Bag on U.S. Competitiveness", *Inside U.S. Trade*, November 24, 1989, p. 17.

(although the BOCs are not currently barred from producing these items).⁶³ Foreign manufacturers supplied 21 percent of the United States telecommunications market in 1988, up from 17 percent in 1984.⁶⁴

The BOCs' entry into manufacturing should have a positive impact on the total market share controlled by United States firms. Because BOCs' intimate knowledge of the United States market, network standards, customer needs, business economics, etc., the BOCs are likely to be strong competitors in the equipment market. Although the BOCs will certainly compete for many contracts with other United States firms, it is also likely that the BOCs will develop innovative products suiting particular customer needs that will expand the total equipment market. In other words, rather than simply taking business away from existing manufacturers, the entry of the BOCs may stimulate greater customer demand for communications products in a way that will advantage all equipment manufacturers.⁶⁵

Movement of Jobs Offshore.—AT&T has closed down or reduced work force at 33 manufacturing plants in the United States since the divestiture, resulting in the loss of 34,374 jobs.⁶⁶ At the same time, AT&T has signed 18 joint venture agreements with foreign manufacturers and has opened seven new manufacturing facilities overseas. AT&T is not the only manufacturer in the communications equipment industry to have moved jobs offshore.⁶⁷ According to the Small Business Administration, from 1980 to 1986, small United States manufacturers (i.e., firms with less than 500 employees) added nearly 700,000 persons to their employment rolls, as compared to a net loss of nearly 2 million jobs among large United States manufacturers.⁶⁸

Allowing the BOCs to manufacture should also promote job opportunities in the United States. If the seven BOCs start their own manufacturing entities, they have the potential to create thousands of new employment opportunities for scientists, technicians, engineers, marketers and support staff. Even if the BOCs enter the manufacturing market by joint venture with existing firms, the expansion of these existing firms might create thousands of new employment opportunities.⁶⁹

⁶³ Council on Competitiveness, *Picking Up the Pace: The Commercial Challenge to American Innovation*, September 1988, p. 15, using data from the United States Department of Commerce.

⁶⁴ NATA Report, p. 3.

⁶⁵ This has occurred in the market for long distance telephone service and also for international telecommunications services.

⁶⁶ See Bell Atlantic's Response to NTIA's Notice of Inquiry, January 31, 1989, pp. 19-21; and Communications Workers of America, "Information Industry Report," October 19, 1988.

⁶⁷ Ironically, the Consent Decree does not prohibit a Bell Company from engaging in manufacturing activities outside of the U.S., as long as the products are only sold outside the U.S. Thus, the Decree has the unfortunate effect of permitting the BOCs to do overseas that which they cannot do domestically.

⁶⁸ "The State of Small Business: A Report of the President and Annual Report on Small Business and Competition," U.S. Small Business Administration (Washington, DC: U.S. Government Printing Office, 1988).

⁶⁹ A recent study performed on behalf of U.S. West found that lifting the information services and manufacturing restrictions would result in a net gain of 55,000 jobs by the year 2000 in the US West Region alone. "The Economic Impact of Telecommunications in the US West Region and the United States," Center for Economic Analysis, University of Colorado, Boulder, CO, November 1, 1989.

To summarize, substantial benefits can be expected from permitting the BOCs to enter the business of manufacturing communications equipment. The BOCs have considerable expertise and experience in the communications field that can be readily transferred into manufacturing activities. Removing the manufacturing restriction may not be the solution to all our competitive challenges. But this policy at least will not restrain these United States businesses from having the opportunity to compete in domestic and world markets. These increased manufacturing activities can be expected to stimulate greater spending on R&D, thus spurring innovation and United States patents, improve the Nation's trade position, increase job opportunities, increase the market share of United States firms both in the United States and abroad, and allow United States firms to invest more heavily in the United States.

C. The Consent Decree imposes an unfair and unjustified restriction on the BOCs

The manufacturing restriction is an unfair and unjustified restriction on the BOCs. No other company involved in the local exchange telephone business is similarly banned from the manufacturing market. In fact, several large telephone companies have extensive manufacturing concerns.

GTE, which takes in more revenues from providing telephone service than several BOCs, supplies about 10 percent of the Nation's central office switching equipment needs.⁷⁰ United Telecom owns the North Supply Company, a leading distributor of voice and data communications equipment (customer premises equipment and network equipment). There is no distinction that can be made concerning the extent of the market power of the BOCs and GTE, for instance, over the purchasing market, as both the BOCs and GTE, each purchase about 10 percent of the central office switches sold in the country. The BOCs, GTE, and United Telecom enjoy a dominant position over local telephone service and thus have the same incentive to engage in cross-subsidization.

One must also question the vertical integration between AT&T's long distance business and its manufacturing businesses. AT&T is the largest manufacturer of communications equipment in the world, and it is the dominant provider of long distance services and international services in the United States. AT&T's service businesses purchase more equipment for its long distance and international networks from its own manufacturing affiliates than the sum total of equipment purchased by any one BOC.

Clearly, if there is a concern about vertical integration between telecommunications services and the manufacture of communications equipment, that concern should apply equally to other local exchange carriers and to AT&T. There is little evidence that these carriers have abused their ability to engage in joint participation in both the services and manufacturing markets to the detriment of competition or of customer rates. There is little reason to believe

⁷⁰ GTE and AT&T recently entered a joint venture agreement, called AG Communications Systems, to manufacture these central office switches. AT&T will gradually assume complete ownership of the joint venture.

that the BOCs would engage in anticompetitive activity while these other carriers would not.

Some argue that the MFJ restrictions are justified because of the BOCs' past anticompetitive activity. The court never determined, however, that AT&T engaged in unlawful anticompetitive activity prior to the divestiture.⁷¹ Rather, AT&T and DOJ reached an agreement which bound the BOCs to the provision of regulated telephone service before the BOCs became legal, independent entities. The BOCs had little opportunity to oppose these restrictions, which were agreed to by their former owner and current competitor, AT&T.

To summarize, the BOCs are bound by a provision that does not apply to any other local telephone companies or long distance companies. There is no reason to punish the BOCs for anticompetitive activity when there was no judicial finding that anticompetitive activity had occurred. The manufacturing ban was adopted as part of an agreement between DOJ, which has not changed its position, and AT&T, a current competitor of the BOCs. Thus, it is patently unfair to continue to bind the BOCs by a restriction when they were never found to have been at fault and when the restriction was imposed by a competitor of the BOCs, especially when that competitor is not bound by a similar restriction.

D. Anticompetitive harm to the communications equipment market is unlikely to occur if the BOCs are permitted to manufacture

As discussed earlier in this report, the District Court never found that AT&T had engaged in anticompetitive activity regarding its manufacturing and procurement activities. Yet, even if the BOCs had engaged in anticompetitive conduct while they were a part of AT&T, it is unlikely that the BOCs could cause harm to the communications equipment market through anticompetitive conduct today.

As several of the witnesses testified, the communications market has changed drastically in the last eight years. The divestiture of AT&T into eight separate companies, the globalization of the communications equipment market, the concentration of equipment suppliers, the increasing foreign penetration of the United States market, the continued dispersal of equipment consumption, for example, have substantially changed the market for communications equipment. Further, the safeguards included in the bill and the FCC's enhanced regulatory safeguards should permit the Commis-

⁷¹ Judge Greene did find, in ruling on a motion for directed verdict filed by AT&T after the government had presented its case, that the government had met its burden of presenting enough evidence to warrant continued prosecution of the case. The case was settled before AT&T had finished presenting its defense. The Judge also stated that the case against AT&T regarding its manufacturing activities was not as strong as the case against its long distance operations.

"It should be noted, however, that the government's procurement case was not extremely strong. In the first place, it consisted only of sixteen individual episodes. Measured against the large field of procurement decisions in which the Bell System was engaged, this was not a formidable number. . . . Moreover, even as to those sixteen episodes the proof was not overwhelming. Where the government's evidence tended to demonstrate anticompetitive acts, AT&T's market share was generally not high; where market share was high, there was relatively little evidence of anticompetitive acts."

The part of the case dealing with pricing of equipment sold by Western Electric was dismissed on September 11, 1981.

552 F. Supp. at 163, note 137.

sion to monitor anticompetitive activity more closely. These changes have reduced the possibility that the BOCs could gain an anticompetitive advantage in manufacturing.

In presenting the antitrust case, DOJ argued to the court that AT&T had engaged in three general types of anticompetitive conduct: 1) the BOCs purchased Western Electric equipment even when those products were more expensive or of lesser quality than alternative goods available from unaffiliated vendors; 2) the BOCs granted Western Electric premature and otherwise preferential access to necessary technical data, compatibility standards, and other information concerning the BOCs' network; and 3) the Bell System subsidized the prices of its equipment with the revenues from the BOCs' monopoly services.

The following section examines the BOCs' economic strength, their incentives to engage in anticompetitive behavior, and the ability of the FCC and other regulators to prevent the BOCs from engaging in such conduct because of their manufacturing activity.

1. The divestiture and other changes have reduced the possibility of significant anticompetitive activity

The market power possessed by each BOC over the communications equipment market is much less than the market power formerly exercised by AT&T. As a result, there is less reason to believe that the BOCs could cause harm to the communications equipment market.

Prior to the divestiture, AT&T purchased approximately 80 percent of all the central office switching and transmission equipment sold in the United States. About 80 percent of that equipment was manufactured by AT&T's manufacturing subsidiary, Western Electric.⁷² As a result, only small fractions of the market remained open to independent manufacturers. Today, the seven RBOCs are separate independent companies. They each purchase about 10 percent of the total central office switching and transmission equipment sold in this country. Further, private (non-telephone company) purchasers of communications equipment account for a much larger percentage of the total purchase market than ten years ago. Dr. Huber found that, as a group, private buyers "buy much more equipment in almost every category than any single RBOC." As a result, even if a BOC were to satisfy all its equipment needs by purchasing products from its manufacturing subsidiary, approximately 90 percent of the equipment market would still be open to independent manufacturers. Thus, the BOCs do not have the ability to foreclose the equipment market to competing manufacturers that AT&T possessed prior to the divestiture.

Market forces are also likely to constrain the BOC's incentives to engage in unlawful cross-subsidization and discrimination. Some argue that the BOCs could purchase lower-quality equipment at inflated prices from their affiliates and pass these costs onto their ratepayers. Because of the potential threat of competitive to the BOC's local telephone services, however, the BOCs will be reluctant

⁷² *Huber Report* at 115. A substantial portion of the remaining 20 percent of telephone company purchases was made by the GTE operating companies, which also purchased telecommunications equipment from an affiliated manufacturer.

to purchase equipment from their subsidiaries if that equipment is overpriced or is not as high in quality as other equipment in the market. The BOCs cannot afford to suffer lower quality service and higher prices when competitors to their access service are lurking around the corner. Even if true competition does not arrive for several years, network equipment often is not replaced for a decade or longer. Thus, the BOCs have little incentive to purchase equipment from themselves if this equipment is not competitive on a cost and quality basis with the equipment of competitive manufacturers.⁷³

Even if the BOCs were to attempt to engage in unlawful self-dealing, the growth of competition will make it easier for regulators to detect such unlawful activity. It would be difficult for a BOC to make a profit on its manufacturing affiliate's operations if that affiliate sold equipment only to its affiliated BOC. Each BOC purchases such a small percentage of equipment sold in the United States that its sales to itself would not be sufficient to support the large research and development costs that are necessary to remain in the business in the long run. If the BOC's manufacturing affiliate sold equipment only to its affiliated BOC, this would raise suspicions at the FCC and DOJ that the BOC was engaging in unlawful self-dealing.

The manufacturing affiliate would, most likely, have to market its products outside the BOC. This has two advantages. The need to sell outside the BOC would put pressure on the manufacturing affiliate to develop products that are competitive with other manufacturers. Second, the sales outside the company would provide regulators with price "benchmarks." Regulators could easily compare the prices paid by the BOCs for equipment it purchases from its affiliate with the prices paid by other purchasers for that same equipment. The existence of these "benchmarks" makes the process of detecting unlawful activity much easier than when there were no other alternative sources of similar equipment.

The existence of several competitors in the communications equipment market also will aid in preventing anticompetitive conduct. For one, the existence of competitive products in the marketplace will also provide "benchmarks" for comparing the prices paid by the telephone company to its manufacturing affiliate for similar equipment manufactured by that affiliate. Also, the equipment manufacturers and ratepayers will undoubtedly seek to protect their interests by scrutinizing every move that the BOCs make. If there is any potential violation, these private "police officers" will be sure to bring these matters to the attention of the Commission and DOJ.⁷⁴

⁷³ It would not in itself be a violation of the antitrust laws for a BOC to purchase equipment manufactured by its manufacturing affiliate. If a BOC purchases its own equipment because it is the higher quality or has the lowest price, there is no anticompetitive harm. There is only a potential antitrust violation if a BOC purchase equipment from itself unreasonably in order to favor its manufacturing affiliate.

⁷⁴ The bill, as reported, requires the BOC's manufacturing subsidiaries to file public reports concerning their activities with the appropriate regulatory authorities. These public reports, in addition to the filings made before the FCC, will assist the private interests in monitoring the BOC's activities.

2. The FCC and the States are better equipped today to protect against anticompetitive activity.

Regulators are generally better equipped today to prevent and detect anticompetitive activity than they were prior to the divestiture. The FCC has developed several new and stronger measures to protect against cross-subsidization and discrimination. The Commission has adopted sophisticated rules governing cost allocations to prevent the BOCs from shifting costs from the unregulated, manufacturing activities to its regulated telephone operations.⁷⁵ The FCC has also boosted its auditing programs in the past few years, partly in response to congressional concerns. For instance, the Commission now has an automated reporting and management information system (ARMIS), which allows the Commission to target audit and enforcement resources. The decision of Congress last year to increase the potential penalties for violations of the Act to up to \$1 million should help to deter such conduct.

The FCC has also worked hard to develop strong relationship with the State regulatory commissions that have oversight authority over the BOCs' intrastate communications services. The FCC frequently confers with State public utility commissions to coordinate their regulatory activity. In short, the BOCs would find it very difficult to engage in any unlawful cross-subsidization should they desire to do so.⁷⁶

The Commission has established other regulations to protect competitors in the equipment marketplace against potential anticompetitive activity. The risk of interconnection discrimination has been limited by widespread acceptance of FCC regulations that spell out the requirements for interconnection of terminal equipment.⁷⁷ The FCC has also contained discrimination in installation, repair, and maintenance by the creation of Centralized Operations Groups that process, coordinate, and schedule orders for CPE interconnection. Private interconnection standards have also been developed by working groups of the International Telecommunication Union and other standard-setting bodies that are equally available to all manufacturers. Perhaps most important are rules that require the disclosure of information about network design changes.⁷⁸

E. The bill contains several safeguards to provide further protection against anticompetitive harm to the communications market

The bill recognizes that, despite the changes in the communications industry and the enhanced ability of regulators to detect anticompetitive activity, there remains a possibility that the BOCs' entry into the manufacturing market could result in harm to ratepayers and competition in the manufacturing market. The BOCs continue to hold a monopoly over local exchange service in the

⁷⁵ See Separation of Costs of Regulated Telephone Service from Costs of Nonregulated Activities, CC Docket No. 86-111, Report and Order, FCC 86-564, released February 6, 1987.

⁷⁶ See Testimony of Alfred C. Sikes, Chairman, Federal Communications Commission, before the Communications Subcommittee, on S. 1983, May 9, 1990.

⁷⁷ 47 C.F.R. 64.702(d) (2) (1985). These rules were clarified in *Computer and Business Equipment Mfrs. Ass'n, 93 FCC 2d 1226 (1983)*.

⁷⁸ See 47 C.F.R. Part 68 (1985).

markets they serve.⁷⁹ Although the BOCs are beginning to face some competition in some urban areas, the extent of this competition is small when compared to the total revenues earned and traffic carried by the BOCs.

For this reason, S. 1981 contains several safeguards to protect against the possibility that anticompetitive conduct or harm to the consumers of telephone service could occur. These safeguards should also aid regulators in detecting and preventing such conduct. For instance, the bill bars any cross-subsidization and requires that a BOC can only purchase equipment from its manufacturing affiliate at the open market price. The bill also requires that competitive manufacturers be given "comparable opportunities" to sell equipment to the telephone company that the BOC provides to its manufacturing affiliate.

Further, the bill contains several specific provisions to assist in preventing such possible anticompetitive activity. For instance, to aid in preventing cross-subsidization, the BOCs' manufacturing activities can only be conducted out of an affiliate that is separate from the telephone company and that complies with, at a minimum, several protective measures specified in the bill. The bill provides that the BOCs must disclose information about their network to all manufacturers at the same time that they make that information available to their manufacturing affiliates. Other prophylactic measures are described in more detail later in this report.

F. Conclusion

Since the divestiture, both technological advances and the emergence of a global economy have completely altered the communications marketplace. The market is becoming more international in scope, and foreign manufacturers are taking advantage of the openness of the United States market to increase their worldwide market shares. The United States is facing the possibility of being shut out of this emerging world market if it does not take action soon. The current MFJ restrictions serve to sideline seven major players and leave their tremendous assets sitting idle while foreign competitors invade our markets and grow into worldwide powers. The BOCs possess enormous resources that could be of great benefit to the United States economy.

The BOCs could bring enormous benefits to the market. Lifting the manufacturing restriction will allow them to take advantage of the natural efficiencies between the operations of the telephone network and the manufacture of equipment to be installed in that network. Allowing the BOCs to manufacture should promote jobs, stimulate R&D spending, contribute to our balance of trade, and help the United States to retain its position as the world leader in telecommunications technology. Because of the significant changes in the communications marketplace and in the regulatory arena, there is less likelihood that the BOCs could cause harm to the Nation's equipment marketplace through anticompetitive activities. Further, regulators are better equipped to prevent harm from occurring to ratepayers or to the competitiveness of the United

⁷⁹ The court found that 99.9 percent of telephone traffic, generated by one customer out of one million, is carried through non-telephone company facilities. 673 F. Supp. at 536-40.

States market, and several provisions in S. 1981 as reported should assist regulators in preventing and detecting such activity.

If the United States expects to compete worldwide, domestic communications policy will have to abandon its excessive preoccupation with the alleged misbehavior of a company that no longer exists and embrace a vision of the future benefits that the seven RBOCs could bring to the international communications equipment marketplace.

LEGISLATIVE HISTORY

Senator Hollings, Chairman of the Committee, introduced S. 1981 on November 21, 1989. The Subcommittee on Communications held two hearings on the bill, on April 25 and May 9, 1990. Witnesses at these hearings included the Chairman of the FCC, several representatives of the BOCs and the telecommunications manufacturing industry, and representatives of the Communications Workers of America, the Consumer Federation of America, and the Arizona Council for the Hearing Impaired. The Commerce Committee ordered S. 1981 reported by voice vote with an amendment in the nature of a substitute at its executive session on May 22, 1990.

SUMMARY OF MAJOR PROVISIONS

The bill as reported adds a new section 225(a) to the Act that would permit the BOCs to manufacture telecommunications equipment and customer premises equipment and provide telecommunications equipment notwithstanding any previous antitrust restrictions. The section prohibits a BOC from manufacturing in conjunction with another BOC.

Subsection (b) requires that the BOC only conduct such manufacturing or provision of equipment through an affiliate that is separate from any BOC.

Subsection (c) includes a number of safeguards to protect against anticompetitive behavior, including:

- requiring the FCC to issue rules to ensure that the affiliate files financial information publicly;
- prohibiting a BOC from carrying out sales and other activities on behalf of its manufacturing affiliate;
- requiring that the affiliate shall conduct all of its manufacturing within the United States and that all component parts, of customer premises equipment manufactured by such affiliate or of telecommunications equipment manufactured by such affiliate, shall have been manufactured within the United States; except that the FCC may, no later than three months after application by such affiliate, waive these requirements upon a showing of extraordinary circumstances;
- requiring that the BOC own no more than 90 percent of the equity of its manufacturing affiliate;
- prohibiting the BOC from issuing debt to its manufacturing affiliate, and prohibiting any creditor of the manufacturing affiliate to have recourse to the assets of the BOC's telephone business; and
- requiring the manufacturing affiliate to make its equipment available to other local telephone companies.

Subsection (d) requires a BOC to file information concerning its network with the FCC at the same time that it makes such information available to its manufacturing affiliate. This subsection also requires a BOC to provide timely information to the public on the deployment of telecommunications equipment in its network.

Subsection (e) requires that the BOC's manufacturing affiliate and other manufacturers have a comparable opportunity to sell equipment to the BOC. This subsection also prohibits cross-subsidization.

ESTIMATED COSTS

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, June 28, 1990.

Hon. ERNEST F. HOLLINGS,
*Chairman, Committee on Commerce, Science, and Transportation,
U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has reviewed S. 1981, the Telecommunications Equipment Research and Manufacturing Competition Act of 1990, as ordered reported by the Senate Committee on Commerce, Science, and Transportation on May 22, 1990. We estimate that implementation of this bill would result in additional costs to the federal government of about \$3 million annually in fiscal years 1991 through 1995, assuming appropriation of the necessary funds.

S. 1981 would permit the Bell Telephone Companies to research and manufacture telecommunications equipment through separate affiliates. The bill would require the Federal Communications Commission (FCC) to prescribe regulations governing varying aspects of the operations of manufacturing affiliates within 180 days of enactment. The FCC would be required to issue regulations concerning the relationship of the affiliates and the companies. The regulations would cover areas including accounting, financing, record-keeping, and reporting. The FCC also would be required to issue regulations to ensure that manufacturing affiliates make their equipment available to local telephone exchange carriers and allow other manufacturers to sell equipment to the Bell Companies. Finally, the bill would require that manufacturing activity by affiliates be conducted within the United States. The FCC would be required to develop procedures to waive this requirement under certain circumstances.

Based on information from the FCC, CBO estimates that development and implementation of the various regulations and procedures required by the bill would result in costs of about \$3 million a year over the next five years. Most of the costs would be for additional personnel to develop and implement the regulations. The FCC also would incur costs to revise its automated cost-accounting

system to monitor the financial relationships between companies and their affiliates.

No costs would be incurred by state or local governments as a result of enactment of this bill.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Laura Carter, who can be reached at 226-2860.

Sincerely,

ROBERT D. REISCHAUER, *Director*.

REGULATORY IMPACT STATEMENT

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation, as reported.

This legislation authorizes the BOCs to engage in the manufacture of telecommunications equipment and customer premises equipment, and the provision of telecommunications equipment. The bill would replace the current antitrust prohibition on BOC manufacturing with several regulatory safeguards designed to prevent the BOCs from engaging in anticompetitive behavior. The bill requires the FCC to develop regulations to enforce the provisions of the bill, so that the BOCs do not use their dominance over local telephone service to gain an unfair advantage over competitors in the equipment manufacturing marketplace. A representative of consumer groups also testified that permitting the BOCs to engage in manufacturing could cause local telephone rates to be higher than they otherwise would be because of the possibility of cross-subsidization. Regulatory provisions are necessary to ensure that the BOCs will not enter the manufacturing business at the expense of competition and telephone service ratepayers.

While these provisions will require some amount of increased regulatory activity by the FCC, it is important to note that any concern about these potential burdens must be balanced against the recognition that the bill allows the BOCs to enter a new line of business that was previously prohibited to them. The increase in productivity in the private sector that will result from the bill is sure to outweigh any increase in regulatory activity.

NUMBER OF PERSONS COVERED

Most of the bill's regulatory provisions concern the activities of the BOCs' telephone operations, not the activities of their manufacturing affiliates. The BOCs' telephone operations, and their employees, are already regulated by the various state commissions and the FCC. Thus, the regulatory provisions concerning the telephone operations are unlikely to increase the number of persons affected by regulation. Some provisions do concern the manufacturing affiliate, such as requiring the affiliate to make the equipment it manufactures available to other telephone companies, and requiring the affiliate to make public filings of its financial information. While the total number of persons affected by such regulations could be substantial if the BOCs' manufacturing affiliates become very successful, these regulations are unlikely to be overly burdensome.

ECONOMIC IMPACT

The economic impact of these regulations is likely to be minimal, especially considering the potential economic benefit that is likely to accrue from allowing the BOCs to enter the manufacturing arena. The BOCs' manufacturing arms would have the potential to stimulate jobs, investment, and export opportunities for the American economy. In addition to boosting overall economic output and productivity, these activities are likely to generate significant tax revenues for local, state and federal governments. Most of the regulatory provisions affect the activities of the telephone company's operations, which are already regulated, and are unlikely to impose much of an economic burden.

PRIVACY

The legislation will not have any adverse impact on the personal privacy of the individuals affected.

PAPERWORK

This bill requires the manufacturing affiliate of a BOC to make public filings of its financial information. The bill does not require the affiliate to generate new information but simply requires the public filing of information that it would collect in the regular course of business. The bill also requires the FCC to adopt rules to implement the provisions of the bill. Thus, the bill will increase the paperwork burden on the BOCs and other interested parties because they will file comments with the FCC concerning its proposed rules. The bill imposes no regular reporting requirements on any company other than the BOCs' manufacturing affiliates.

SECTION-BY-SECTION ANALYSIS

Section 1

Section 1 states that the short title of the bill is the "Telecommunications Equipment Research and Manufacturing Competition Act of 1990."

Section 2

Section 2 states the findings of the Congress that the economic growth and international competitiveness of the United States would be assisted by permitting the BOCs to engage in manufacturing and research regarding communications equipment.

Except as noted in the following discussion, the term "manufacturing" is intended to include the design, development, and fabrication of telecommunications equipment and customer premises equipment, as well as the provision of telecommunications equipment.

Section 3(a)

Section 3(a) adds a new section 225 to the Act that specifies the new activities in which the BOCs may engage. This section also sets forth the obligations and regulations that will govern their participation in these activities. The following describes the provisions of this new section 225 of the Act:

Section 225(a) permits a BOC, through an affiliate, to engage in the manufacture and provision of telecommunications equipment and the manufacture of customer premises equipment, notwithstanding any restriction contained in the MFJ. The provision does not grant the BOCs an exemption from future antitrust actions. The provision also states that the BOCs may not engage in manufacturing "in conjunction with" a BOC with which it is not affiliated. For instance, this provision would permit Illinois Bell to engage in joint manufacturing with Michigan Bell because they are both owned by Ameritech, but would not permit Illinois Bell to manufacture in conjunction with New York Telephone, which is owned by NYNEX. This provision is intended to bar any form of joint activity that might permit the BOCs to engage in anticompetitive behavior.

This provision is not intended to change the status of Bell Communications Research (Bellcore), i.e., make unlawful any activity that currently is lawful for Bellcore. Bellcore, which was created by the MFJ and is owned jointly and equally by the seven divested companies, provides a centralized organization for the provision of engineering, administrative and other services. One such service is providing a single point of contact for coordination of the BOCs to meet national security and emergency preparedness requirements. The Committee does not intend to disrupt Bellcore's current activities. Neither does the provision authorize Bellcore to do anything more than it is authorized to do today. For instance, the provision does not authorize Bellcore to engage in the manufacture or provision of telecommunications equipment or the manufacture of customer premises equipment, other than the limited amount that it was authorized to do prior to this bill.

Section 225(b) says that a BOC may only engage in the manufacture of telecommunications equipment and customer premises equipment and the provision of telecommunications equipment through an affiliate that is separate from the BOC. The manufacturing affiliate of a BOC may include a subsidiary of the BOC or a subsidiary of the RHC that owns or is owned by the BOC. This provision, for instance, does not require that each of the twenty-two BOCs establish its own separate affiliate: each of the seven RHCs may set up its own manufacturing affiliate or affiliates as long as those manufacturing affiliates are separate from the BOC's telephone service operations. There is no limit to the number of manufacturing entities with which a BOC may affiliate, as long as they are all separate from the BOC's telephone service operations.

The intention of the word "separate" is to require enough distance between the manufacturing affiliate's operations and the BOC's telephone service operations to make it easier for regulators to detect cross-subsidization and anticompetitive behavior. Although other provisions of the bill specifically address certain activities concerning the separation between the manufacturing affiliate and the BOC's telephone service operations, these provisions establish the minimum requirements for such separation. The FCC may, after notice and comment, adopt rules that address issues not addressed in this bill and that require further separation if the FCC finds that such rules are necessary to protect against cross-subsidization and anticompetitive behavior. In determining such

rules, however, the FCC shall balance the need for these rules with the need to permit the BOCs to engage in close collaboration with any manufacturer, as set forth in section 225(f).

Section 225(c)(1) requires the manufacturing affiliate to maintain books, records, and accounts separate from its affiliated BOC. These materials must also identify all transactions between the manufacturing affiliate and the BOC. Even if the manufacturing affiliate is not a publicly held corporation, it must prepare financial statements which are in compliance with federal financial reporting requirements for publicly held corporations, file such statements with the Commission, and make such statements available for public inspection.

Section 225(c)(2) requires that a BOC and its non-manufacturing affiliates may not perform sales, advertising, installation, production or maintenance operations for a manufacturing affiliate. In other words, the manufacturing affiliate must conduct these activities on its own behalf, either with its own employees or using an agent that is independent of the affiliated BOC or its affiliates. The BOC and its manufacturing affiliates may carry out institutional advertising not related to specific telecommunications (or customer premises) equipment as long as the manufacturing affiliate pays its pro rata share of the costs of such advertising.

Section 225(c)(3) restricts the operations of the BOC's manufacturing affiliate in order to promote United States investment, employment and productivity. The provision states that the manufacturing affiliate shall conduct all of its manufacturing within the United States and all component parts, of customer premises equipment manufactured by such affiliate or of telecommunications equipment manufactured by such affiliate, shall have been manufactured within the United States. The provision also authorizes the FCC to waive these requirements, no later than three months after the affiliate submits an application requesting such a waiver, upon a showing of extraordinary circumstances.

The purpose of this provision is to ensure that the BOCs' manufacturing activities benefit the United States and not foreign countries. Over the past decade, several large manufacturers, including AT&T, have moved their manufacturing facilities outside the United States.⁸⁰ American manufacturers have also been increasing their use of foreign components in equipment that they fabricate.⁸¹ Meanwhile, several foreign companies have been increasing their investments in the United States and increasing their share of the American market. In addition, in part because they are precluded currently from entering the manufacturing market, the BOCs have shown a proclivity toward investing their capital overseas. A recent New York Times article found that all seven of the BOCs had made significant investments in Europe.⁸² Bellcore, the BOCs' joint manufacturing center, has also entered several joint

⁸⁰ According to AT&T, AT&T now employs about 17,500 persons in manufacturing-related jobs outside the United States.

⁸¹ Testimony at the hearings before the Communications Subcommittee indicated that 58 percent of the chips used in some AT&T circuit boards, for instance, are manufactured abroad.

⁸² "The Baby Bells Scramble for Europe", *The New York Times*, December 10, 1989, Section 3 (Business Section), p. 1.

venture agreements with foreign-based manufacturers.⁸³ In 1987, NTIA determined that, if the manufacturing restriction is lifted,

[T]here is a substantial concern [involving the United States trade position] in one situation. That situation would be if a Bell company undertook to manufacture digital central office switches in partnership with a foreign-based firm, and overseas markets (including the foreign partner's home market) remained closed to United States firms. It is our view that, absent appropriate safeguards, such joint venturing would likely cause significant harm to American competitive technology and trade positions, and could pose the threat of destroying this country's indigenous central office equipment manufacturing capacity.⁸⁴

This pattern of activity is not in the long-run best interests of the United States. The movement of jobs to offshore locations will eventually cause the American workforce to lose the expertise to attract other manufacturing establishments. Increasing investment by foreign companies could cause United States technology and profits to be exported back to the home country of the foreign investor. If domestic companies focus too much on the possibilities of investment in foreign markets, the American economy will suffer from a lack of growth, especially in the latest technologies. These trends could lead to a serious decline in United States productivity, United States leadership in high technology industries, the availability of jobs, and the United States trade position.

As a result, the bill contains a provision to require the BOCs to conduct their manufacturing in a manner that will be sure to benefit the United States. The intention of this provision is to promote United States competitiveness by stimulating spending on R&D, encouraging job growth, permitting investment by United States companies in the United States, and giving firms the incentive to develop in-house technological expertise that will serve as the foundation for a productive economy. This is necessary to allow the United States to retain its leadership in the telecommunications industry.

On the other hand, this provision is not intended to be so restrictive that it prevents the BOCs from entering the manufacturing market at all. For this reason, a waiver provision is included for those extraordinary circumstances when such a waiver is required.

For purposes of this paragraph, the term "manufacturing" does not include "provisions of telecommunications equipment." This section is not intended to bar the BOCs from being able to sell telecommunications equipment abroad. In fact, it is hoped that the BOCs will produce goods that can be expected and can help to improve the United States balance of trade.

⁸³ Sixteen of 34 joint venture research projects entered into by Bellcore over the past five years have been with foreign companies. In 1990 alone, Bellcore signed joint research projects with the Toshiba Corp. of Japan, the Furukawa Electric Co., Ltd. of Japan, the Industrial Technology Research Institute of Taiwan, and Siemens Aktiengesellschaft of West Germany. Notices filed in the Federal Register Pursuant to the National Cooperative Research Act of 1984, Department of Justice, Antitrust Division.

⁸⁴ "NTIA Trade Report: Assessing the Effects of Changing the AT&T Antitrust Consent Decree", U.S. Department of Commerce, February 4, 1987, p. vi.

Section 225(c)(4) requires that a BOC and its affiliates may own no more than 90 percent of the equity of any of its affiliated manufacturers. In other words, a BOC manufacturing affiliate cannot manufacture unless at least 10 percent of the equity of such affiliate is owned by a private entity or entities not affiliated with that BOC. Section 225(a) further prevents any other BOC, or any affiliate of any other BOC, from purchasing any equity interest in that manufacturing affiliate. The intention of this provision is to increase the oversight of the operations of the affiliate by outside parties. Independent manufacturers are most likely to be interested in making this equity investment so as to obtain shareholder and financial information of the company. These outside entities can act as "private police officers" by scrutinizing the activities of the manufacturing affiliate and bringing any possible violations of the law to the attention of regulators. These outside investors can also exercise their rights as shareholders to bring suit against the directors of the corporation should they fail to fulfill their legal obligations.

Section 225(c)(5) recognizes that the manufacturing affiliate may choose to incur debt as part of its capitalization. This section provides that this debt may not be issued by any affiliate of the manufacturing affiliate, which includes any affiliate of the BOC with which it is affiliated. Also, any debt incurred by the manufacturing affiliate cannot permit a creditor, on default, to have recourse to the assets of the BOC's telephone service operations. The purpose of this provision is to protect the independence and viability of the BOC's basic telephone service in recognition of the vital service that these companies provide and the necessity to keep these companies solvent.

Section 225(c)(6) clarifies the separation requirement of section 225(b). This section makes it clear that section 225(b) only requires separation between a BOC and its manufacturing affiliate. It does not require separation between the manufacturing affiliate and any other affiliate of the BOC. For instance, the twenty-two divested companies have organized into seven holding companies. There is no requirement for separation between any non-BOC subsidiary or affiliate of the holding company and the manufacturing affiliate.

Section 225(c)(7) further clarifies that any BOC affiliate that becomes affiliated with a manufacturing entity itself becomes a manufacturing affiliate and must operate separately from the BOC and otherwise comply with the provisions of the bill.

Section 225(c)(8) requires BOC manufacturing affiliates to make available any telecommunications equipment they manufacture and offer to all local exchange carriers without unreasonable discrimination or self-preference as to price, delivery, terms, or conditions. There are approximately 1400 carriers that provide local exchange telephone service in the United States. These carriers interconnect with each other and with interchange carriers to provide nationwide telephone service. The other 1400 local telephone companies need access to such telecommunications equipment in order to maintain high quality telephone service. High quality telecommunications service is particularly important in rural areas, often served by independent telephone companies, because of the need to stimulate jobs and economic growth in those regions. It is assumed that the BOCs will continue to manufacture equipment for which

there is reasonable demand from these other local telephone companies, taking into account the profitability of manufacturing the product, alternative sources of the product, the importance of the equipment to the local companies, the quantity demanded, the obsolescence of the product, and other appropriate factors. The telecommunications equipment that the BOCs must make available to other local telephone companies must be intended for use in the public telecommunications network (including for use with information services) and includes software that is part of such telecommunications equipment.

Some competition is developing in the provision of local telephone service in certain urban centers, particularly for large business customers in downtown metropolitan areas. This provision is not intended to obligate a BOC manufacturing affiliate to sell to companies providing directly competitive local exchange service within the BOC's service area.

The manufacturing affiliate's obligation to sell telecommunications equipment to an unaffiliated local telephone exchange is contingent upon two factors. Either the unaffiliated carrier is not affiliated with a telecommunications equipment manufacturer or if that carrier is so affiliated, the carrier must provide to the Bell Company the telecommunications equipment which its affiliate manufacturers for sale or commercial use without discrimination or self-preference as to price, delivery, terms for conditions.

Section 225(d) imposes certain information disclosure obligations on the BOCs. The BOC's telephone exchange service facilities are essential facilities for a wide variety of telecommunications products and services, including long distance services, cellular services, information services, customer premises equipment and telecommunications equipment. Those who interconnect with and those who manufacture equipment to operate with the local exchange network are dependent on the BOC for full and complete information about protocols and the technical requirements for such interconnection. To design customer premises equipment and telecommunications equipment, for instance, manufacturers of such equipment must understand what interfaces are available to interconnect their equipment to telephone exchange facilities.

In presenting the antitrust case against AT&T, DOJ made several allegations that AT&T had withheld critical information concerning the operation of the telephone network from outside equipment manufacturers in order to favor its affiliated manufacturing affiliate, Western Electric. Although the conditions of the market have changed substantially since that case was argued before the courts, some continue to assert that the BOCs would have the same ability and incentive to control their use of the information concerning their networks in order to favor their manufacturing affiliates.

To forestall such arguments, this provision requires a BOC to make publicly available the protocols and technical information concerning the operation of its network. The BOCs must report promptly to the FCC any material changes or proposed changes to such protocols and technical requirements, and the schedule for implementation of such changes or proposed changes. This provision is intended to cover all technical information necessary for the

interconnection of other services providers to the network as well as for the interconnection and use of customer premises equipment and telecommunications equipment with that network. It is also intended that the BOCs will reveal when and where such changes to the network will take place.

Under paragraph (2), the BOCs must reveal such information as early as possible, but at a minimum, no later than the same time that it makes such information available to any of its affiliates. The purpose of this requirement is to ensure that competitive manufacturers of CPE and telecommunications equipment have an opportunity to compete on an equal footing with the BOCs' manufacturing affiliates. Further, such information should not be limited solely to the minimum information necessary for interconnection of equipment available at that time. The BOCs should reveal protocols and technical information that may be useful for the design and development of new equipment that interconnects with that network, including both CPE and telecommunications equipment. For instance, a BOC should not be permitted to withhold information concerning the network from both its affiliate and unaffiliated manufacturers if such information could be useful to such unaffiliated manufacturers in designing new products or equipment that may contain advanced capabilities that would be of benefit to the public.

All regulated local exchange companies, including BOCs, are required under paragraph (3) to provide timely information concerning the deployment of telecommunications equipment in the network to other regulated carriers serving the same area of interest. For the purposes of this section, the term "area of interest" means a geographic area encompassing one or more franchise exchange areas serving common social, economic and other purposes related to the provision of telephone exchange service by local exchange carriers. The geographic areas and the number of franchise exchange areas covered by this term are not required to be uniform but may vary to meet differing conditions and requirements.

As with subsection (c)(8), this provision is not intended to extend to carriers that compete directly with the telephone companies in the provision of local telephone service. This requirement on the BOCs does not lessen their obligations under paragraph (1) to make available to everyone any material or proposed changes to the technical requirements of the network.

Finally, paragraph (4) recognizes the FCC's authority to prescribe such other regulations as may be necessary to ensure that manufacturers in competition with the BOCs' manufacturing affiliates have as ready and equal access to the information about the network that is necessary for such competition as do the manufacturing affiliates. The FCC, as it has in the past, should protect commercially sensitive information. The BOCs' manufacturing affiliates are entitled to earnings based on their intellectual property and to protect the proprietary nature of their commercially valuable information.

Subsection (e) also imposes obligations on the BOCs to protect competition and the ratepayer. Paragraph (1) requires that any Bell Company that has an affiliate that engages in manufacturing must provide to other manufacturers of telecommunications and

customer premises equipment opportunities to sell such equipment that are comparable to the opportunities it provides to its own manufacturing affiliate. "Comparable" as used in this section means that the BOC must seek out such technically suitable, available equipment of good value and benefit to the corporation regardless of source. The provision recognizes that it may be impossible to provide any two companies, affiliated or not, with "equal" opportunities to sell equipment. But the BOCs should strive to provide competitive manufacturers with opportunities that are as equal as possible to the opportunities they provide to their manufacturing affiliates.

Paragraph (2) requires the FCC to prescribe regulations requiring that any BOC with an affiliate that engages in any manufacturing authorized by section 225 (a) not subsidize that affiliate with revenues from the company's regulated telecommunications services. The Commission may take whatever action it considers appropriate to prevent such cross-subsidization, including regulatory measures that go beyond those contained explicitly in this bill.

Paragraph (3) requires the FCC to prescribe regulations requiring that a BOC that purchase equipment from its manufacturing affiliate authorized under section 225(a) only make such purchases at the open market price. The open market price of a product that incorporates sophisticated and rapidly changing technology generally reflects multiple product dimensions (e.g., product quality, specificity and compatibility of design, timely availability, specific technology, future product support and technology development). This provision is intended to protect against both anticompetitive self-dealing and cross-subsidization.

Section 225(f) permits the BOCs and their affiliates to work in close collaboration with any manufacturer of customer premises equipment or telecommunications equipment. During the hearings on the bill, the Committee heard several witnesses comment that the manufacturing line-of-business restriction prevents the BOCs from collaborating closely with manufacturers of customer premises and telecommunications equipment. The telephone network is extremely complicated and no individual or group of individuals can understand all of its technology, cost and customer perspectives. A collaborative effort is often useful to produce a successful product. Collaboration between manufacturers and network engineers and researchers can produce efficiencies that can lead to new products and innovative services. The inability to collaborate can cause delays and increased expense in the development of new customer premises and telecommunications equipment.⁸⁵

The Committee intends to allow BOC personnel, personnel of its manufacturing affiliate, and any other affiliate, and any manufacturer to work together in the design and development of customer premises and telecommunications equipment, including hardware

⁸⁵ One of the factors that helps explain the relatively poor American showing in manufacturing performance and technology is the link between production and research/development/design. Constant flows of people, information, and ideas between research and production is characteristic of Japanese firms. In American firms, the processes of research (or design) and production are more often sequential, with the results of development work handed over to a different set of people for management of production. There is much less interaction between the designers of the product and the production managers.

and software. Such collaboration, however, is not intended to override the separation requirement between the BOC and the manufacturing affiliate under subsection (b). Further, such collaboration is permitted only subject to the rights of unaffiliated manufacturers to obtain access to all necessary technical information concerning the operation of the network at least as early as it is received by the BOC's manufacturing affiliates under subsection (d). Finally, such collaboration is not intended to permit Bellcore, the BOCs' jointly-owned research center, to collaborate with any manufacturer. Any manufacturing activity conducted by Bellcore, or collaboration with any other manufacturer, would be considered a violation of the prohibition in subsection (a) against a BOC engaging in manufacturing activity in conjunction with another BOC.

Section 225(g) simply authorizes the FCC to prescribe such additional rules and regulations as it determines necessary to carry out the provisions (and, impliedly, the purposes) of this section.

Section 225(h) simply recognizes that the FCC has the same authority over the BOCs and their manufacturing affiliates that it has in enforcing the Act with respect to any common carrier subject to the Act.

Section 225(i) requires the FCC to prescribe regulations to enforce this section within 6 months after the date of enactment of this section. The BOCs shall only be permitted to engage in the manufacturing authorized by subsection (a) after the regulations to enforce subsections (c), (d), and (e) are in effect.

Section 225(j) permits the BOCs to continue to engage in activities in which they were authorized to engage prior to the enactment of this bill. There are at least two categories of activities that fall under this "grandfather" clauses. The first concerns BOC activities outside the United States. The District Court has granted waivers permitting the BOCs and their affiliates to manufacture and provide telecommunications and customer premises equipment outside the United States. It should be noted that these waivers prohibit the BOCs from importing back to the United States the telecommunications and customer premises equipment that they manufacture outside the United States under the authority previously granted by the District Court. This bill does not alter or void such authority, but the Committee does not intend that the BOCs should be permitted to expend their overseas operations.

Subsection 225(k) contains several definitions. Among the most important are:

Paragraph (1) defines the term "affiliate" to mean any entity in which a BOC or any of its affiliates has any financial or management interest. This explicit reference to the BOCs creates an anomaly in section (c)(8)(A), where the term "manufacturing affiliate" is used to describe an affiliate of a non-BOC telephone company. In this case, the definition should not be read literally to concern only manufacturing affiliates of a non-BOC telephone company that are also affiliates of BOCs, but should instead refer to any manufacturing entities that are affiliated with the independent local telephone company.

Paragraph (2) refers to a BOC as including any successor or assign of a BOC. Prior to divestiture, AT&T controlled and operated the Bell System's cellular businesses. At divestiture, AT&T trans-

ferred those businesses to the seven regional holding companies, not to the holding companies' Bell Telephone Companies. Therefore, the cellular businesses are not to be considered either successors or assigns of the Bell Telephone Companies for the purposes of this section. Such cellular companies are, of course, affiliates of the BOCs.

Paragraph (4) defines the term "manufacturing" as it is defined by the District Court in its decision interpreting the term as it is used in the MFJ. Such term includes the design and development of equipment, including software essential to the operations of that equipment.

Section 3(b)

Section 3(b) adds a conforming amendment to section 2(b) of the Act to recognize the FCC's authority to regulate the operations of the BOCs in relation to their manufacturing affiliates and the operations of the manufacturing affiliates themselves. This section is not intended to preempt the states' existing authority to regulate the operations of the BOCs or their manufacturing subsidiaries.

ADDITIONAL VIEWS OF SENATOR ALBERT GORE, JR.

I have generally supported the goals of S. 1981. It is time to reconsider the restrictions in the Modified Final Judgment (MFJ) which prevent the Bell operating companies (BOCs) from competing in the marketplace for telecommunications equipment in the U.S. and abroad. I have commended Chairman Hollings for his initiative in advancing this goal.

However, I am disturbed by language in the Committee report accompanying S. 1981 which could be harmful to a major manufacturer of telecommunications equipment in Tennessee.

Nashville-based Northern Telecom Inc. (NTI) is identified in the committee report as a "foreign" company. While it is true that NTI is a subsidiary of Northern Telecom Limited of Canada, I believe its impressive presence in the U.S. and its commitment to the U.S. economy distinguishes the company as an exceptional U.S. corporate citizen and deserving of different treatment in the report language.

NTI, headquartered in Nashville, was incorporated in 1972 in Delaware. The company employs approximately 22,000 people in the U.S. in 12 manufacturing plants, 13 research and development centers and in marketing, sales, and service offices across the country. It is the second largest manufacturer of telecommunications equipment in the U.S., supplying systems to business, universities, local, State and Federal governments, the telecommunications industry, and other institutions worldwide.

Northern Telecom's 1989 U.S. revenues were approximately \$3.6 billion. Substantially all of those sales were of products and services manufactured in the U.S. NTI had a total of nearly \$3.1 billion in assets in the U.S. in 1989, and the amount of goods and services purchased from U.S. suppliers was approximately \$1.3 billion.

NTI has a sizable research and development program in the United States as well. Research and development is conducted at Northern Telecom locations in association with manufacturing operators, and in four laboratories in Atlanta, Dallas, Raleigh-Durham, and Mountain View, California.

Clearly, NTI has invested significant capital in the construction of U.S. manufacturing and R&D facilities. It has been responsible for significant U.S. job growth in the telecommunications industry. And, importantly, this investment has led to the development of high, value-added technology which will help provide the tools that our economy requires to be more competitive in the global marketplace.

Additionally, Northern Telecom is a major U.S. exporter of telecommunications equipment to Europe, the Pacific Rim, South America, and other regions throughout the world. In recognition of NTI's substantial contribution to U.S. exports, it received the President's E-Award.

While the fundamental objectives of S. 1981 do not penalize NTI's ability to continue its contribution to the U.S. telecommunications economy--and the U.S. economy as a whole—I believe that the Committee report should not single out NTI as a target for adverse interpretation of the bill's intent.

I hope to work with the Chairman to correct this flaw in what is otherwise sound legislation.

MINORITY VIEWS OF SENATOR DANIEL K. INOUE

For some twenty-five years, Chairman Hollings and I have served on the Commerce Committee. In that time, I can only count a few times that we have disagreed on a communications issue. I have learned that the Chairman is extremely knowledgeable about these matters and generally knows how to strike the proper balance. It is for that reason that I have had to think long and hard about opposing this legislation. At the end, however, I feel strongly that this legislation will not achieve its objective of increasing American competitiveness in the international telecommunications market. In fact, it will do just the opposite.

In Washington, we often believe history is what was on last night's news. I consider that unfortunate. We ignore important lessons and wind up repeating our mistakes. I am afraid that by reporting this legislation, this Committee has taken this near-sighted view of history and that we are setting in motion a cycle of conflict and uncertainty that will eventually lead back to the courts for resolution.

To comprehend the issue debated here, it is essential to remember a fundamental fact: the nation's local telephone companies are not like other businesses. Because they control essential telephone facilities and because they are rate regulated, they have incentives to act anticompetitively when they enter into unregulated lines of business. It is not that the people who work there are malevolent. I have found just the opposite to be the case. It is simply that these incentives cause them to use their undue market power to the detriment of competitors.

That is why the United States government has brought four antitrust actions against AT&T in the past seventy-five years.¹ Three of these actions resulted in AT&T divesting some of its operations. All of these actions resulted in AT&T or its progeny being prohibited from engaging in certain actions.

That is why companies and individuals filed dozens of private antitrust actions against AT&T during the years when newcomers were trying to enter into the telecommunications marketplace. These suits resulted in multimillion dollar awards.

With the most recent court action, we thought we had put most of these problems to rest. The source of this undue market power—the essential (bottleneck) local telephone facilities—were given to seven different companies (the Bell Operating Companies or BOCs) and these companies were forbidden to vertically integrate into cer-

¹ The first action resulted in the 1913 Kingsbury Commitment. AT&T agreed to sell its holdings in Western Union and to refrain from purchasing any local telephone company. The second action, in 1926, resulted in AT&T divesting its ownership of a nationwide radio programming network. The third action resulted in the 1956 Consent Decree, which in effect barred AT&T from offering data processing type services. The final action is the 1984 Modified Final Judgment.

tain businesses: the provision of long distance and information services and the manufacturing of telecommunications equipment. Without the threat of anticompetitive acts, firms in these three "forbidden" sectors have flourished. Their growth rates are stunning.²

We are now asked to undo this arrangement based on vague promises that regulators can do a better job and that these firms have some special ability that can improve our lot. Untested theories, unproven approaches, and unknown protections do not give me any solace. The result will almost certainly be that all of the benefits gained by the Modified Final Judgment—at a not insignificant cost—will be for naught.

Let me now turn to the specifics of this debate over the telecommunications manufacturing prohibition to further demonstrate my points.

THE MODIFIED FINAL JUDGMENT

The last two antitrust actions brought by the U.S. government were founded on the same premise: the structure of AT&T was inherently anticompetitive. Firms providing long distance or information services required AT&T's local telephone facilities to complete their calls. Firms manufacturing telecommunications equipment could hardly stay in business if they could not sell to AT&T's local telephone companies. Yet, AT&T, with control of almost all of this country's local telephone facilities, too was engaged in providing long distance and information services and in manufacturing equipment. Not surprisingly, AT&T, the government argued, acted to favor its own enterprises, either by cross-subsidizing them from regulated telephone revenues or by discriminating against competitors. In other words, because it controlled "bottleneck" facilities, AT&T had both the incentive and ability to foreclose competition. As a result, it was virtually impossible to compete against AT&T and for the government's pro-competitive policy to be successful.

In the area of equipment manufacturing, the government alleged that AT&T acted to foreclose competition in several ways. First, AT&T gave to its manufacturing subsidiary, Western Electric, ready and immediate access to key engineering and technical information about the local telephone network. At the same time, this information was withheld from or not given as quickly to competitors. Without timely information, competitors found they were at a grave disadvantage in designing and manufacturing equipment for the local telephone companies.

Second, AT&T used revenues from regulated telephone services to subsidize the local company's purchase of equipment from Western Electric and the sale of Western provided customer premises equipment. More specifically, the government claimed that costs of equipment research, design, and development were allocated to design of the basic telephone network. Thus, competitors were harmed by facing products sold at below cost, and ratepayers were harmed since their revenues paid for this predatory conduct.

² See the Testimony of Michael J. Circk, Vice-Chairman, Telecommunications Industry Association, Before the Subcommittee on Communications, May 9, 1990, pp. 1-6.

Third, even where competitors produced a better product at cheaper rates, AT&T simply purchased from Western as a matter of practice. With the enormity of the Bell System and the relative lack of regulatory oversight, the odds of getting caught were slim.

The consequence of these practices was that the local Bell telephone companies purchased virtually all of their products from Western Electric, regardless of effectiveness, quality, or price. After all, how does a firm compete with a fully integrated monopolist that can merely turn to its subsidiary when it wants something? That is what the antitrust actions tried to remedy.

The obvious question at this point is: what happened to the regulators? Weren't they supposed to police these anticompetitive actions? To some extent, the regulators tried. The FCC conducted lengthy, but totally unsuccessful, proceedings into AT&T's manufacturing operations. State regulators only occasionally reviewed an equipment purchase by local telephone companies. Neither had direct jurisdiction over manufacturing operations, and neither spent much time in this area.

Despite the obvious lack of oversight of this area by regulators, AT&T argued at the beginning of the last antitrust case that regulatory oversight was so pervasive that the courts should not hear the case and should permit regulators to work their will. The court (Judge Waddy) soundly rejected this argument after a thorough review of the extent of the FCC's oversight of AT&T. The court concluded that the Commission failed to adequately oversee many AT&T activities, leaving more than ample room for anticompetitive conduct.³

The antitrust case thus continued. In early 1982, the Department of Justice and AT&T entered into a consent decree, which later became, after court review, the Modified Final Judgment (MFJ). The overall thrust of the MFJ was to separate competitive activities from those that would continue to be regulated monopolies. AT&T kept the former, and the newly created seven BOCs were given the latter along with conditions restricting them from certain activities.

THE TELECOMMUNICATIONS MANUFACTURING RESTRICTION

The MFJ prohibits the BOCs from manufacturing telecommunications equipment. The immediate question is: what is manufacturing? Does it involve only the fabrication of equipment, or does it extend to the design and development in conjunction with fabrication? The answer to these questions can be found in a 1987 decision of the court: the BOCs are barred "from the entire manufacturing process, including design, development, and fabrication."⁴ The court went on the support this finding by stating:

The decree was aimed at preventing in the future the anti-competitive practices in which the Bell System was assumed to

³ Judge Joseph C. Waddy, *Memorandum Opinion and Order on Jurisdictional Issues*, November 24, 1976, U.S. v. AT&T, CA No. 74-1698, 427 F. Supp. 57 (D.D.C., 1976); *AT&T v. U.S.*, AT&T, *Petition for Writ of Certiorari to the United States District Court for the District of Columbia*, January 6, 1977. AT&T appealed this ruling, but both the Court of Appeals and the Supreme Court refused to overturn it.

⁴ *United States v. Western Electric Co.*, Civil Action No. 82-0192, filed Dec. 3, 1987, U.S. District Court for the District of Columbia.

have been engaged in the past. Yet the Bell Systems' practices in the design and development were responsible for the section II(D)(2) restriction as much as, if not more than, its practices with regard to fabrication. In fact, virtually every "manufacturing episode" that was the subject of a pretrial charge by the government or that produced evidence at the trial, it was design and development manipulation that was the focus or the sole subject rather than discrimination with respect to fabrication.⁵

The scope of the manufacturing prohibition thus goes to the entire process. Yet, it is vital to this debate to understand that this does not mean that all the BOCs can do is issue generic requests and sit back to await the results. They can engage in a variety of manufacturing related activities, including close coordination with manufacturers to ensure that they obtain the necessary products. The following list provides a description of manufacturing activities within and outside the scope of the prohibition:

<i>Manufacturing Activity</i>	<i>Can BOCs Provide?</i>
Market Research	Yes
Product Conception—Generic Specifications and Functions of a Product.....	Yes
Manufacturing Ownership.....	No
In House	
Acquisition	
Joint Venture	
Select Exclusive Manufacturer	Yes
Fund Manufacture Development.....	Yes
Engineering—Design of Product	No (but can work closely with manufacturer)
Manufacturing Prototype	No (but can work closely with manufacturer)
Sell Products They Develop:	
CPE.....	Yes
Network	No

Despite the rhetoric heard during the MFJ debate, the BOCs are able to work relatively closely with manufacturers in the design and development of products. For example, they meet regularly with equipment manufacturers through a group known as the Multi-Vendor Interaction program. Through Bellcore (the research and standards arm of the 7 BOCs), they have offices located at or near the plants of major switch manufacturers; and they regularly come to these plants to provide specifications for equipment and carry out tests. The Vice-President of Technology Systems for Bellcore demonstrated this close working relationship in a 1989 statement:

Not only have we solved the immediate problems of divestiture, but we have, as an industry, moved well beyond our immediate post-divestiture circumstances. In particular, we have seen major progress toward the opening of the telecommunications marketplace through a free flow of information on architectures, requirements, and interfaces. The response has been an outpouring of products that Bellcore's clients [the BOCs] are

⁵ Ibid. Pp. 17-18.

using to grow and evolve their networks, to provide existing services more economically than heretofore and to provide new services . . .

In January 1984, our supplier database contained 2000 companies; by January 1986, that number had grown to 4850, and now we have 9000 suppliers in our database and 50 shelf feet of supplier information in our library . . .

The two-day communications that has been established between Bellcore and the telecommunications supplier community is one of the successes of divestiture.⁶

All of this success is based on the fact that the BOCs cannot engage in manufacturing and thus have no reason to act anticompetitively. All of this success is in jeopardy if this manufacturing prohibition is lifted.⁷

Without having an in-house equipment manufacturer, the BOCs have embarked on a sophisticated strategy that meets their needs. They have used their enormous size and purchasing power to ensure they are not beholden to any single vendor. They have made sure that for each product equipment vendors compete to provide it. That way the BOCs obtain the best, most innovative equipment at the lowest price.

Moreover, over time, they have, in effect, forced vendors to tailor their products to specific BOC needs. For example, the BOCs had been concerned that the software in their switches was written in a way that required them to return to the vendors each time they wanted to change or create a service. Each such change may take up to a year or two. Because this delayed the provision of service, the BOCs met with the switch vendors and now the software is written in functions so that the BOCs can make these changes themselves. It is thus incorrect to state that the BOCs cannot work closely with manufacturers or have no control over vendors. Their very size ensures they are assiduously courted by each vendor.

Despite this working relationship, the proponents of this legislation allege that the full competitive might of the BOCs could be used much more extensively to increase our economic strength. They further argue that the regulators can control any anticompetitive problems, despite the fact that the regulators have never been able to do so. They contend that regulators have new tools at their disposal. Since these safeguards are fundamental, they should be explored more fully. Once they are, it is again clear that they are not sufficient.

SAFEGUARDS

While the BOCs may argue that their bottleneck strength is rapidly eroding, no other party—not even among their supporters in the government—believes this to be the case.⁸ There is no real dis-

⁶ Bellcore, *Digest of Technical Information*, January, 1989, pp. 1-4.

⁷ For a more complete discussion of the interaction between the BOCs and equipment vendors, see the Testimony of Michael J. Birck, Vice-Chairman, Telecommunications Industry Association, Senate Subcommittee on Communications Hearings on S. 1981, May 9, 1990, pp. 14-19.

⁸ See, for example, *The Geodesic Network, 1987 Report on Competition in the Telephone Industry*, Department of Justice (Peter Huber), Chapter 2.

pute that by permitting the BOCs to enter these restricted markets, they would have the same type of vertical monopoly structure that gave birth to the Justice Department suit against AT&T and many private anti-trust suits. This might also subject ratepayers to higher rates if adequate protections are not instituted. Are any remedies sufficient to protect against these antitrust concerns while permitting entry?

There are two general types of anticompetitive conduct by the BOCs that must be addressed. First, they may cross-subsidize these new ventures. It is likely that new ventures, especially those now restricted, would share corporate resources, both people and telephone plant, with local telephone operations. The costs of these resources may be capable of being allocated specifically to each activity, but in many cases they will not. There is then the potential for some of these shared costs to be picked-up in a greater proportion than proper by the ratepayer, giving rise to predatory pricing. For example, how should we allocate the costs of research that spawns innovations in both basic telephone and unregulated information services? What about administrative overhead, such as legal services? What about a telephone switch that provides various functions?

Second, the local telephone companies may give preferential treatment to their own ventures. Such preferences may take the form of advance notice of new products, services, or standards. It may involve use of existing customer information. Competitors may find themselves with a lesser grade of interconnection or with slower service. These and other types of preferences comprise a host of ways for competitors to be unfairly discriminated against.

CROSS-SUBSIDIZATION

In regard to the matter of cross-subsidization, the BOCs' claim that they can construct a proper scheme of accounting for these common costs such that the ratepayer would not be harmed. The FCC, after many years of examining this matter, has finally established rules for such an accounting scheme.⁹ At the Committee's hearing, the Chairman of the FCC stated that these rules are in place and are working and that these rules require annual independent audits to ensure compliance with the rules. The true value of these rules, however, is very limited.

At the outset, it is questionable whether the FCC rules correctly allocate these common costs between regulated telephone operations and unregulated ventures. No one can deny that some of these allocation rules are arbitrary. Because they have been in place only a short time, no one can say with certainty whether they can work.

A GAO report of a few years ago questioned whether the Commission can ever implement an effective accounting scheme. This view is shared by almost all non-BOC entities. They argue that any allocation would be by its very nature arbitrary and that these accounts are too complex to track accurately, especially by the FCC

⁹ *Separation of Costs of Regulated Telephone Service from Costs to Nonregulated Activities*, CC Docket No. 86-111, Report and Order, FCC 86-564, released February 6, 1987.

with its limited resources. In any event, even if there is a successful accounting scheme, it does not address other financial aid the telephone parent can give the new venture. For example, the parent can guarantee debt acquired by the new venture. The parent also funds other key start-up costs. In each of these instances, ratepayers might well pick-up costs not attributable to local telephone service.

An elaborate description of the problems involved in detecting cross-subsidization was contained in a letter to the staff working on the 1987 Huber report on behalf of the Telecommunications Committee of the Western Conference of Public Service Commissions:

The presence or extent of cross-subsidy is obscured by the following three phenomena: cost allocation factors, indirect subsidies, and the shifting of risk from competitive to monopoly ventures . . .

. . . the nature of joint and common costs is such that they cannot be associated with particular services on the basis of cost causation. Conventional practice has used cost allocation factors in a fully distributed cost study to allocate joint and common costs to the various services. . . The absence of a consensus on these cost allocation factors precludes state commissions from having confidence that cross-subsidization has been effectively prevented.

. . . (Indirect subsidies occur) when an intangible asset is developed in the utility business—often at considerable expense to monopoly ratepayers—and the benefit of the intangible asset is effectively transferred to a non-utility line of business. This sort of transfer occurs when an affiliate is allowed access to the utility's pool of highly trained and experienced personnel, and when it is able to rely upon the utility's name and reputation of marketing information and usage patterns—all with our proper compensation.

. . . it may happen that competitive lines of business into which utilities diversify are inherently more risky than the franchised, monopoly utility operations. If that is the case, the diversified company's cost of capital will rise as a direct consequence of the diversification. If no adjustment is made, the utility subsidizes its affiliate by bearing a portion of the risk of the affiliate's line of business. Unfortunately, there is no consensus—either among regulators, utilities, or the professions—on methods for calculating the magnitude of this subsidy and removing its effect from the utility's proper share of aggregate costs.

There is then no reason to believe the FCC has finally crafted rules that properly allocate these common costs between regulated and unregulated activities so as to preclude cross-subsidization. But, even assuming they do, there are two additional significant weaknesses in relying on these rules. First, they do not apply to the states, which control most of the BOC costs. Second, they cannot be adequately enforced.

The FCC's common cost rules only apply to activities controlled by the Commission, that is activities over the facilities used for interstate telephone calls. But, about three-quarters of the facilities (and costs) of the telephone company are not used for interstate

calls. The states control activities over these facilities. The states, however, do not have to follow the FCC's rules; and few have comparable rules for the allocation of common costs. In addition to the lack of effective oversight in many states, because each BOC is in many states and because there is some flexibility in locating facilities and operations, they have some ability to avoid those few states with strict regulations.

While the FCC's independent audit requirement helps ensure that whatever is on the accounting ledgers complies with the common cost rules, it does little more. Some agency not only needs to check on the independent audits but has to look behind the ledgers. There are at least four reasons for more careful oversight: each BOC (1) adopts its own cost manual, (2) chooses its own cost allocation procedures, (3) selects its own auditors, and (4) uses its own reporting categories and terminology. The FCC has assured us they will carry out this task; however, so far, the FCC has not even released its assessment of the first round of independent audits on 1988 common cost allocations. In addition, the GAO recently indicated that the FCC has only enough resources to audit fully each major telephone company once every 16 years.

Both the FCC Chairman and the Chairman of Bell South claimed at the Committee's hearing that the GAO figure is misleading and they pointed to the success of the recent FCC audit of NYNEX Material Enterprises. They claim that a full audit is rarely required and that selective enforcement is effective.

There are two major problems with this interpretation. First, the actions of NYNEX occurred about five years ago, and it was not until a short time ago that the FCC ruled on this matter. While FCC enforcement after such a long time may make the ratepayer whole, it does nothing for competing equipment providers. There is no way to make up for lost sales, especially when competition is stiff and margins are slim. Slow enforcement for these competitors is tantamount to no enforcement.

Second, selective enforcement only works when the auditors know what area to target. How did this work with respect to the NYNEX audit? The FCC acted only after disclosures were made to the *Boston Globe*. So, the Commission was not in the posture of aggressively auditing or looking for problems. It was initially passive. As anyone knows, disclosures of the type of the NYNEX case are rare. It is at best misleading for the FCC to portray its policies as successful based on this case. It is more an example of regulation by good fortune. Hardly a policy for the long run.

The FCC Chairman and the BOCs have also argued that the regulators are turning away from rate of return regulation and changing to price based or incentive regulation and that this will lessen the opportunities for cross-subsidization. First of all, rate regulation will always serve as a basis for overseeing the regulated telephone companies. Even under the FCC's price cap approach, the BOCs will be regularly evaluated to determine whether their earnings are excessive. In addition, if the BOC ever find themselves underearning, they will seek changes in the regulations. This, in fact occurred recently in New York where New York Telephone sought changes in its incentive plan when it found it was underearning by hundreds of million dollars. Second, whether this incentive regula-

tion will be successful in lessening cross-subsidization depends entirely on how the plan is constructed. The FCC's proposal for the BOCs groups too many different services together and thus will provide little protection. At the state level, the approaches tried so far are either short-term contracts that can be changed or complete deregulation (thus no control) of certain service offerings.

The best way to sum up all of these problems with policing cross-subsidization is to turn to a recent statement by FCC Commissioner Barrett—the only Commissioner who has also been a state regulator: "I contend there's a distinct possibility that there's not a regulatory body in the country that would recognize a cross-subsidy if it smacked them in the face."¹⁰ There is simply no reason to have any faith that regulators can solve this problem. They have never had this ability; they have not acted to change this fact.

DISCRIMINATION AND PREFERENTIAL TREATMENT

As for the matter of preferential treatment, the BOCs' claim that the FCC and state regulators can impose certain rules of conduct that will prevent such activities. The FCC, for example, has rules that require the disclosure of network information and the protection of telephone customer information from improper release. These rules, however provide little solace for competitors; there continue to exist opportunities for preferential treatment that are too numerous for any regulatory body to police effectively.

At the outset, the supporters of this legislation argue that the world has changed: there are now seven companies instead of one, and the market is global, not domestic. These supporters then go on to argue that an equipment firm could not be successful selling just to itself and that this would aid detection. To begin with, there is a fundamental flaw in these arguments: the MFJ assumed this to be the case and still believed that the prohibitions on BOC activities were necessary even with the break-up of AT&T. That is because the MFJ is based on the BOCs' control of local exchange bottlenecks, and there is no doubt that the BOCs' control remains as great today.

While there are now seven companies, each company has a monopoly in their operating region (about 15 percent of the market). There is no question that this market power is sufficient to translate into total control over smaller equipment vendors. It will also translate into greatly increased leverage over even the largest vendors. In fact, the Department of Justice in its filing in the First Triennial Review of the MFJ admits that if the manufacturing restriction were lifted, each BOC could satisfy all or nearly all of its equipment needs from its own manufacturing affiliate.¹¹ The Huber Report for the Department (*The Geodesic Network, 1987 Report on Competition in the Telephone Industry*) estimates that in-house purchases by each BOC will foreclose anywhere from five to fifteen percent (and for some items as much as 20 percent) of the U.S. equipment market.¹² Under traditional antitrust analysis, se-

¹⁰ *Communications Daily*, March 5, 1990, p. 1.

¹¹ *Report and Recommendations of the United States Concerning the Line of Business Restrictions Imposed on the Bell Operating Companies by the Modification of Final Judgment*, February 7, 1987, pp. 169-170.

¹² See Huber Report at 1.15, 14.8, and 14.13-14.

rious competitive concerns are raised when as low as seven or eight percent of a market is foreclosed as the result of leveraging by a regulated utility. Consequently, the BOCs even in this new incarnation continue to pose a substantial threat to competition if they become vertically integrated, and the facts demonstrate that this threat is not diminished by regulatory oversight.

For regulatory oversight of discrimination to be successful, there must be similar prices for similar products (the so-called benchmarks). It should be noted first that the FCC had benchmarks prior to divestiture—in companies like GTE and United—but was unable to police anticompetitive acts. Second, benchmarks only work if there are outside sales. However, there is no certainty this will occur to any great extent. In most sectors of the communications equipment market, sales to one BOC would be considered enough to ensure a firm's success. Third, the 1987 Huber Report concludes that telecommunications equipment prices for similar products can vary, sometimes greatly. For example, the Report found that prices for similar switches can vary by about 20 percent, "a competitively significant margin."¹³

Not only is it difficult to find similar prices, it is difficult to find similar products. Many telecommunications products behave more as "custom" items than as commodities. More importantly, even for products where price variations have not been great, the BOCs have an incentive to make every product into a "custom" product. This makes regulatory detection virtually impossible.

Even assuming that it is easy to find similar products with similar prices, FCC oversight will likely prove ineffective in policing discrimination. First, the Commission acts after the fact, after a BOC has not bought a product from a competitor. The competitor must first present a case to the Commission that he offered a similar quality product at rates, terms, and conditions that were at least as good. The Commission then must get a response from the BOC, and then investigate and weigh the evidence. In the early 1970s, a company, Datran, brought such a complaint to the FCC. Before the FCC could complete its years of investigation, Datran went bankrupt.

Every year, the BOCs enter into many thousands of equipment transactions. Even if a small percentage of these were taken to the FCC, the Commission would have to increase its resources many times over to be able to deal with them. The reality is such that these resources will simply not be expended and that effective enforcement will simply not occur.

Finally, while the FCC has adopted rules requiring disclosure of technical information, these rules make this information available only at the "make/buy" point, that is when the BOC makes the decision to procure the product.

However, prior to this point, there are extensive discussions about the technical makeup of the network. If the BOCs were permitted into equipment manufacturing, they would be part of these extensive discussions, giving them a head start over the competition.

¹³ See Huber Report at 14.18.

THE SEPARATE SUBSIDIARY SAFEGUARD IN S. 1981

To the Chairman's credit, he recognizes that the existing regulations are insufficient to control anticompetitive acts by the BOCs. His legislation proposes that these activities be carried out through separate subsidiaries with some outside financing. The value of these separate subsidiaries is that while they do not change incentives to act anticompetitively, they make these activities somewhat easier to detect.

There are two major problems with S. 1981's separate subsidiary approach. First, this approach was rejected by the antitrust experts in the AT&T case as insufficient. They recognized that such an approach continues to rely on regulatory oversight, and they had no indication that such oversight would ever be adequate. Second, the idea behind separate subsidiaries is to separate costs and activities as much as possible. S. 1981 begins down this road and then turns around to permit greater commingling by the parent and the offspring in order to gain the benefits sought by this legislation. By this maneuver, the ease of detection gained through separate subsidiaries is greatly diminished.

In sum, the safeguards relied upon in this legislation are chimerical. Ratepayers and competitors will have to return to the pre-MFJ days and continually go hat-in-hand to the regulators and ask for help. No one has come before us with good reason why regulators have all of a sudden gained the skills and the will necessary to do this job. Even the Chairman of the FCC appears unsure of the abilities of regulators. In his statement before the Committee, he states, "Finally, Mr. Chairman, we should bear in mind that, while S. 1981 would change limitations imposed under the 1982 antitrust exposure of Bell companies * * *" ¹⁴ Thus, the Chairman understands that regulation may not work and that the antitrust laws have an important role to play. Why then, don't we let them work? Why then, are we going down a road that will most likely lead back to where we already are?

THE PUTATIVE BENEFITS OF S. 1981

Even the proponents of this legislation are convinced that some measures must be enacted to prevent anticompetitive acts by the BOCs. These proponents argue that any problems with these safeguards are more than offset by the benefits that can come from BOC entry into equipment manufacturing. It is therefore important to examine these putative benefits. In the end, they are just as imaginary as the proposed safeguards.

To begin with, the BOCs have absolutely no expertise in equipment manufacturing. They have no idea what the manufacturing process entails. They have never designed, made, sold, and serviced a product (with the exception of selling and maintaining customer premises equipment). For them to gain this expertise would take far too long, especially in today's dynamic environment. It is therefore almost certain that they will enter through acquisition, merger, and joint venture.

¹⁴Statement of Alfred C. Sikes, Chairman, FCC, before the Senate Subcommittee on Communications, hearing on S. 1981, May 9, 1980, p. 7.

Likely candidates for deals with the BOCs are foreign manufacturers, all of whom are eager to sell in the American market. S. 1981 correctly recognizes this threat, and the bill contains a domestic content provision. I commend the Chairman for including this provision. However, the BOCs have already tried to weaken it; and it is doubtful that the Administration can accept it. Since this provision is fundamental to the objectives of this bill being achieved, I am greatly concerned that we will move this bill forward assuming that this provision will remain—when in fact it is likely to vanish. If it does vanish, the effect of this bill will be to turn over our domestic manufacturing to foreign concerns. That would be a disaster.

Assuming the provision remains, what do the BOCs bring to the manufacturing market? First of all, the proponents argue that the BOCs will bring their technical expertise in transmission and networking and will be able to integrate this into the creation of new products. While there may be economies of scope in the operation of telephone networks and the creation of equipment, there is no evidence that they are so great that a vast amount of new and better products will be introduced more quickly. There is also no evidence that many of these economies are not already captured by the close working relationship of the BOCs and equipment vendors or that they could not be captured with just a few minor changes to the MFJ (that would not threaten renewed anticompetitive activity).

In addition, one man's economies are another man's cross-subsidies. Inherent in these ties between the regulated telephone activities and these new equipment activities is increased commingling and the blurring of lines. It was this very problem—that was unsolvable over 75 years of antitrust disputes with AT&T—that brought the equipment prohibition in the MFJ.

The proponents also argue that the BOCs bring money. They argue that our small, high-tech firms are going under because they cannot find capital and that the BOCs can fill this void. This "BOCs as bankers" argument is somewhat puzzling. First, the capital markets in the U.S. are generally thought to work efficiently. Money flows fairly easily and constantly. If for some reason these markets are not working properly, we should address them directly.

Second, the BOCs do not have unlimited capital; and if they have excessive amounts, the regulators should examine whether their returns from regulated telephone operations should be lowered. With their capital, the BOCs make decisions on what can give the highest return. Today, they are investing this capital in the telephone network and overseas. They are also increasing shareholder dividends. There is no inherent reason why they would all of a sudden decide to invest in small, high-tech companies.

Third, the BOCs can and do make investments in such companies and ventures. The MFJ only prohibits them from owning or having a direct or constructive equity interest. Nothing prohibits them from having some other financial interest in a company and recovering their cost plus a reasonable return.

The proponents of this legislation next argue that by removing this prohibition on manufacturing our telecommunication trade

balance will improve. First of all, the U.S. continues to run a trade surplus in the higher value, telephone network products. We run a trade deficit in the lower value, customer premises equipment, which is akin to consumer electronics products. The BOCs have stated that they do not intend to enter this lower end market.

The greater fear here is that the BOCs will further worsen our balance of trade. As stated above, this legislation is precariously balanced on the domestic content provision. If this provision is weakened or removed entirely, this fear is likely to become a reality as the BOCs venture with eager foreign partners.

The proponents next turn to research and development, claiming that by permitting the BOCs to manufacture the amounts expended here will increase dramatically. It must be noted that the amounts expended on R&D by domestic manufacturers have gone up steadily since divestiture. At that time, AT&T spent about \$2 billion on R&D. Today, the divested AT&T alone spends well over \$3 billion. To this amount, you need to add the amount expended by the other domestic manufacturers as well as the amount expended by the BOCs and Bellcore. The total amount expended for R&D today by all domestic firms is about twice that expended at the time of divestiture. Because BOC entry would almost certainly cut into sales by existing businesses, particularly AT&T, while BOC R&D might grow, R&D for other companies—now with lower sales—would fall. In fact, it may well have the result of causing severe problems for current R&D efforts, including those by Bell Labs.

CONCLUSION

The Chairman has often stated that there's no education in the second kick of a mule. That goes for the third and fourth kick as well; yet, we continue to show we have not learned our lesson. Given the opportunity to become vertically integrated, the BOCs will use their essential facilities to undermine the competition. We have seventy-five years of evidence to demonstrate this point.

The proponents argue that the world has changed—that in the global marketplace, we need the BOCs to use their strength to help us compete and that on balance the regulatory safeguards are sufficient. But, we have only vague promises of what the BOCs can bring to the marketplace. In contrast, we know that they will try to act to the detriment of ratepayers and competitors. The trust we put into the regulators to protect these parties is greatly misplaced. Not only have they not demonstrated they deserve our trust; but, as soon as we pass this legislation, the BOCs will be back before the regulators looking to ease existing requirements—and they will continue to press all of these regulators until this is accomplished.

No one wanted AT&T to be divested, but we let it happen, believing it would bring benefits to the public and our nation. We went through years of uncertainty and problems because of this decision. Now, we are seeing the benefits, and they are substantial. I have heard no cogent reason why this should all be undone.

MINORITY VIEWS OF SENATOR KERRY

I have read the views of Senator Inouye on S. 1981. I would like to associate myself with these minority views.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new material is printed in italic, existing law in which no change is proposed is shown in roman):

COMMUNICATIONS ACT OF 1934

Title I of that Act

TITLE I—GENERAL PROVISIONS

SEC. 1. * * *

APPLICATION OF ACT

SEC. 2. (a) * * *

(b) Except as provided in [section 224] *sections 224 and 225* and subject to the provisions of section 301 and title VI, nothing in this Act shall be construed to apply or to give the Commission jurisdiction with respect to (1) charges, classifications, practices, services, facilities, or regulations for or in connection with intrastate communication service by wire or radio of any carrier, or (2) any carrier engaged in interstate or foreign communication solely through physical connection with the facilities of another carrier not directly or indirectly controlling or controlled by, or under direct or indirect common control with such carrier, or (3) any carrier engaged in interstate or foreign communication solely through connection by radio, or by wire and radio, with facilities, located in an adjoining State or in Canada or Mexico (where they adjoin the State in which the carrier is doing business), of another carrier not directly or indirectly controlling or controlled by, or under direct or indirect common control with such carrier, or (4) any carrier to which clause (2) or clause (3) would be applicable except for furnishing interstate mobile radio communication service or radio communication service to mobile stations on land vehicles in Canada or Mexico; except that sections 201 through 205 of this Act, both inclusive, shall, except as otherwise provided therein, apply to carriers described in clauses (2), (3), and (4).

* * * * *

Title II of that Act

TITLE II—COMMON CARRIERS

SEC. 201-224. * * *

REGULATION OF MANUFACTURING BY BELL TELEPHONE COMPANIES

SEC. 225. (a) *Subject to the requirements of this section and the regulations prescribed thereunder, a Bell Telephone Company, through an affiliate of that Company, notwithstanding any restriction or obligation imposed before the date of enactment of this section pursuant to the Modification of Final Judgment on the lines of business in which a Bell Telephone Company may engage, may manufacture and provide telecommunications equipment and manufacture customer premises equipment, except that neither a Bell Telephone Company nor any of its affiliates may engage in such manufacturing in conjunction with a Bell Telephone Company not so affiliated or any of its affiliates.*

(b) *Any manufacturing or provision authorized under subsection (a) shall be conducted only through an affiliate (hereafter in this section referred to as a "manufacturing affiliate") that is separate from any Bell Telephone Company.*

(c) *The Commission shall prescribe regulations to ensure that—*

(1) *such manufacturing affiliate shall maintain books, records, and accounts separate from its affiliated Bell Telephone Company which identify all transactions between the manufacturing affiliate and its affiliated Bell Telephone Company and, even if such manufacturing affiliate is not a publicly held corporation, prepare financial statements which are in compliance with Federal financial reporting requirements for publicly held corporations, file such statements with the Commission, and make such statements available for public inspection;*

(2) *consistent with the provisions of this section, neither a Bell Telephone Company nor any of its non-manufacturing affiliates shall perform sales, advertising, installation, production, or maintenance operations for a manufacturing affiliate; except that institutional advertising, of a type not related to specific telecommunications equipment, carried out by the Bell Telephone Company or its affiliates shall be permitted if each party pays its pro rata share.*

(3) *such manufacturing affiliate shall conduct all of its manufacturing within the United States and all component parts, of customer premises equipment manufactured by such affiliate or of telecommunications equipment manufactured by such affiliate, shall have been manufactured within the United States; except that the Commission may, no later than three months after application by such affiliate, waive the requirements of this paragraph upon a showing of extraordinary circumstances;*

(4) *no more than 90 percent of the equity of such manufacturing affiliate shall be owned by its affiliated Bell Telephone Company and any affiliates of that Bell Telephone Company;*

(5) *any debt incurred by such manufacturing affiliate may not be issued by its affiliates, and such manufacturing affiliate*

shall be prohibited from incurring debt in a manner that would permit a creditor, on default, to have recourse to the assets of its affiliated Bell Telephone Company's telecommunications services business;

(6) such manufacturing affiliate shall not be required to operate separately from the other affiliates of its affiliated Bell Telephone Company;

(7) if an affiliate of a Bell Telephone Company becomes affiliated with a manufacturing entity, such affiliate shall be treated as a manufacturing affiliate of that Bell Telephone Company within the meaning of subsection (b) and shall comply with the requirements of this section; and

(8) such manufacturing affiliate shall make available, without discrimination or self-preference as to price, delivery, terms, or conditions, to all local telephone exchange carriers, for use with the public telecommunications network, any telecommunications equipment manufactured by such affiliate so long as each such purchasing carrier—

(A) does not either manufacture telecommunications equipment, or have a manufacturing affiliate which manufactures telecommunications equipment, or

(B) agrees to make available, to the Bell Telephone Company affiliated with such manufacturing affiliate or any of the other affiliates of such Company, any telecommunications equipment manufactured by such purchasing carrier or by any entity or organization with which such carrier is affiliated.

(d)(1) The Commission shall prescribe regulations to require that each Bell Telephone Company shall maintain and file with the Commission full and complete information with respect to the protocols and technical requirements for connection with the use of its telephone exchange service facilities. Such regulations shall require each such Company to report promptly to the Commission any material changes or proposed changes to such protocols and requirements, and the schedule for implementation of such changes or proposed changes.

(2) A Bell Telephone Company shall not disclose to any of its affiliates any information required to be filed under paragraph (1) before that information is so filed.

(3) When two or more carriers are providing regulated telephone exchange service in the same area of interest, each such carrier shall provide to other such carriers timely information on the deployment of telecommunications equipment.

(4) The Commission may prescribe such additional regulations under this subsection as may be necessary to ensure that manufacturers in competition with a Bell Telephone Company's manufacturing affiliate have ready and equal access to the information required for such competition that such Company makes available to its manufacturing affiliate.

(e) The Commission shall prescribe regulations requiring that any Bell Telephone Company which has an affiliate that engages in any manufacturing authorized by subsection (a) shall—

(1) provide, to other manufacturers of telecommunications equipment and customer premises equipment, opportunities to

sell such equipment to such Bell Telephone Company which are comparable to the opportunities which such Company provides to its affiliates;

(2) not subsidize its manufacturing affiliate with revenues from its regulated telecommunications services; and

(3) only purchase equipment from its manufacturing affiliate at the open market price.

(f) A Bell Telephone Company and its affiliates may engage in close collaboration with any manufacturer of customer premises equipment or telecommunications equipment during the design and development of hardware, software, or combinations thereof relating to such equipment.

(g) The Commission may prescribe such additional rules and regulations as the Commission determines necessary to carry out the provisions of this section.

(h) For the purposes of administering and enforcing the provisions of this section and the regulations prescribed thereunder, the Commission shall have the same authority, power, and functions with respect to any Bell Telephone Company as the Commission has in administering and enforcing the provisions of this title with respect to any common carrier subject to this Act.

(i) The authority of the Commission to prescribe regulations to carry out this section is effective on the date of enactment of this section. The Commission shall prescribe such regulations within 180 days after such date of enactment, and the authority to engage in the manufacturing authorized in subsection (a) shall not take effect until regulations prescribed by the Commission under subsections (c), (d), and (e) are in effect.

(j) Nothing in this section shall prohibit any Bell Telephone Company from engaging, directly or through any affiliate, in any manufacturing activity in which any Company or affiliate was authorized to engage on the date of enactment of this section.

(k) As used in this section:

(1) The term "affiliate" means any organization or entity that, directly or indirectly, owns or controls, is owned or controlled by, or is common ownership with a Bell Telephone Company. Such term includes any organization or entity in which a Bell Telephone Company or any of its affiliates has any financial or management interest.

(2) The term "Bell Telephone Company" means those companies listed in appendix A of the Modification of Final Judgment, and includes any successor or assign of any such company, but does not include any affiliate of any such company.

(3) The term "customer premises equipment" means equipment employed on the premises of a person (other than a carrier) to originate, route, or terminate telecommunications.

(4) The term "Manufacturing" has the same meaning as such term has in the Modification of Final Judgment as interpreted in *United States v. Western Electric*, Civil Action No. 82-0192 (United States District Court, District of Columbia) (filed December 3, 1987).

(5) The term "Modification of Final Judgment" means the decree entered August 24, 1982, in *United States v. Western*

Electric, Civil Action No. 82-0192 (United States District Court, District of Columbia).

(6) The term "telecommunications" means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received, by means of an electromagnetic transmission medium, including all instrumentalities, facilities, apparatus, and services (including the collection, storage, forwarding, switching, and delivery of such information) essential to such transmission.

(7) The term "telecommunications equipment" means equipment, other than customer premises equipment, used by a carrier to provide telecommunications services.

(8) The term "telecommunications service" means the offering for hire of telecommunications facilities, or of telecommunications by means of such facilities.

○

Document No. 164

TELECOMMUNICATIONS EQUIPMENT RE-
SEARCH AND MANUFACTURING COMPETI-
TION ACT OF 1991

Mr. HOLLINGS, from the Committee on Commerce, Science,
and Transportation, submitted the following

R E P O R T

OF THE

SENATE COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION

TOGETHER WITH

ADDITIONAL AND MINORITY VIEWS

ON

S. 173



APRIL 19, 1991.—Ordered to be printed
Filed under authority of the order of the Senate of April 18 (legislative
day, April 9), 1991

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TELECOMMUNICATIONS EQUIPMENT RESEARCH AND
MANUFACTURING COMPETITION ACT OF 1991

APRIL 19, 1991.—Ordered to be printed

Filed under authority of the order of the Senate of April 18 (legislative day, April 9),
1991

Mr. HOLLINGS, from the Committee on Commerce, Science, and
Transportation, submitted the following

REPORT

together with

ADDITIONAL AND MINORITY VIEWS

[To accompany S. 173]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 173) to permit the Bell Telephone Companies to conduct research on, design, and manufacture telecommunications equipment, and for other purposes, having considered the same, reports favorably thereon with amendments and recommends that the bill as amended do pass.

PURPOSE OF BILL

The purpose of the bill, S. 173, as reported, is to permit the Bell Telephone Companies to manufacture and provide communications equipment, subject to regulatory safeguards. The bill is intended to promote U.S. competitiveness in global telecommunications markets, stimulate employment opportunities, and preserve U.S. leadership in developing innovative telecommunications technologies. The bill includes a provision that requires the BOCs to conduct all their manufacturing in the United States. The safeguards are intended to protect the ratepayer and competition against possible abuse.

BACKGROUND AND NEEDS

ORIGIN AND HISTORY OF THE MANUFACTURING RESTRICTION

Events Leading to the AT&T Consent Decree

1. History of concern over AT&T's monopoly

For most of this century, AT&T was a horizontal and vertical monopoly. AT&T Long Lines provided the only long distance telephone service throughout the country; AT&T owned 22 BOCs, which provided the only local telephone service to 80 percent of the nation's population; AT&T owned Western Electric, which manufactured almost all the equipment needed for the operation of the telephone network; and AT&T owned Bell Laboratories (Bell Labs), which conducted the most extensive research involving high technologies and telecommunications of any research center in the world. AT&T was not just the world's largest provider of telephone service, it was also the largest corporation in the world.

The strength of AT&T's monopoly and AT&T's attempts to extend this monopoly into other businesses, were, until recently, a constant concern of U.S. policymakers. The government has made several attempts to control AT&T through antitrust actions and by regulation. In 1913, the Department of Justice (DOJ) pressured AT&T into agreeing not to purchase any more competing telephone companies. AT&T also agreed to allow competing telephone companies to interconnect with the AT&T network. This agreement also required AT&T to sell its shares in Western Union, the monopoly provider of telegraph service in the country, which AT&T had recently purchased.¹

In the 1920s, the Government forced AT&T to relinquish its ownership of movie theaters, again based on antitrust law principles. Congress passed the Communications Act of 1934 (the 1934 Act) and created the Federal Communications Commission (FCC) to regulate AT&T's provision of telephone service on an ongoing basis.² AT&T, in part, welcomed this legislation, hoping that it would forestall any future antitrust actions against it.

2. The antitrust case of 1949

In 1949, the Federal Government filed another antitrust action against AT&T, alleging that AT&T had abused its control over the telephone network to discriminate against competitive manufacturers of telephone equipment.³ The government contended that AT&T had purchased all its equipment needs from its Western Electric subsidiary regardless of the price or quality of that equipment. Since AT&T and its affiliated Bell Companies purchased as much as 75 percent of the telephone equipment sold in the country, competing manufacturers had little opportunity to find a market for their products. The DOJ suit sought to separate Western Electric from AT&T's telephone services business and to bar AT&T

¹ *United States v. AT&T*, No. 6082, U.S. Dist. Ct., Dist. of Oregon, *Original Petition*, July 24, 1913; Nathan C. Kingsbury to James C. McReynolds, December 19, 1913; *United States v. AT&T*, No. 6082 (D. Or. 1914) (Decree).

² 47 U.S.C. 151, et seq.

³ *United States v. Western Electric*, No. 17-49 (D.N.J. 1949).

from engaging in any future telephone manufacturing activity. That suit was settled in 1956. The agreement required no structural change in AT&T's operations, but it did bar AT&T from participating in the emerging computer and data processing businesses.⁴

3. *The growth of competition and the origins of the 1974 anti-trust case*

Beginning in the 1960s and continuing into the 1970s, the FCC and the courts introduced greater competition to AT&T's monopoly businesses. In 1968, over AT&T's objection, the FCC ordered AT&T to permit customers to attach non-Western Electric telephone equipment to the telephone network.⁵ Three years later, the FCC also issued an order permitting "specialized" common carriers, such as MCI, to compete with AT&T in the provision of certain long distance services.⁶ The courts subsequently upheld these decisions and further recognized the right of long distance companies to compete against the full range of AT&T's long distance services.⁷

AT&T's new equipment and long distance competitors, however, soon found that permission to compete was not enough to overcome AT&T's market power. The competitors complained that AT&T was using its control over the monopoly local telephone carriers to discriminate against them and prevent them from gaining a foothold in their markets.⁸ For instance, the long distance competitors alleged that the BOCs would not give the competitors the same quality connections to the local telephone company that the BOCs gave to AT&T. The equipment manufacturers alleged that AT&T and the BOCs would not purchase equipment made by companies other than Western Electric. The DOJ found merit in these complaints and filed another antitrust suit against AT&T in 1974, alleging harm to both the long distance and manufacturing market.

4. *Rationale for the antitrust action regarding AT&T's manufacturing activities*

With regard to the telephone manufacturing market, the DOJ alleged that AT&T, through its ownership of the BOCs, engaged in three unlawful activities: (1) AT&T and the BOCs purchased all of their telephone equipment for their long distance and local networks from Western Electric, regardless of the relative price or

⁴ *United States v. Western Electric Co.*, CA No. 17-49, Final Judgment, 1956 Trade Cas. 68,246 (D.N.J. 1956).

⁵ FCC Docket 16942, adopted June 26, 1968, 13 FCC 2d 420 ("Carterfone" decision).

⁶ *First Report and Order*, FCC Docket 18920, "Specialized Common Carriers," June 3, 1971, 29 FCC 2d 870, *aff'd sub nom. Wash. Util. & Trans. Comm'n v. FCC*, 513 F.2d 1142 (9th Cir. 1975), *cert. denied*, 423 U.S. 836 (1975) (Specialized Common Carrier decision).

⁷ *MCI v. FCC*, No. 75-1635, 561 F.2d 365 (D.C.Cir.), *cert. denied*, 434 U.S. 1040 (1978) ("Execunet" decision).

⁸ To reach a customer, also known as an "end user", all telecommunications service providers, including long distance companies and information service companies, must almost always connect with the local telephone network. While there are a few companies offering competitive "bypass" services to business customers in some major cities, it is virtually impossible for competitors to duplicate the millions of miles of copper cable strung beneath the street and on telephone poles that are controlled by the telephone companies. Because the competitors had no alternative other than to connect their lines to the local Bell Companies in order to reach their customers, the competitors argued that the BOCs exercised "bottleneck" control over the quality of the competitors' services.

quality of that equipment;⁹ (2) AT&T subsidized its equipment manufacturing activities with revenues earned from its telephone service businesses, thereby forcing telephone service customers to pay higher telephone rates than necessary and allowing Western Electric to sell equipment below its actual costs of manufacturing that equipment; and (3) AT&T manipulated the design of its telephone network so that only equipment manufactured by Western Electric would be compatible with the telephone network.

5. *The court proceedings*

After several years of pre-trial procedures, the DOJ began presenting its case in 1981. Later that year, the Federal court judge administering the case, Judge Harold Greene, ruled that the DOJ had presented sufficient evidence of antitrust activity to satisfy its initial burden of proof. The Judge thus denied AT&T's request to dismiss the case and ordered AT&T to present its defense. About three weeks before the trial was to conclude, however, the DOJ and AT&T came to a settlement agreement. Judge Greene accepted the agreement, with several alterations, on August 24, 1982.

6. *The Consent Decree*

The settlement agreement is today known as the "Modification of Final Judgment" (MFJ) or the "AT&T Consent Decree."¹⁰ The parties agreed to separate AT&T's competitive businesses (long distance and manufacturing) from its monopoly services (local exchange telephone service). AT&T agreed to divest itself of any ownership interest in the 22 BOCs, and the DOJ agreed to allow AT&T to retain its long distance operations, its Western Electric manufacturing subsidiary and its Bell Labs research facilities. In exchange for relinquishing the BOCs, AT&T received the DOJ's commitment that it would ask the courts to lift the restriction in the 1956 decree that barred AT&T from participating in the computer and data processing markets.

The DOJ remained concerned, however, that the BOCs would retain their dominance over local telephone service after their divestiture from AT&T. The parties thus agreed to restrict the lines of business that the BOCs would be allowed to enter. The parties agreed to bar the BOCs permanently from providing information services and long distance telephone services and from manufacturing and providing telephone equipment.¹¹ In addition, another provision of the agreement restricted the BOCs to providing only local telephone exchange services. AT&T and the DOJ believed these restrictions were necessary to prevent the BOCs from leveraging their dominance over local telephone service to gain an unfair advantage over participants in competitive markets.¹²

⁹ Since AT&T purchased up to 75 percent of the telephone equipment in the country, there was little opportunity for competing manufacturers to sell their equipment elsewhere if AT&T was not a buyer.

¹⁰ The "Modification of Final Judgment" modifies the Final Judgment that concluded the government's earlier antitrust action begun in 1949 and settled in 1956. *United States v. Western Electric Company*, 552 F.Supp. 131 (D.D.C. 1982), *aff'd sub nom., Maryland v. United States*, 460 U.S. 1001 (1983).

¹¹ These are known as the three "line of business" restrictions.

¹² The BOCs also were required to provide "equal access" to all long distance carriers. This means that the BOCs are obliged to make available to all long distance companies the same quality access to the customer that they provide to AT&T.

Pursuant to the Tunney Act,¹³ Judge Green took extensive comment on the proposed settlement agreement to determine whether it was supported by the evidence introduced at trial and consistent with the public interest. After his review, Judge Greene suggested several changes. For instance, he directed the parties to change the terms of the decree to permit the BOCs to publish and distribute "Yellow Pages" directories. While he accepted the ban on the BOCs' provision and manufacture of telecommunications equipment, he permitted the BOCs to provide (but not manufacture) "customer premises equipment".¹⁴ He allowed the BOCs to apply for waivers of the three "line of business" restrictions and accepted the DOJ's commitment to report to the court every three years after the decree on the continued need for these restrictions. The Judge also established a standard, discussed in more detail below, for determining when the restrictions could be lifted entirely.¹⁵ Finally, the Judge retained jurisdiction over the decree to consider waivers to the restrictions and to the decree in general.

Enforcement and Interpretations of the Decree

1. The Plan of Reorganization

The Consent Decree, accepted by the court in August 1982, provided that the divestiture by AT&T of its Bell Companies would take effect on January 1, 1984. To comply with this deadline, AT&T submitted to the DOJ and then to the court a detailed "Plan of Reorganization" that set forth a plan for dividing its assets between itself and the BOCs. Since the vast majority of the investment in the Bell System consisted of wires and switches used for local service, AT&T relinquished almost three-quarters of its assets (\$112 billion out of \$155 billion).

The 22 Bell Companies were organized into seven Regional Bell Operating Companies (RBOCs) or Regional Holding Companies (RHCs), each of similar size in terms of assets and revenues, but not in terms of geographic area.¹⁶ Each of the RBOCs was roughly equal in size at that time to the largest independent telephone company, the General Telephone and Electric Company (GTE).

¹³ Antitrust Procedures and Penalties Act, 15 U.S.C. 16(b)(4) (hereinafter referred to as the Tunney Act).

¹⁴ The decree defines two types of telephone equipment: "telecommunications equipment" refers to equipment used in the telephone network and includes central office switches and transmission equipment such as fiber optic cable; "customer premises equipment" (or "CPE") refers to equipment used at the customer's location and includes telephones and telephone switches installed by businesses on their premises. For purposes of convenience, telecommunications equipment and CPE will be referred collectively to as "communications equipment".

¹⁵ This standard essentially permits the BOCs to enter the three prohibited lines of business when there is significant competition to their local exchange services or when there are other reasons for believing that the BOCs could not harm competition in the market they seek to enter.

¹⁶ The seven RBOCs, and the BOCs they control, are as follows: NYNEX Corp. (including New England Telephone Company and the New York Telephone Company, the Bell Telephone Company of Pennsylvania; the Diamond State Telephone Company, and the Chesapeake and Potomac Telephone Companies of Washington, D.C., Virginia, Maryland, and West Virginia); Bell-South Corp. (including Southern Bell Telephone and Telegraph Co. and South Central Bell Telephone Co.); Ameritech Corp. (including Ohio Bell Telephone Co., Michigan Bell Telephone Co., Indiana Bell Telephone Co., Illinois Bell Telephone Co., and Wisconsin Telephone Co.); US West Corp. (including Northwestern Bell Telephone Co., the Mountain States Telephone and Telegraph Co., and Pacific Northwest Bell Telephone Co.); Pacific Telesis Corp. (including Pacific Bell Telephone and Telegraph Co. and Bell Telephone Company of Nevada); and Southwestern Bell (including the Southwestern Bell Telephone Co.).

2. *The waiver process*

Shortly after the divestiture took effect on January 1, 1984, several BOCs filed motions requesting waivers of the line of business restrictions. The DOJ noted that the waiver applicants made no attempt to demonstrate that the relevant economic conditions had significantly changed since the divestiture, and the court denied the motions. The court indicated that it would not consider waivers by the BOCs to enter the long distance, information services or manufacturing markets unless the BOCs provided evidence that the risks of anticompetitive conduct had diminished. Judge Greene indicated that waivers to enter other lines of business generally would be easy to obtain, as long as the total revenues from these competitive lines of business did not exceed 10 percent of the BOCs' total revenues.

Judge Greene also set up a procedure to consider future waiver requests. He directed that the BOCs first submit their waiver requests to the DOJ for review, that the DOJ would make a recommendation on those requests, and that the requests would then be forwarded to the court. By January 27, 1987, the BOCs had submitted approximately 160 waivers to the DOJ for review before being submitted to the court. One hundred and three of these had been decided, 30 were pending with the DOJ, and 13 were pending with the court.¹⁷ The court noted at the time that the number of waiver applications was greater than the court initially expected.¹⁸

3. *The First Triennial Review*

On February 2, 1987, three years after the divestiture, the DOJ submitted its report and recommendations to the court concerning the continued need for the line of business restrictions. In a fundamental shift from its earlier position, the DOJ recommended complete removal of the restrictions on information services, manufacturing, and the BOCs' entry into other, non-telecommunications lines of business. The DOJ further recommended that the long distance restriction be modified substantially to permit each BOC to provide long distance service outside of the region in which it provides local telephone service.¹⁹ The DOJ also submitted a lengthy study of the telecommunications marketplace prepared under contract by Dr. Peter Huber (known as the "Huber Report") to support its recommendations.

a. The DOJ's Views on Manufacturing.—Regarding the manufacturing restriction,²⁰ the DOJ argued that several changes had oc-

¹⁷ As of that date, only one waiver request supported by the DOJ had been denied. "Report and Recommendations of the United States Concerning the Line of Business Restrictions Imposed on the Bell Operating Companies by the Modification of Final Judgment", Civil Action No. 82-0192, p. 25.

¹⁸ See, *United States v. Western Elec. Co.*, 592 F.Supp. 846, 858 (D.D.C. 1984), *appeal dismissed*, 777 F.2d 23 (D.C. Cir. 1985).

¹⁹ DOJ altered this recommendation by suggesting that the restriction on long distance should be retained but that the court should entertain requests for waivers of the restriction as soon as state and local regulations limiting competition in the local exchange market were lifted.

²⁰ From this point on, unless otherwise noted, the term "manufacturing restriction" will be used to describe the restriction contained in the AT&T Consent Decree that bars the BOCs from manufacturing telecommunications equipment and customer premises equipment and from providing telecommunications equipment.

curred since 1982 that made it unlikely that the BOCs could engage in any anticompetitive abuse. The most significant change, in the DOJ's view, was the divestiture itself. It argued that one vertically-integrated monopoly had been replaced by eight companies (the seven RBOCs and AT&T). The DOJ pointed out that, whereas the former Bell System purchased about 80 percent of the central office switching and network transmission equipment, "no one BOC accounts for more than a relatively small percentage of the purchases in any equipment market."²¹ The DOJ further noted that the markets for communications equipment were competitive and included several vertically-integrated firms, numerous "fringe" firms, and many large foreign firms.

The DOJ found that these market changes were accompanied by regulatory changes that reduced the ability of any BOC to engage in anticompetitive activity. Primary among these regulatory changes was the FCC's adoption of standards governing the interconnection of terminal equipment to the telephone network and rules governing the disclosure of network design information. In addition, the DOJ noted that private national and international interconnection standards also had been promulgated. The DOJ asserted that these standards would prevent the BOCs from designing their network to favor their own equipment manufacturers. Further, the DOJ argued that the FCC had adopted new cost allocation rules that would prevent cross-subsidization. Finally, the DOJ pointed out that the BOCs would remain subject to the anti-trust laws even after the manufacturing restriction was lifted and that the DOJ would prohibit any anticompetitive attempt to recreate the old Bell System.

The DOJ further argued that continuing the manufacturing restriction could impose several direct costs on society. According to the DOJ, the manufacturing restriction kept the BOCs from taking advantage of the natural efficiencies between providing telephone service and manufacturing. Such efficiencies include the sharing of joint or common costs, technical and engineering expertise, and especially joint research. The DOJ also noted that the "gray areas" between permitted and impermissible activities (such as between "manufacturing" and "providing" CPE, between designing the telephone network and designing equipment to be used in that network, and between designing generic standards and designing specific products to meet those standards) could result in substantial litigation costs and constitute a drain on judicial resources.

b. The District Court's Opinion.—After taking extensive public comment on the DOJ's recommendations, the court granted the request to remove the restriction on non-telecommunications businesses and modified the restriction on information services. But the court made no change in the long distance or manufacturing restrictions.²²

The court began its analysis by noting that section VIII(C) of the Consent Decree provides that the restrictions may be removed only

²¹ DOJ Recommendations, p. 161. DOJ noted that Dr. Huber had found that "no single BOC's purchasing decisions . . . can have much impact on competition in the market as a whole." DOJ Recommendations, p. 162, note 318, quoting Huber, *The Geodesic Network*, at 1.16.

²² 673 F. Supp. 525 (D.D.C. 1987).

if the BOCs demonstrate that "there is no substantial possibility that they could use their monopoly powers to impede competition in the markets they seek to enter". The court explained that this standard imposes a burden on the BOCs to demonstrate that unforeseen changes have occurred that warrant the removal of the restrictions.

The court found that the three changes claimed by the BOCs were not sufficient to satisfy this burden. First, it found that the BOCs still controlled a monopoly over local telephone service. Second, it found that the divestiture was not a relevant change for two reasons: the parties knew that AT&T would be separated into eight separate companies at the time that they agreed to the line of business restrictions; and also, despite being separated, the BOCs collectively remained about equal to the old Bell System in terms of their monopoly power. Third, the court found that FCC regulation was actually less stringent than it was prior to the divestiture due to the FCC's loss of staff and its shift toward a more deregulatory philosophy.

Regarding manufacturing, the court found that no changes had occurred in the previous three years that warranted removal of the restriction. It found:

- (1) the Regional Companies still have an ironclad hold on the local exchanges;
- (2) collectively they account for the purchases of what may be estimated at seventy percent of the national output of telecommunications equipment, only slightly less than the share of the pre-divestiture Bell System;
- (3) if the restriction were lifted, the Regional Companies may be expected to act as did the Bell System: they would buy all, or almost all, of their equipment requirements from their own manufacturing units rather than from outsiders;
- (4) no measures, regulatory or otherwise, are available effectively to counteract such activities; and
- (5) in short order following removal of the restriction, a return to the monopolistic, anticompetitive character of the telecommunications equipment market would be likely, if not inevitable.²³

c. The Circuit Court of Appeals Decision.—The BOCs appealed this decision. On appeal, the U.S. Court of Appeals for the District of Columbia Circuit upheld the District Court's finding that the BOCs had not carried their burden of proving why the restrictions should be lifted. The Circuit Court thus affirmed the District Court's decision.²⁴

Regarding the manufacture of telecommunications equipment, the Circuit Court found that the District Court had properly relied upon DOJ admissions that (1) the BOCs would likely purchase sub-

²³ 673 F.Supp. 525, at 573 (D.D.C. 1987).

²⁴ *United States v. Western Electric*, Slip Opinion, No. 87-5388 (April 3, 1990). The Circuit Court also upheld the District Court's refusal to lift the ban on long distance services but remanded the District Court's decision not to lift the restriction on information services. The Circuit Court held that the District Court had applied the wrong standard to review the information services restriction and remanded to the District Court the issue of whether the information services restriction should remain in effect under the correct standard. The Supreme Court declined to review the ruling (cert denied, *MCI Communications Corp. v. United States*, 59 U.S.L.W. 3273 (October 9, 1990)).

stantially all of their equipment requirements from their manufacturing affiliates regardless of price or quality, thereby foreclosing some "substantial portion (5-15 percent) of the equipment market", and (2) that the BOCs would possess both the incentive *and the ability* to cross-subsidize, at least somewhat." (emphasis in original).²⁵ The Circuit Court determined that "it is not enough for the BOCs . . . to show that a significant number of stable competitors will be able to survive BOC entry."²⁶

The Circuit Court stated that it was "inclined to think that the question [of whether to lift the ban on manufacturing CPE] is much closer than it was for telecommunications equipment." Since the BOCs petitioned for complete removal of the manufacturing restriction and urged the District Court not to separate telecommunications equipment from CPE, however, the Circuit Court found that the BOCs had failed to carry their burden under the section VIII(C) standard.

Despite upholding the District Court, the Circuit Court found fault with the District Court's interpretation of the section VIII(C) standard. Specifically, the Circuit Court found that the District Court had erred in determining that the BOCs were required to show an unforeseen change in circumstances to satisfy the section VIII(C) standard. The Circuit Court said that the divestiture and the practices of the BOCs were significant factors that the District Court could have considered in reviewing the restrictions. Also, the Circuit Court expressly noted that the District Court was not authorized to review the effect of the restrictions on consumers or on U.S. international trade. The Circuit Court emphasized that the District Court could not deny the BOCs' motions "for any other reason not related to the antitrust laws."²⁷

4. *The Definition of Manufacturing*

The Consent Decree does not contain a definition of the term "manufacturing", an omission which created great uncertainty as to the scope of the BOCs' permissible activities. In April 1985, AT&T and several other companies submitted complaints to the DOJ that several BOCs were violating the manufacturing prohibition by engaging in the design and development of telecommunications products. Two years later, after the DOJ refused to act on these complaints, AT&T filed a motion with the District Court seeking a declaratory ruling that the Consent Decree's ban on manufacturing prohibits the "design" and "development" as well as the "fabrication" of equipment. The BOCs opposed the motion, arguing that this expansion definition went beyond the plain meaning of the word "manufacture" and the expectations of the parties in agreeing to the Consent Decree.

²⁵ Slip Op., at 44.

²⁶ Slip Op., at 46.

²⁷ Slip Op., at 36. The Circuit Court noted that the district court "considered the impact of removing the restrictions on various public policies, including the welfare of local ratepayers, innovation in the manufacturing market, the goal of universal telephone service, first amendment values, and the United States' position in international trade. The District Court explained its discussion of these factors by noting that 'the same standards may be applied in proceedings addressing continued viability of the restrictions as were used in determining whether the restrictions were to be imposed in the first place.' 673 F.Supp. at 583. We disagree." Slip Op., at 35-36.

The District Court granted AT&T's motion.²⁸ Judge Greene stated that "[t]here is no valid basis for the position that only fabrication is prohibited" by the ban on manufacturing. The court determined that defining "manufacturing" to include "design" and "development" as well as "fabrication" was consistent with the parties' intent at the time the decree was entered. The court noted that AT&T's anticompetitive activities had occurred more during the "design" and "development" phases of manufacturing than during the "fabrication" phase. The Court also clarified that the ban on "design" and "development" extended to the design and development of software integral to communications equipment.

On appeal the U.S. Court of Appeals for the District of Columbia upheld Judge Greene's ruling.²⁹ The Circuit Court found that the contemporaneous statements of the parties concerning the Consent Decree's objectives left no question that the parties intended to prohibit design and development. The Circuit Court agreed with the District Court that much of the anticompetitive behavior attributed to AT&T involved AT&T's design and development activities, not just its fabrication activities. If permitted to engage in design and development, the Circuit Court speculated, a BOC could see its network information to design unique products, contract out the fabrication work, and then purchase the fabricated items at inflated prices.³⁰ Finally, the Circuit Court also determined that the District Court's inclusion of software design in the prohibited manufacturing activities was consistent with the court's definition of manufacturing.

THE MANUFACTURING MARKET TODAY

The World Market

The annual world-wide market for communications equipment is now over \$120 billion.³¹ The U.S. market, at about \$33 billion, is by far the largest in the world and is twice the size of the second largest market (the Soviet Union).³² The North American market as a whole, however, is roughly as large as the European market.³³

The market for high-technology products (such as central office switches, private branch exchanges (PBXs) and fiber optic transmission equipment) is becoming increasingly concentrated among a few firms. In the past several years, Siemens has purchased Rolm, a manufacturer of PBXs, from IBM; Siemens combined with GEC (a U.K. company) to acquire Plessey in the United Kingdom and Stromberg-Carlsson in the United States; AT&T has entered joint ventures with Philips in the Netherlands and with Italtel in Italy, and has purchased a controlling interest in GTE's manufacturing facilities in the United States; and Ericsson acquired CGCT, a

²⁸ *United States v. Western Elec. Co.*, 675 F. Supp. 655 (D.D.C. 1987).

²⁹ *United States v. Western Electric*, Slip Opinion, No. 88-5050 (February 2, 1990).

³⁰ Ironically, the Circuit Court also noted that the parties to the decree intended to include design and development in the definition of manufacturing so as to avoid future legal disputes concerning the BOCs' compliance with the antitrust laws. Slip Op., at 11.

³¹ "International Telecommunications", *Financial Times Survey*, July 19, 1989, Section III, p. I.

³² "Telecommunications Market Review and Forecast: Annual Report of the Telecommunications Industry", 1990 Edition, North American Telecommunications Association (NATA Report).

³³ *Telecommunications Equipment*, The Freedonia Group (1986), in 1988 Telephone Industry Directory and Sourcebook.

French equipment manufacturer. Experts predict that, by the end of this decade, there will be no more than six major switches manufacturers in the world. This is primarily due to the extremely high research and development costs necessary to remain competitive in this market.³⁴

The supplies of "low-end" CPE (telephones, facsimile (fax) machine, cordless telephones, telephone answering machines, etc.) are much more numerous. This market is highly competitive, and the profit margins are low. Manufacturers of this equipment usually locate their manufacturing facilities in areas of the world with low labor costs (such as Mexico and Asia) to remain competitive. Sales of simple voice telephones are growing slowly (about four percent per year) while sales of data equipment (computers, fax and telex machines), mobile equipment (cellular and cordless telephones) and fiber optic equipment are growing quickly (up to 20 percent a year).³⁵

Up until 1986, AT&T was the largest manufacturer of communications equipment in the world, supplying about 20 percent of the world's needs.³⁶ By 1990, AT&T had slipped to second place behind Alcatel of France, with Northern Telecom of Canada close behind AT&T in third. According to data supplied by AT&T, of the top eight international switch manufacturers, only one is an American company, AT&T.

The U.S. Market

1. Trends in the U.S. Market

The U.S. market grew at a rate of about 10 percent a year from 1984 to 1987, but has slowed recently to about a three percent annual growth rate.³⁷ This growth is being driven by new technologies (such as cellular radios, fax machines, and fiber optic systems) and the conversion from analog to digital transmission modes.

In his report for the DOJ, Dr. Huber noted two "overarching" trends in the equipment markets: "the continued dispersal of equipment consumption, and the steady consolidation of equipment production."³⁸ He noted that the dispersal of equipment consumption was caused not just by the break-up of AT&T into eight independent companies, but also by the growth of private buyers. He states, for instance, that private buyers and non-telephone company carriers "buy much more equipment in almost every category than any single RBOC".³⁹

Regarding the consolidation of equipment production, Dr. Huber noted that AT&T and Northern Telecom supply over 80 percent of the central office switching market in the United States and that the three largest manufacturers supply over 80 percent of fiber

³⁴ "It will cost between \$1 billion to \$1.5 billion for each switchmaker to develop the next family of switches. . . . According to Siemens, the world's third-largest switchmaker, a supplier needs at least 15% of the world market. . . . That leaves room for roughly six switchmakers. There are ten." "A Tale of Too Many", *The Economist*, March 10, 1990.

³⁵ "A Tale of Too Many", *The Economist*, March 10, 1990.

³⁶ "Dealmakers are Burning Up the Phone Lines," *Business Week*, March 13, 1989, p. 140.

³⁷ 1991 U.S. Industrial Outlook, U.S. Department of Commerce, Chapters 30 and 31.

³⁸ *Huber Report*, at 1.10.

³⁹ *Huber Report*, at 1.16.

optic cable, 85 percent of cellular switching systems and 60 percent of PBXs.⁴⁰

For the equipment market as a whole, AT&T is by far the largest supplier of U.S. equipment needs, satisfying about one-third of U.S. demand. AT&T employs about 60,000 people in 25 manufacturing plants throughout the country and employs another 30,000 employees in research, sales, and other manufacturing-related activities. According to AT&T, all the equipment that AT&T sells in the United States is assembled in the United States, except for telephones, which it assembles in Singapore. Many components of AT&T equipment, however, are manufactured overseas. AT&T has an ownership interest in 14 other plants overseas, which employ about 20,000 people and which manufacture equipment for sale in foreign markets.

The amount of equipment supplied by other U.S. suppliers varies depending upon the market segment. For instance, the market for transmission equipment and CPE is scattered among 50-100 firms, each serving particular niches.

Foreign-based manufacturers, however, have made significant inroads in most of the high-technology and high growth products.⁴¹ For instance, Northern Telecom increased its share of the central office switch market by a compounded annual growth rate of 20.3 percent per year from 1984 through 1989, while AT&T's sales increased only 2.3 percent per year.⁴² In the exploding market for fax machines, not one of the dozens of suppliers is based in the United States. In the PBX market, AT&T captured 22 percent of the market in 1988 but was closely followed by Northern Telecom (19 percent), Rolm (recently purchased by Siemens, 16 percent), NEC (8 percent), Mitel (a Canadian-based company recently sold by British Telecom, 8 percent), and Siemens (5 percent).⁴³

2. *The U.S. Trade Position*

The U.S. market is very open to foreign competitors compared to many other nations. The result has been increasing foreign penetration of the U.S. market both in terms of sales and investment. Overall, foreign manufacturers increased their share of the U.S. equipment market from 17 percent in 1984 to 21 percent in 1988.⁴⁴

The U.S. trade balance in communications equipment shifted from a surplus of over \$800 million in 1981 to a deficit of about \$2.6 billion in 1988. In 1989 and 1990, the U.S. trade deficit improved to \$1.9 billion and \$772 million, respectively. This improvement, however, resulted partly from accounting changes implemented by the Department of Commerce in 1989 (for example, the inclusion of communications satellites and various types of radio equipment) and partly from softness in the U.S. economy during 1990 that caused U.S. businesses to cut back on their imports of foreign-made products.

⁴⁰ *Huber Report*, at 1.11-1.12.

⁴¹ It should be noted that some of these foreign-based firms, including Northern Telecom and Siemens, have a substantial manufacturing presence in the United States and employ several thousand American workers.

⁴² NATA Report, p. 81.

⁴³ NATA Report, p. 111, Figure 31.

⁴⁴ NATA Report, p. 3.

Despite this improvement in the U.S. trade position, the United States still faced a trade deficit of \$2.3 billion in CPE in 1990. The CPE market has been dominated increasingly by foreign suppliers, especially Asian ones. Although there are 16 U.S.-based manufacturers of telephone systems, the combined U.S. market share of these U.S. firms is less than 35 percent.⁴⁵

In network switching equipment, the United States has maintained a trade surplus for several years, including a surplus of \$710 million in 1990. Much of this surplus, however, is driven by exports of switches made in the United States by foreign-owned firms. For instance, Northern Telecom (Canada), Siemens (Germany), and GEC (U.K.) all own significant switch manufacturing plants in the United States. Annual foreign investment in the U.S. high technology industries increased from \$214 million in 1985 to \$3.3 billion in 1988.⁴⁶ From 1984 to 1989, 66 different U.S.-based computer and telecommunications equipment companies have been bought by or merged with foreign-based firms. The home country of the acquiring firms and the number of transactions for each are as follows:

Canada	11
Asia:	
Japan	9
Hong Kong.....	1
Australia.....	1
Europe:	
Great Britain.....	21
West Germany.....	7
Italy.....	6
France.....	4
Switzerland.....	3
The Netherlands.....	2
Israel.....	47 1

⁴⁷ DATABASE: Dun & Bradstreet, Prompt, IAD, Securities Data Co. and Salomon Bros.

The United States faced a trade deficit in communications equipment with the five major East Asian countries of \$3.5 billion in 1990.⁴⁸ The United States had a deficit of \$30 million in 1989 with France but had a trade surplus with Europe as a whole.

3. U.S. Research and Development

U.S. firms in the communications industry are spending more on research and development (R&D) than ever before, but U.S. spending on research and development lags behind several other nations in percentage terms. Total U.S. R&D expenditures (\$95 billion in 1988) were greater than those of Japan, West Germany, France and Britain combined (\$80 billion). However, the United States trails other countries in non-defense R&D when expressed in terms of percentages of Gross National Product (GNP). According to the National Science Foundation, in 1988, the United States spent 1.9

⁴⁵ AT&T pleading before the International Trade Commission (ITC). AT&T recently obtained a ruling from the ITC on its complaint that Japan and Korea had engaged in unlawful dumping of their products in the United States.

⁴⁶ In testimony before the Communications Subcommittee, Alfred Sikes, Chairman of the FCC, noted that there had been about \$12 billion in purchases of high-technology equipment firms by Japanese companies in the last two years, and that Japanese companies purchased 26 companies during 1989 alone. Transcript of the Hearings Before the Communications Subcommittee, Committee on Commerce, Science, and Transportation, on S. 1981, The Telecommunications Equipment Research and Manufacturing Competition Act, May 9, 1990, pp. 18-19.

⁴⁸ *U.S. Telecommunications Trade in 1990*, International Trade Administration, Department of Commerce.

percent, Japan 2.9 percent, and West Germany 2.7 percent of their respective GNPs on R&D.⁴⁹

AT&T's R&D budget has grown an average of only 3 percent per year since the divestiture, from \$2 billion in 1983 to approximately \$2.4 billion in 1990 (about 5 percent of total revenues). Nevertheless, AT&T devotes more resources to communications equipment R&D than any other U.S. communications equipment manufacturer.

The BOCs' R&D budgets also lag behind the typical R&D expenditures of other firms, especially high-technology firms. The BOCs spent over \$1 billion in R&D activities in 1990, including research done at Bell Communications Research (Bellcore) and at the BOCs' own independent research facilities.⁵⁰ However this represented only 1.3 percent of their revenues in 1988 and 1989. This is less than one-half the average of all U.S. industry (3.4 percent) and much less than the average for the typical telecommunications and computer firms (average 6 percent to 10 percent).

A result, the growth in U.S. spending on research and development falls far short of our international competitors. When combined, the total R&D budget for AT&T and the BOCs is only about 70 percent larger than AT&T R&D budget before divestiture, a growth rate of about 9 percent per year. By contrast, between 1982 and 1989, Japan's six leading manufacturers of computers, communications and electronics increased their annual outlays on R&D from \$2.5 billion to \$11.3 billion, or an average compounded rate of nearly 24 percent per year.⁵¹ Similarly, between 1985 and 1988, the five leading high technology manufacturers in Europe increased their annual investment in R&D from nearly \$4 billion to \$7.1 billion, an average annual growth rate of about 22 percent.⁵²

REASONS FOR REPLACING THE MANUFACTURING RESTRICTION WITH REGULATORY SAFEGUARDS

The Congress and the FCC, not the federal courts, should be setting telecommunications policy

Because of the unusual nature of the AT&T Consent Decree, a federal judge is now responsible for regulating a huge portion of the U.S. communications industry. The BOCs alone control over one-half the communications assets in this country and earn over \$80 billion in annual revenues. The BOCs thus have such a strong presence in the industry that their activities inevitably affect the entire communications industry, and the entire economy.⁵³ Judge Greene's decisions concerning the permissible lines of business that

⁴⁹ National Science Foundation, Division of Science Resource Studies.

⁵⁰ Four BOCs have established their own research facilities, NYNEX, Ameritech, US West and Southwestern Bell.

⁵¹ These firms are NEC, Matsushita Electric, Toshiba, Pioneer Electronic, Sony and Hitachi.

⁵² These firms are Siemens, Philips, Plessey, Ericsson and Thomson.

⁵³ In addition, the BOCs employ more than one percent of the total U.S. workforce. They purchase about 50 percent of all telecommunications equipment sold in this country. Further, they serve 80 percent of the country's telephone customers and carry an even greater percentage of actual traffic.

the BOCs may enter thus have the effect of setting national telecommunications policy.⁵⁴

Judge Greene has acted within the bounds of the law. Judge Greene's responsibilities to oversee the Consent Decree derive directly from an act of Congress. In passing the Tunney Act, Congress specifically directed federal judges to review antitrust settlement decrees to determine whether they would be in the public interest. Judge Greene has shown flexibility in administering the decree, and has often made changes to the decree that have favored the interests of the BOCs.⁵⁵

Nonetheless, there is considerable question whether it is good public policy for a single federal court judge to be exercising such control over the communications industry. As familiar as Judge Greene may be with the issues involved in the Consent Decree, no Federal judge should be responsible for setting federal communications policy. There are several reasons for this conclusion.

(1) The District Court has a small staff compared with the amount of work involved in enforcing the decree. As the Judge himself has admitted, it is taxing for him to resolve all questions related to the decree with a staff of a few clerks at the same time that he handles a full judicial caseload.⁵⁶ The BOCs have filed over 200 waiver requests since the decree was entered. The Judge has been required to rule on numerous petitions for clarification and declaratory rulings concerning the terms of the decree. In addition, he is involved in several enforcement proceedings concerning possible violations of the MFJ by the BOCs. The sheer scope of these activities would make it difficult for any single person to devote sufficient time and attention to these issues.

(2) The Consent Decree requires the court to make a number of decisions based on communications economics, technology and marketing. No federal judge can be expected to be an expert on these matters. For instance, the court must make decisions based on the distinction between design of the telephone network and design of equipment that is used in the network, between providing customer equipment and manufac-

⁵⁴ It is interesting to note that, in choosing the top 25 most influential telecommunications leaders in the world in 1988, *Communications Week* listed Judge Greene second, just after Richard Butler, Secretary General of the International Telecommunications Union, and just before Robert Allen, Chairman of AT&T. In 1989, *Communications Week* listed Judge Greene fifth, three places ahead of Alfred Sikes, Chairman of the FCC. In 1990, *Communications Week* again placed the Judge second among the top 25. See, *Communications Week*, October 24, 1988, p. C3; *Communications Week*, November 13, 1989, p. C2; *Communications Week*, October 22, 1990, Special Report, p. 1.

⁵⁵ For instance, the Judge refused to accept the DOJ's proposal to make the line of business restrictions permanent (by allowing them to file for waivers and agreeing to review the need for the restrictions every three years), he permitted the BOCs to provide "Yellow Pages" directories and to market CPE, he removed the limitation that barred the BOCs from taking in more than 10 percent of their total revenues from non-communications ventures, and he loosened the information services restriction to permit the BOCs to provide "gateway" functions.

⁵⁶ "The enforcement of the AT&T decree by my court is a considerable personal burden, for the work exists on top of a normal judicial caseload, and that burden is rarely accompanied by the opportunity to consider and decide novel or otherwise interesting legal issues that would balance the extr. work in an intellectual sense. Yet I have a sworn obligation as a member of the judiciary to enforce laws and judgments even if some of the work is burdensome, or if it is accompanied by criticism from the sidelines by those with an economic or ideological axe to grind. Unless and until the laws are changed, I will carry out my responsibilities." "The Antitrust Laws, Telecommunications, and Consumers", an address by Judge Harold H. Greene, February 5, 1988.

turing customer equipment,⁵⁷ and between engaging in applied research for the issuance of generic product specifications and engaging in the design and development of specific products. Even assuming a rational basis for these rules, any district court judge, with a staff of a few law clerks, would find it extremely difficult to make decisions that must be founded on a detailed understanding of communications technology and markets.

(3) The court is limited to considering antitrust law standards, not "public interest" standards, in making its decisions. As the U.S. Court of Appeals for the D.C. Circuit recently ruled, the District Court may not consider ratepayer concerns or international trade concerns in enforcing or interpreting the decree. Further, federal judges are not directly accountable to the public through the democratic process as are the Congress or the President. The judicial branch was created to act as an independent check on the behavior of the legislative and executive branches of government, not to set policy. This is why the courts are immune from Congressional influence.⁵⁸ For the court to attempt to make policy decisions based upon its independent review of the public interest in reaching its decisions is inconsistent with the principles of democratic government set forth in the Constitution.

The Constitution places responsibility for enacting laws and setting U.S. policy with the Congress and the President, not with the judiciary. Only Congress can consider all the relevant factors in deciding whether the BOCs should be permitted to manufacture.

Additionally, to the extent that the Congress has delegated some of this responsibility to the FCC, even the FCC is more qualified to consider the need for these restrictions than is the judiciary. The FCC is the expert agency created by Congress specifically for the purpose of regulating communications to satisfy the "public interest". The FCC is authorized to consider antitrust concerns as well as consumer, trade and competitiveness concerns in enforcing the "public interest" standard contained in the 1934 Act.

The FCC has an extensive staff of professionals, including economists, engineers, lawyers and telephone industry analysts, many with years of experience in regulating the telephone industry. It is responsible for monitoring and regulating the telephone industry, and it has developed sophisticated rules governing the industry's operations. The FCC also has authority to take into account antitrust laws in making its decisions. The Commission staff is trained to understand the technical operations of the telephone network, take into account the principles of antitrust laws, consider the concerns of telephone service ratepayers, and integrate these findings into a decision that represents the "public interest". The reported bill reasserts that the authority for regulating the communications

⁵⁷ The BOCs argued in petitions before the Judge that the process of "providing" CPE permits them to perform research and design engineering. If not allowed to perform such functions, the BOCs argued, they could not market distinctive lines of CPE, as the court intended.

⁵⁸ As Chairman Sikes of the FCC pointed out at the Communications Subcommittee May 9th, 1996, hearing, "... I would add additionally that if you do not think I am doing a good job, you will not hesitate, I know, to call me up here [to testify]. And I would doubt that Judge Greene has ever been up here [to testify before a Congressional committee]." Hearing Transcript, p. 19.

industry lies with Congress and the expert agency created to carry out that task.

Lifting the manufacturing restriction will promote the international competitiveness of the United States in high technology industries

The competitive position of the U.S. manufacturing industry is facing a serious challenge.⁵⁹ This appears to be especially true in the field of communications equipment manufacturing. There is substantial evidence indicating that the United States has already begun to lose its world leadership position in this market.⁶⁰ The amount of funds spent by U.S. companies on research and development is well below the proportional amounts spent by other countries; the United States continues to suffer a trade deficit in communications equipment; foreign firms are increasing their share of the U.S. and world equipment markets; and more U.S. jobs are being moved overseas.

The market for communications equipment is a global one, and several large, foreign-based equipment manufacturers are rapidly consolidating to divide up the world market among them.⁶¹ A large, worldwide market share is becoming increasingly important to the development of new technologies because of the heavy research and development costs that are necessary to develop "state-of-the-art" technology. Unless the United States takes a more active role in permitting its companies to compete fully in these international markets, the United States faces the possibility that it will be shut out of the world market altogether.⁶²

Lifting the manufacturing restriction on the BOCs may help the United States reverse the trend in several ways. Because of their intimate knowledge of the communications equipment industry and their tremendous resources, the BOCs may themselves be able to become strong international players. The BOCs' ability to work closely with existing U.S. manufacturers could help these manufacturers grow into strong international players. Lifting the restriction may also stimulate spending on research and development that could spawn new and innovative technologies based in the United States. At a minimum, lifting the restriction will ensure that the United States is not holding back resources that could have a significant impact on the Nation's ability to compete.

The following provides a more detailed explanation of the benefits that can be expected to accrue to the U.S. communications

⁵⁹ See, "Paying the Bill: Manufacturing & America's Trade Deficit", Office of Technology Assessment, Congress of the United States, June 1988. This report finds, among other things, that "... America's relative decline [in manufacturing] is not just the natural effect of growth in other countries but also reveals a fundamental weakening in our ability to use technology to make things cheaply and well." *Id.*, at 26.

⁶⁰ "Comparisons of various measures of technological innovation and productivity in the telecommunications industry suggest a general trend of declining U.S. competitiveness relative to certain of its major trading partners, particularly Japan." "U.S. Telecommunications in a Global Economy: Competitiveness at a Crossroads", A Report from the Secretary of Commerce, August, 1990, (DOC Competitiveness Report), p. 19.

⁶¹ "The telecommunications industry is rapidly becoming as globalized as other major international enterprises, such as the financial services, computer, and movie industries." DOC Competitiveness Report, p. 7.

⁶² "American [telecommunications equipment] companies have been losing business in their home market faster than they can gain market share in the rest of the world." DOC Competitiveness Report, p. 9.

equipment industry as a result of lifting the manufacturing restriction on the BOCs.

1. New and better telecommunications products and services

Perhaps the most important reason for lifting the manufacturing restriction is that allowing the BOCs to enter the manufacturing market will bring tremendous benefits to the American consumer. A sophisticated telecommunications network can reduce the need for travel, speed response time and enhance productivity. Fact, high-capacity telecommunications services are essential for businesses in urban areas to stay on top of the latest developments in world finance. Governments require the best communications systems to keep in touch with world affairs that may have a direct impact upon our national interests. An enhanced telecommunications network will allow rural areas to compete more favorably with their urban counterparts for economic development. Finally, the telecommunications network can bring entertainment, news, computer services, and other services to the consumer's home no matter where the services are located.

The network cannot satisfy these needs if the equipment necessary to provide these services is not available for the network or to the user. Yet the manufacturing restriction poses a significant barrier to the introduction of new equipment to address these needs. Not only can the BOCs not develop or design equipment themselves, they also are limited in their ability to work closely with existing manufacturers to help the manufacturers bring their products to the market.

One example of how the MFJ restriction serves as a barrier to the introduction of new equipment and services results from the artificial distinction between research (which the BOCs are permitted to do) and design and development (which are prohibited). This distinction harms manufacturers that want to manufacture products to work with the telephone network. If a manufacturer tests a piece of equipment on the BOC network, BOC engineers can tell the manufacturer that the product does not work, but they cannot tell the manufacturer why the product does not work or how to fix it. The manufacturer must return to its own shop and try again, with no idea what the problem is. Such a manufacturer must continue in this "trial-and-error" fashion until the manufacturer discovers the problem or abandons the effort completely. Lifting the manufacturing restriction could allow the BOCs to work closely with such a manufacturer to test the product, discover the problems, and work together to find the solutions.

Bringing new services to the consumer requires a sophisticated understanding of both consumer needs and the network's capabilities. The telephone companies are very familiar with these two issues. The BOCs provide telephone service to 80 percent of the nation's population, serving the cities, the suburbs, and the rural areas. They are as close to the telecommunications needs of the public as any company in the telecommunications field, and they understand their network better than anyone else.

Allowing the Bell Companies into manufacturing will permit them to take full advantage of these resources. They will be able to design equipment to meet the needs of their customers. They will

be able to upgrade their service offerings by manufacturing equipment specifically for the network. The BOCs can integrate their knowledge of the customers' needs and the potential of the network to ensure that the United States operates the highest quality telecommunications network in the world.

Lifting the manufacturing restriction should benefit all citizens, and particularly those persons with disabilities. Congress has reaffirmed consistently that the benefits of new communications technologies are to be made "available, so far as possible, to all the people of the United States".⁶³ Allowing the BOCs to engage in manufacturing will help to ensure that this mandate is carried out through the generation of products and services specifically designed to meet the needs of handicapped and disabled persons. In entering the manufacturing market, the BOCs should seek to accommodate the alternate access needs of individuals with functional limitations of hearing, vision, movement, manipulation, speech and interpretation of information. The BOCs are encouraged to focus their resources on developing access solutions to the public network for all people, including those with disabilities.

Also, the BOCs have been among the nation's leaders regarding programs to encourage minority participation in procurement. They are encouraged to continue their leadership in promoting opportunities for minority-owned businesses to work with them in the field of manufacturing.

2. Increased investment in the United States by U.S. companies.

The amount of foreign investment in the United States has increased tremendously since the AT&T divestiture. As noted previously foreign manufacturers have purchased or merged with 66 U.S. high-technology firms in the past five years. This trend in foreign investment has increased dramatically over the past three years:

As recently as 1977, only about 3.5 percent of the value added and the employment of American manufacturing originated in companies controlled by foreign parents. By 1987, the number had grown to almost 8 percent. In just the last two years, with the faster pace of foreign acquisitions and investments, the figure is now almost 11 percent. Foreign-owned companies now employ 3 million Americans, roughly 10 percent of our manufacturing workers. In fact, in 1989, affiliates of foreign manufacturers created more jobs in the United States than American-owned manufacturing companies.⁶⁴

The manufacturing restriction poses a severe limitation on the ability of small manufacturing companies in the United States to find funding from other U.S. manufacturing companies. Currently, entrepreneurs and small, start-up companies cannot go to the BOCs for financing because the MFJ restriction bars the BOCs

⁶³ 47 U.S.C. 151. See also, the Americans with Disabilities Act of 1990 (ADA), Public Law 101-336, 104 Stat. 327, 366-69.

⁶⁴ Robert B. Reich, "Who is Us?", *Harvard Business Review*, January-February 1990, p. 55.

from owning any equity in a manufacturing concern.⁶⁵ As one small manufacturer testified at the 1991 hearing on this bill:

By prohibiting the Bell Companies from engaging in *any* aspect of the telecommunications manufacturing process, the MFJ implicitly restricts the business activities of *every* telecommunications manufacturer in America. . . . Instead, independent telecommunications manufacturers are required by the MFJ to limit their business relationships with the Bell Operating Companies to arms-length dealings. . . .⁶⁶

This manufacturer noted that there are 31 small companies that have indicated their support for allowing the BOCs to participate in the manufacturing process.

Removal of the manufacturing restriction on the BOCs can help to reverse this trend of increasing foreign investment in the United States. Today, entrepreneurs often must turn to foreign-based businesses to find necessary start-up capital. For instance, Centigram Corp. found it necessary to sell a substantial part of its equity to foreign communications companies after the BOCs refused to provide such funding, based on a fear that such funding would violate the manufacturing restriction. Lifting the manufacturing restriction thus could reduce the incentives for small companies to seek funding from abroad and thus slow the growth of foreign investment in the United States.

3. Increased research and development

Research and development are the linchpins of industrial competitiveness. Highly developed research laboratories are one of the key foundations of a healthy and growing industry. For instance, many experts attribute AT&T's former dominance over the telecommunications equipment marketplace to its outstanding research facilities at Bell Labs. The importance of basic research is demonstrated by the U.S. government's willingness to devote significant Federal funds to basic research projects every year.

As discussed above, however, total research and development spending in the United States is in decline relative to U.S. gross national product and lags well behind that of many foreign countries. This trend is particularly apparent in the communications equipment industry. According to the companies' annual reports, the research budgets for AT&T and the BOCs combined have grown at a rate of 9 percent per year since the divestiture, while the principal foreign competitors have increased their R&D expenditures by 19 to 23 percent per year. The BOCs spend about 1.3 percent of their sales revenues on R&D, while the average high technology firm spends between 6 and 10 percent of their revenues on R&D.

The trends in R&D spending have had an impact on the ability of U.S. firms to obtain patents in new telecommunications technol-

⁶⁵ The extent to which a BOC can loan money to a manufacturing entity is unclear, although the court has indicated that any financial relationship between a BOC and a manufacturer may be prohibited.

⁶⁶ Testimony of Stuart M. Gibson, III, president and CEO, Concept Communications, Inc. before the Communications Subcommittee, February 28, 1991, p. 2.

ogies. Between 1980 and 1988, for instance, the percentage of telecommunications patents awarded by the U.S. Patent Office to U.S. inventors fell from 58 percent to 48 percent of the total, whereas the percentage of such patents awarded to Japanese interests rose from 18 percent to 31 percent. In both years, Europeans accounted for the remaining 24 percent of all telecommunications patents awarded in the United States. For example, Sam Ginn, the chairman and CEO of Pacific Telesis Group (one of the seven RBOCs), testified that Germany's Siemens spent 11.2 percent of its sales revenues on R&D, Japan's Fujitsu spent 10.3 percent, and Sweden's Ericsson spent 11.3 percent.⁶⁷

The MFJ restriction discourages the BOCs from conducting such research for several reasons.

(A) If a BOC develops a new technology or product, the manufacturing restriction bars the BOC from manufacturing that product and bringing it to market. Thus a BOC has no incentive to engage in research because its ability to profit from that investment is limited. If the restriction is lifted, the BOCs could develop, design and fabricate a product based upon their research discoveries. The opportunity to make a profit from the manufacture of a product they develop should give the BOCs greater reason to spend more of their resources on research than is currently permissible.

(B) The Court's interpretation of "manufacturing" makes it very difficult for the BOCs to know what research activities are permitted. The court's decision effectively drew a line between R (research) and D (development). This has reduced any efficiencies from conducting joint research and design and development activities and has created substantial uncertainty for the BOCs.⁶⁸ For instance, the BOCs may conduct applied research and issue generic product specifications but may not design particular products that meet those specifications. The BOCs also may design software for their telephone network, but may not design software for equipment that is installed in the network. Because of the severe penalties that can apply if the BOCs cross the line into prohibited "manufacturing" activities, the BOCs are discouraged from engaging in any research activities at all.⁶⁹

⁶⁷ Testimony of Sam Ginn, chairman and CEO, Pacific Telesis Group, before the Communications Subcommittee, February 28, 1991, p. 3.

⁶⁸ An example of the confusion caused by the court's decision was provided by Mr. Ginn in his testimony. He testified that the following guidelines are given to each Pacific Telesis employee: "Pacific Telesis may not develop 'firmware' or software integral to the functioning of hardware for customer premise equipment, central office switches, transmission systems or other telecommunications equipment. For example, software generics for stored program controlled central office switches containing algorithms which make the hardware work are considered software integral to the operation of hardware. A Rule of Thumb: Software that is not sold separately from the hardware is probably software integral to the hardware. Warning: Software that is sold separately (e.g. certain switch generic software) may be integral to the operation of the hardware." Testimony of Sam Ginn, Hearing before Communications Subcommittee, February 28, 1991, p. 14.

⁶⁹ Bell Atlantic brought this confusion concerning the scope of the manufacturing restriction to light in a 1989 filing with the National Telecommunications and Information Administration (NTIA). Bell Atlantic notes that, after Judge Greene's order interpreting the meaning of the term "manufacturing", it submitted to the court a detailed description of the engineering and software development activities in which it was engaged. The court found that some of these activities "may be forbidden" and might subject Bell Atlantic to an enforcement proceeding.

Continued

Lifting the manufacturing restriction should have a positive effect on the amount of research conducted by the BOCs and by the entire communications industry. There would be no limitations on the research the BOCs may conduct. Lifting the restriction also will allow the BOCs to profit from that research by bringing new products to market. The BOCs' increased spending on research and development, and their ability to coordinate their R&D activities with their operation of the network also, of course, should improve their chances of developing new technologies and acquiring patents.⁷⁰

Further, BOC entry may encourage AT&T and other manufacturers to devote more resources to research in order to stay competitive with the BOCs' manufacturing affiliates. Finally, lifting the manufacturing restriction might allow the United States to shift some of the responsibility and desire to conduct greater research onto private industry and, possibly, reduce the pressure on the United States Treasury to fund such research activities.

4. Improved balance of trade

As described earlier, the U.S. market is very open to foreign competitors, particularly compared to many other nations. Foreign competitors have increased substantially their sales and investment in this country. The U.S. trade deficit, while declining over the past two years, continues to be a source of concern, especially considering that the United States formerly maintained a huge trade surplus in communications equipment.⁷¹ The mounting trade surpluses in telecommunications equipment enjoyed by foreign manufacturers are particularly worrisome because the surpluses have allowed them to underwrite substantially higher levels of R&D spending on communications and related technologies, unmatched by leading U.S. manufacturers and the BOCs.

There is no guarantee that the BOCs' entry into manufacturing will reverse the country's trade deficit. The balance of trade depends upon many factors unrelated to the quality and price of the products produced, such as exchange rates, trade barriers and tariffs, and the telephone network standards in that country, for example. However, permitting the BOCs to enter the market, espe-

Rather than specifying which activities were potentially in violation of the Decree, the court directed Bell Atlantic to seek guidance from DOJ. In commenting on Bell Atlantic's request, however, DOJ refused to provide any guidance because, it said, it "has neither the obligations nor the resources" to do so. Bell Atlantic's Response to NTIA Notice of Inquiry, Docket 81267-8267, January 1989, at 6, n. 21.

⁷⁰ See Robert B. Reich, "The Quiet Path to Technological Preeminence", *Scientific American*, October 1989, pp. 41-47, for a description of how the loss of American competitiveness has resulted in part because American companies have not learned how to integrate their research and development activities with the manufacturing engineering, design and production processes.

" . . . This quiet path back to competitiveness depends less on ambitious government R&D projects aimed at specific technology areas . . . than on improving the process by which technological insights . . . are transformed by American workers into high-quality products. . . . U.S. companies must link their own R&D efforts more closely to commercial production. Compared with Japanese firms, most American firms draw a sharper distinction between R&D on the one side and production and marketing on the other. . . . This division prolongs product-development times and causes marketing opportunities to be lost." *Id.*, pp. 43, 45.

See also, "A Smarter Way to Manufacture: How 'concurrent engineering' can reinvigorate American industry," *BusinessWeek*, April 30, 1990, pp. 110-117.

⁷¹ As mentioned earlier, while the trade deficit has improved over the past two years, part of this improvement is due to the adoption of a more detailed methodology for identifying telecommunications equipment exports. See, DOC Competitiveness Report, p. 1.

cially with the requirement that they make all their products in the United States, could provide a significant benefit to the U.S. trade position.

BOC participation in manufacturing could help the trade deficit in several ways. First, the BOCs may generate significant exports of communications equipment from their own manufacturing activities. Second, the BOCs may stimulate greater exports by investing in entrepreneurs or small, start-up companies that have good ideas but lack the capital to bring those ideas to market. Third, BOC manufacturing also may stimulate AT&T and other manufacturers to become more competitive, thereby improving the productivity and export potential of AT&T and other manufacturers. Several of the BOCs, for instance, allege that AT&T has not been responsive to their equipment needs because its leadership among U.S. communications manufacturing firms is unchallenged. As a consequence, the BOCs argue, they have had to turn to foreign suppliers to meet their customers' needs.

It is true that the U.S. trade deficit in telecommunications equipment is primarily due to the import of "low-end", low-profit CPE (telephones, cordless telephones, fax machines, etc.) that the BOCs are unlikely to manufacture. It is also true that the United States had a trade surplus in the "high-end" equipment market, that of intelligent switching equipment.

These facts do not tell the whole story, however. For one thing, the U.S. trade surplus in "high-end" switching equipment is partly due to the export of equipment made in U.S. plants that are owned by foreign-based companies such as Northern Telecom and Siemens. There is considerable question as to whether the United States should be satisfied with a trade surplus that is based upon exports by foreign-based companies operating in this country. Also, even if the BOCs forsake the "Low-end" equipment market for the higher-profit switching market, the BOCs' entrance into that market could improve the trade balance significantly.

5. Increased U.S. share of the world market

The market share of U.S. companies has fallen dramatically in several key equipment markets related to communications. As noted earlier, foreign manufacturers supplied 21 percent of the U.S. telecommunications market in 1988, up from 17 percent in 1984.⁷² The most recent data supplied by three trade groups opposing the reported bill show a decline in the U.S. market share in almost every category of equipment (from "Assessment of the U.S. Department of Commerce Study: U.S. Telecommunications in a Global Economy, Competitiveness at the Crossroads," by the Independent Data Communications Manufacturers Association, North American Telecommunications Association, and the Telecommunications Industry Association, p. 5):

⁷² NATA Report, p. 3.

U.S. WORLDWIDE MARKET SHARE

(By percentage)

Product	1985	1988
Central office switching	25.0	19.5
Private branch exchanges (PBX's)	38.0	35.0
Data PBX's	71.0	62.0
Fax machines	0.0	0.0
Key telephones	55.0	50.0
Voice mail	98.5	95.5
Data modems	66.0	52.0
Statistical multiplexers	73.0	69.0

It is instructive to note that U.S. firms produce no fax machines sold in the United States, even though fax machines are among the fastest growing type of equipment in the world. Of particular importance is the lead held by Japan in the market for optical-based equipment, as this market is likely to be one of the key high-technology industries of the future. According to World Semiconductor Trade Statistics Inc., "Japanese companies will sell nearly \$1.4 billion worth of optoelectronic devices in 1992, four times the U.S. total."⁷³

Many observers believe that the actual U.S. market share figures are even lower than the ones quoted above, but these figures are included to demonstrate that information from the opponents of the reported bill shows that the United States is losing its advantage in every sector of the international communications equipment market. Further, these figures reflect the market share of all firms operating in the United States without regard to the nationality of the firm. For instance, these figures include sales by the Siemens factories located in the United States. One certainly must question whether sales by these firms can be said to benefit the United States if the profits from these activities flow back to the home country of the foreign manufacturer. If the sales of foreign-based companies operating in the United States is excluded, the true market share of U.S.-based firms operating in the United States is much lower than the numbers quoted above.

The BOCs' entry into manufacturing should have a positive impact on the total market share controlled by U.S. firms. Because of the BOCs' intimate knowledge of the U.S. market, network standards, customer needs, business economics, among others, the BOCs are likely to be strong competitors in the equipment market. Although the BOCs will certainly compete for many contracts with other U.S. firms, it is also likely that the BOCs will develop innovative products suiting particular customer needs that will expand the total equipment market. In other words, rather than simply taking business away from existing manufacturers, the entry of the BOCs may stimulate greater customer demand for communications products in a way that will advantage all equipment manufacturers.⁷⁴

⁷³ George Gilder, "Into the Telecom," *Harvard Business Review*, p. 158 (March-April 1991).

⁷⁴ New entrants into the markets for long distance telephone service and international telecommunications services have caused those markets to increase in size, for instance.

Because of their years of experience in the telecommunications business, the BOCs can be expected to make significant contributions to the development of new and sophisticated communications technologies. It is clear that there are substantial efficiencies between the operation of the local exchange network and the design and development of equipment used with the network.⁷⁵ Such efficiencies include the BOCs' sharing of joint costs, their knowledge of the network, their familiarity with customers' needs, and administrative economies. The Department of Commerce has noted that one of the principal advantages held by Japanese companies is their "superior production techniques and efficiency."⁷⁶ The BOCs are well suited to take advantage of these efficiencies and compete effectively with Japanese and other foreign competitors.

Allowing the BOCs to manufacture also will benefit the BOCs' telephone service customers. The BOCs provide ongoing telephone service to 80 percent of the nation's population. The BOCs will be able to make use of their knowledge of customer needs by developing and manufacturing equipment to meet those needs. Currently, if a customer comes to a BOC with a requirement for a particular service, that BOC cannot design or manufacture any equipment to meet that need. By lifting the manufacturing restriction, telephone service customers will be able to have their equipment and services needs satisfied by the company that knows their needs best.

6. Increased jobs in the United States

AT&T has closed down or reduced the work force at 33 manufacturing plants in the United States since the divestiture, resulting in the loss of 60,000 manufacturing-related jobs.⁷⁷ At the same time, AT&T has signed 18 joint venture agreements with foreign manufacturers and has opened seven new manufacturing facilities overseas. For instance, AT&T built a \$200 million computer chip factory in Madrid, Spain in 1985. In 1990, AT&T built and will soon open a second plant nearby to build 5ESS switches. In Singapore, AT&T owns a telephone manufacturing plant that employs 7,000 people. AT&T is also a joint equity owner with the principal telecommunications companies of several countries, including the

⁷⁵ In denying a request to separate Western Electric and Bell Labs from AT&T, Judge Greene recognized that the nation had benefited greatly from AT&T's joint ownership of its communications services businesses and its manufacturing businesses:

... AT&T argued vigorously that the present structure of the Bell System was in significant part responsible for this admirable record [of innovation in the telecommunications industry] because the researchers were linked with a manufacturer—Western Electric—and with two service organizations—the Operating Companies and the Long Lines Department.

"The Court is of the opinion that there is considerable merit to these contentions. Bell Laboratories has been a positive force both in basic and in applied research, and this research has had a beneficial effect on the nation's economic position in all of its varied aspects. It also seems to be true that the links between Bell Laboratories and the manufacturing and service arms of the Bell System have been of assistance in the achievement of these technological successes." (Footnotes omitted.)

In a footnote, the Judge recognized that these benefits to the nation's economic position included basic scientific advances, cheaper and better products for consumers, increased foreign trade, and improved national defense. 552 F.Supp. at 167.

⁷⁶ "The principal competitive advantage for many foreign-based companies in [the CPE] market appears to be superior production techniques and efficiency, not necessarily lower labor costs, as is commonly assumed. Japan has a significant advantage in manufacturing processes. Improving the efficiency of U.S. manufacturing process—so-called 'production engineering'—could contribute significantly to an improvement in our competitiveness in many of these product areas." DOC Competitiveness Report, p. 12.

⁷⁷ AT&T Form 10-K Reports.

Netherlands, Italy, Denmark, Taiwan, Thailand, Hong Kong, South Korea, Japan, and China. AT&T also has opened a plant employing 7000 people in Matamoros, Mexico, and is constructing a second plant in Guadalajara, Mexico.

AT&T is not the only U.S. manufacturer in the communications equipment industry to have moved jobs offshore.⁷⁸ According to the Small Business Administration, from 1980 to 1986, small U.S. manufacturers (i.e., firms with less than 500 employees) added nearly 700,000 persons to their employment rolls, as compared to a net loss of nearly 2 million jobs among large U.S. manufacturers.⁷⁹

According to Robert Reich, Professor at the John F. Kennedy School of Government, the transfer of jobs overseas has become a pervasive corporate strategy:

American corporations have been abroad for years, even decades. So in one sense, the multinational identity of American companies is nothing new. What is new is that American-owned multinationals are beginning to employ large numbers of foreigners relative to their American work forces, are beginning to rely on foreign facilities to do many of their most technologically complex activities, and are beginning to export from their foreign facilities—including bringing products back to the United States. . . . Forty percent of IBM's world employees are foreign, and the percentage is increasing. . . . Another example is Texas Instruments, which now does most of its research, development, design, and manufacturing in East Asia. . . . More than 100,000 Singaporeans work for more than 200 U.S. corporations, most of them fabricating and assembling electronic components for export to the United States.⁸⁰

Allowing the BOCs to manufacture undoubtedly will promote job opportunities in the United States, especially because the reported bill requires that the BOCs conduct all their manufacturing in this country. The seven BOCs have the potential to create thousands of new employment opportunities for scientists, technicians, engineers, marketers, and support staff. Even if the BOCs enter the manufacturing market by providing seed capital to existing firms, the expansion of these existing firms could create thousands of new employment opportunities.⁸¹

7. Summary

To summarize, substantial benefits can be expected from permitting the BOCs to enter the business of manufacturing communications equipment. The BOCs have considerable expertise and experience in the communications field that can be readily transferred

⁷⁸ Ironically, the Consent Decree does not prohibit a BOC from engaging in manufacturing activities outside of the United States, as long as the products are only sold outside the United States. Thus, the Decree has the effect of permitting the BOCs to do overseas what they cannot domestically.

⁷⁹ "The State of Small Business: A Report of the President and Annual Report on Small Business and Competition," U.S. Small Business Administration (Washington, D.C.: U.S. Government Printing Office, 1988).

⁸⁰ Robert B. Reich, "Who is Us?," *Harvard Business Review*, January-February 1990.

⁸¹ A study performed on behalf of US West found that lifting the information services and manufacturing restrictions would result in a net gain of 55,000 jobs by the year 2000 in the US West region alone. "The Economic Impact of Telecommunications in the US West Region and the United States," Center for Economic Analysis, University of Colorado, Boulder, CO, November 1, 1989.

into manufacturing activities. These increased manufacturing activities can be expected to stimulate greater spending on research and development, improve the nation's trade position, increase job opportunities, increase the market share of U.S. firms both in the United States and abroad, and give U.S. firms an opportunity to seek funding from another U.S. firm rather than seek capital from overseas.

The Consent Decree imposes an unfair and unjustified restriction on the BOCs

The manufacturing restriction on the BOCs cannot be justified on policy grounds. There are 1,400 different local telephone companies operating in the United States; only the seven RBOCs are prohibited from manufacturing. In fact, several large telephone companies have extensive manufacturing concerns.

GTE, which takes in more revenues from providing telephone service than several BOCs, supplied about 10 percent of the Nation's central office switching equipment needs before it sold its equipment manufacturing operations to AT&T. United Telecom owns the North Supply Company, a leading distributor of voice and data communications equipment. There is no reason to bar the BOCs from the manufacturing market and not bar similar companies.

One must also question why AT&T is permitted to manufacture and the BOCs are not. AT&T remains the largest provider of long distance service in the country, with a market share of between 65 and 70 percent. AT&T is also the largest manufacturer of communications equipment in the world. AT&T's long distance and international businesses purchase more equipment from their own manufacturing affiliates than the sum total of equipment purchased by any one BOC.

Clearly, if there is a concern about vertical integration between telecommunications services and the manufacture of communications equipment, that concern should apply equally to other local exchange carriers and to AT&T. There is little evidence that these carriers have abused their ability to engage in joint participation in both the services and manufacturing markets to the detriment of competition or of customer rates. There is no reason to bar the BOCs and not bar all other local telephone companies from the manufacturing market.

Some argue that the MFJ restrictions are justified because of the BOCs' past anticompetitive activity. The Court never determined, however, that AT&T engaged in unlawful anticompetitive activity prior to the divestiture.⁸²

⁸² Judge Greene did find, in ruling on a motion for directed verdict filed by AT&T after the government had presented its case, that the Government had met its burden of presenting enough evidence to warrant continued prosecution of the case. The case was settled before AT&T had finished presenting its defense. The Judge also stated that the case against AT&T regarding its manufacturing activities was not as strong as the case against its long distance operations:

"It should be noted, however, that the government's procurement case was not extremely strong. In the first place, it consisted only of 16 individual episodes. Measured against the large field of procurement decisions in which the Bell System was engaged, this was not a formidable number. . . . Moreover, even as to those 16 episodes the proof was not overwhelming. Where the

Continued

Further, even if such activities were proved to have occurred, there is no reason to attribute the activities of the former AT&T to the present BOCs. The RBOCs are seven, completely independent companies that are actively competing with each other in many markets. There is no longer a single "Bell System" that could systematically thwart competition as could the AT&T monopoly.

It is important also to remember that the BOCs were bound by the line of business restrictions before they became legal, independent entities, and had no opportunity to oppose these restrictions.

Allowing the BOCs to manufacture will not cause anticompetitive harm to the communications equipment market

As discussed in the previous section, the District Court never found that AT&T had engaged in anticompetitive activity regarding its manufacturing and procurement activities. Yet, even if the BOCs had engaged in anticompetitive conduct while they were a part of AT&T, it is difficult to believe that the BOCs could cause harm to the communications equipment market through anticompetitive conduct today.

It is generally agreed that the communications market has changed drastically in the last eight years. The divestiture of AT&T into eight separate companies, the globalization of the communications equipment market, the concentration of equipment suppliers, the increasing foreign penetration of the U.S. market, and the continued dispersal of equipment consumption have greatly diminished the potential market power of the BOCs over the equipment market. Further, the safeguards included in the bill and the FCC's enhanced regulatory safeguards (detailed below) should permit the FCC to monitor anticompetitive activity more closely. These changes have substantially reduced the possibility that the BOCs could gain an anticompetitive advantage in manufacturing.

In presenting the antitrust case, the DOJ argued to the Court that AT&T had engaged in three general types of anticompetitive conduct with respect to the manufacture of communications equipment: (1) the Bell System purchased Western Electric equipment even when those products were more expensive and/or of lesser quality than alternative goods available from unaffiliated vendors; (2) the Bell System granted Western Electric premature and otherwise preferential access to necessary technical data, compatibility standards, and other information concerning the BOCs' network; and (3) the Bell System subsidized the prices of its equipment with the revenues from the BOCs' monopoly services. The following section will examine whether the BOCs could engage in any of these activities today.

1. The individual BOCs do not have nearly the market power that AT&T had prior to divestiture

The market power possessed by each BOC over the communications equipment market is not comparable to the market power for-

government's evidence tended to demonstrate anticompetitive acts, AT&T's market share was generally not high: where market share was high, there was relatively little evidence of anticompetitive acts.

The part of the case dealing with pricing of equipment sold by Western Electric was dismissed on September 11, 1981. 552 F.Supp. at 163, note 137.

merly exercised by AT&T. Prior to the divestiture, AT&T purchased approximately 80 percent of all the central office switching and transmission equipment sold in the United States. About 80 percent of that equipment was manufactured by AT&T's manufacturing subsidiary, Western Electric.⁸³ As a result, only small fractions of the market remained open to independent manufacturers.

Today, the seven RBOCs are separate independent companies and could not damage competition in the equipment market. Each RBOC purchases about four percent of the total amount of communications equipment sold in this country each year.⁸⁴ Thus, even if an RBOC satisfied all its equipment needs by purchasing from itself, the remaining 96 percent of the market would remain open to other suppliers.

Further, private (non-telephone company) purchasers of communications equipment account for a much larger percentage of the total purchase market than they did 10 years ago. Dr. Huber found that, as a group, private buyers "buy much more equipment in almost every category than any single RBOC". The BOCs simply do not have the ability to foreclose the equipment market to competing manufacturers that AT&T possessed prior to the divestiture.

2. Increasing competition will prevent the BOCs from cross-subsidizing or engaging in unlawful self-dealing

Some argue that, if allowed to manufacture, the BOCs will purchase all their equipment from their affiliated companies, regardless of the cost or quality of the equipment. These opponents claim that the BOCs will simply pass on the costs of this equipment on to their telephone service ratepayers. The BOCs simply cannot afford to take this risk.

First, it is important to recognize that self-dealing in itself is not an anticompetitive activity. If a BOC manufactures the best product at the cheapest price, public policy should permit the BOC to use that product to provide telephone service to the public. Self-dealing only causes harm if a BOC purchases equipment from itself at prices that exceed the market rate for that product.

Those who would propose to ban the BOCs from purchasing any equipment from their own affiliates would undercut the reason for enacting this bill. If a BOC manufactures a better product than any of its competitors, the Bell Telephone Company should be able to purchase the equipment at the market rate so that it can provide high-quality service to its telephone customers. To forbid a BOC from purchasing any of the equipment it manufactures would prevent the BOCs and their telephone customers from being able to take advantage of the latest advances in technology. Further, if they could not purchase equipment from themselves, the BOCs

⁸³ Huber Report, at 1.15. A substantial portion of the remaining 20 percent of telephone company purchases was supplied by the manufacturing affiliate of the GTE operating companies. These GTE telephone companies also purchased telecommunications equipment from this manufacturing affiliate.

⁸⁴ The BOCs spent a total of \$8.5 billion on communications equipment in 1989, while total telecommunications equipment sales were about \$32.7 billion. From these figures, it is apparent that the BOCs collectively purchased about 26 percent of the communications equipment sold in this country in 1989. See, *Telephony*, January 9, 1989; 1990 Telecommunications Market Review and Forecast, North American Telecommunications Association, Table 1, p. 12.

might be forced to purchase equipment from foreign manufacturers.

Second, the BOCs have little incentive to purchase equipment from themselves at inflated prices. The BOCs are facing an increasing amount of competition for local telephone service.⁸⁵ These competitors will purchase the highest quality equipment at the lower prices in order to find a market advantage. The BOCs cannot afford to suffer lower quality service and higher prices when competitors to their access services are increasing their market shares. Even if full competition does not arrive for several years, network equipment often is not replaced for a decade or longer. The BOCs must prepare for the threat of this competition in the future by purchasing today high-quality equipment at market rates. Thus, the BOCs have no reason to purchase equipment from themselves if this equipment is not competitive on a cost and quality basis with the equipment of competitive manufacturers.

3. Competition in the equipment market will prevent anticompetitive activity

Even if the BOCs were to attempt to engage in anticompetitive self-dealing, the competitiveness of the equipment market will make it easier for regulators to determine whether a BOC was purchasing its own equipment at inflated prices. This is because the regulators will be able to compare the prices paid by the BOC with the prices paid by other purchasers of similar equipment. First, regulators could compare the price paid by the BOC with the price paid for that same equipment on the open market by other purchasers.⁸⁶ Second, regulators could compare the price paid by the BOC with the prices for similar equipment manufactured by other manufacturers. If the BOCs paid a price that was higher than the market price for that equipment, that would be prima facie evidence of unlawful activity. The existence of these "benchmarks" makes the process of detecting unlawful activity much easier than when there were no other alternative sources of similar equipment.

The presence of several competitors in the communications equipment market also will aid in preventing anticompetitive conduct. The equipment manufacturers undoubtedly will seek to protect their interests by scrutinizing every BOC activity. If there is any potential violation, these private "policemen" will be sure to bring these matters to the attention of the FCC and the DOJ.⁸⁷

⁸⁵ Several companies are constructing fiber optic rings around major cities for the transmission of voice and data services by business customers. Some other companies, such as Teleport in New York City, are also providing earth station and satellite services to businesses.

⁸⁶ If the BOC purchases all the equipment manufactured by its affiliate and the affiliate did not sell its equipment on the open market, so that no "benchmarks" were available, this would itself raise suspicions among regulators that the products it was manufacturing were not competitive on the open market and thus that the BOC was purchasing low-quality equipment or paying overly high prices.

⁸⁷ The bill, as reported, requires the BOCs' manufacturing subsidiaries to file public reports concerning their activities with the appropriate regulatory authorities. These public reports, in addition to the filings made before the FCC, will assist the private interests in monitoring the BOCs' activities.

4. The FCC and the States are better equipped today to protect against anticompetitive activity

Regulators are generally better equipped today to protect against anticompetitive activity than they were before the divestiture. In the first place, the AT&T monolith has been replaced by eight independent companies. The FCC can now compare the actions and operating results of one of the BOCs against those of the other BOCs, and can require each company to conform its actions and accounting methods to a single system if necessary.

The FCC has also developed several new and stronger measures to protect against cross-subsidization and discrimination. The FCC has adopted sophisticated rules governing cost allocations (the "Part X Rules") to prevent a BOC from shifting costs from unregulated enterprises (such as manufacturing) to its regulated telephone operations.⁸⁸ Each BOC is required to prepare and have approved by the FCC a cost allocation manual that complies with the FCC's cost allocation rules. In addition, the FCC requires an annual attestation audit by independent auditors to verify that each BOC's cost allocation manual is in compliance with the FCC rules. As a final check, the FCC reviews the audit findings and the auditors' work papers. The FCC has also adopted asymmetric rules governing transactions between the BOCs and their affiliates which insulate ratepayers from cross-subsidy of unregulated operations.

The FCC has boosted its auditing programs in the past few years, partly in response to congressional concerns. For instance, the FCC now has an automated reporting and management information system (ARMIS), which allows the FCC to compare one BOC's performance to that of its peers and to compare historical trends. The BOCs submit this information in the same format and on computer tapes, which make it easy for the FCC to compare the reports provided by the BOCs to determine if any one of them deviates substantially from established benchmarks.

The FCC has worked hard to develop strong relationships with the State regulatory commissions that have oversight authority over the BOCs' intrastate communications services. The FCC frequently confers with State public utility commissions to coordinate and compare regulatory activity by the various BOCs.

The State public utility commissions, through the National Association of Regulatory Utility Commissioners (NARUC) and similar regional associations, share information about actions taken within their territories to preclude improper conduct by the BOCs. They assist each other in interpreting the information provided by the BOCs so as to regulate the intrastate operations of the BOCs with more uniformity.

Congress recently increased the potential fines and forfeitures for violations of the 1934 Act by over 10 times. Each of the BOCs can now be fined up to \$1 million for each violation of the FCC's rules or the Act. These increased penalties will help to deter the BOCs from violating the Act through discrimination and cross-subsidization.

⁸⁸ See, Separation of Costs of Regulated Telephone Service from Costs of Nonregulated Activities, CC Docket No. 85-111, Report and Order, FCC 86-564, released February 6, 1987.

Congress has also recently increased the amount of funds provided to the FCC so that it can enforce these rules. After several years of stable (and sometimes declining) funding, the FCC received increased in appropriations of about eight percent in both fiscal years 1990 and 1991. For fiscal year 1992, Congress is considering providing the FCC with a budget of \$133 million, a 15-percent increase over fiscal year 1991.

The FCC has been committed to developing and enforcing sound rules to protect competition.⁸⁹ The risk of interconnection discrimination has been limited by the FCC's adoption of regulations that detail the requirements for interconnection of terminal equipment⁹⁰ and the provision of enhanced services.⁹¹ The FCC has also prevented discrimination in installation, repair, and maintenance by requiring the BOCs to form Centralized Operations Groups that process, coordinate, and schedule orders for CPE interconnection. Private interconnection standards have also been developed by working groups of the International Telecommunication Union and other standard-setting bodies that are equally available to all manufacturers. Perhaps one of the most important set of regulations is that which requires the BOCs to disclose information about network design changes.⁹²

In addition, the FCC's willingness and desire to enforce these rules is of utmost importance. The recent commitments made by the Chairman of the FCC indicate that the FCC takes its enforcement responsibilities seriously.⁹³ In fact, the FCC has already indicated that it intends to use its additional budget authority from Congress to increase the number of staff members dedicated to enforcement activities.

Because of these rules and enforcement mechanisms, as well as the FCC's enforcement intentions, the Committee is confident that the FCC will vigorously enforce the law and regulations so as to prevent any harmful activity on the part of the BOCs.

5. The bill contains many additional safeguards

Despite the changes in the communications industry and the enhanced ability of regulators to detect anticompetitive activity, some argue that there remains a possibility that the BOCs' entry into the manufacturing market could cause harm to ratepayers and competition. For this reason, S. 173 contains many safeguards to protect against this possibility. These safeguards should also aid regulators in detecting and preventing such conduct.

First, the bill precludes any BOC from engaging in manufacturing with another unaffiliated BOC. This will, for example, preclude New York Telephone from manufacturing in conjunction with New Jersey Bell. The purpose of this provision is to ensure that each of the seven RBOCs competes with each other in the manufacturing

⁸⁹ Testimony of Alfred C. Sikes, Chairman, FCC, before the Communications Subcommittee, on S. 173, February 28, 1991.

⁹⁰ 47 C.F.R. 64.702(d)(2) (1985). These rules were clarified in *Computer and Business Equipment Mfrs.' Ass'n.*, 93 FCC 2d 1226 (1983).

⁹¹ See, e.g., *Computer III Remand Proceedings: Bell Operating Company Safeguards and Tier 1 Local Exchange Company Safeguards*, 6 FCC Rcd 174 (1990).

⁹² See 47 C.F.R. Part 68 (1985).

⁹³ Testimony of Alfred C. Sikes, Chairman, FCC, before the Communications Subcommittee, on S. 173, February 28, 1991.

market. This provision will preclude the BOCs from "reviving" the moonlitic system formerly controlled by AT&T.

Second, the bill requires the BOCs to perform any manufacturing through an affiliate that is separate from the operating telephone companies. This will ensure that, at least for accounting and regulatory purposes, the manufacturing operations must remain apart from the telephone operations so that any potential cross-subsidization can be easily detected.

S. 173 also specifies some of the minimum requirements of this separation. For instance, a BOC manufacturing affiliate must maintain separate books of account that identify any transactions between the manufacturing affiliate and the telephone company and the affiliate must prepare and file financial reporting statements just as if it were a publicly held corporation. The FCC may adopt other regulations to enforce this "separation" requirement.

Further, the bill requires that any affiliate of the Bell Telephone Company that becomes affiliated with a manufacturing entity must comply with the separate affiliate provisions of the bill and the rules adopted by the FCC. This precludes the BOCs from acquiring or otherwise obtaining an interest in a manufacturing entity without complying with all of the provisions of the bill. Thus, a BOC cannot "hide" a manufacturing affiliate to avoid the requirements in the bill by placing it within another affiliate or subsidiary. The intent of this provision is to ensure that a BOC cannot evade the regulatory and safeguard provisions of the bill through the use of other, non-manufacturing affiliates. In other words, the bill ensures that a BOC may not do through another affiliate what it could not do with the manufacturing affiliate directly, and vice versa.

Also, the legislation prohibits a Bell Telephone Company from performing sales, specific advertising, installation, and similar functions for its manufacturing affiliate. This provision removes opportunities for cross-subsidization by precluding the two companies from sharing certain costs. This provision also ensures that the BOC manufacturing affiliate does not gain a special market advantage by virtue of its relationship with the telephone company. The manufacturing affiliate must compete on its own footing just like any other manufacturer.

S. 173 also prohibits a BOC from owning more than 90 percent of the equity of its manufacturing affiliate. The remaining 10 percent must be made available on the open market to outside investors. These outside investors will provide further oversight over the manufacturing affiliate's operations to ensure that it does not engage in any unlawful conduct, and they will further ensure that the manufacturing affiliate will remain a competitive, self-sustaining and for-profit entity separate from the telephone company.

In addition, the bill precludes the manufacturing affiliate from incurring debt in a manner that would allow a creditor, on default, to have recourse to the telephone company's assets. This ensures that the rates and quality of telephone service will not suffer if the manufacturing affiliate cannot service its debt.

This provision also requires the manufacturing affiliate to procure its debt from the financial markets outside the operations of the telephone company or any of its affiliates. By barring a BOC from internally financing its manufacturing operations, this provi-

sion prevents a BOC from giving its manufacturing affiliate a marketplace advantage over other manufacturers who must also acquire their debt from the financial markets.

Next, the bill requires that the manufacturing affiliate sell, without discrimination as to price, delivery, terms, and conditions, the equipment it manufactures to other telephone companies for use in the local telecommunications network. This provision will assist other local exchange telephone companies and ensure that the network of all telephone companies benefit from the equipment manufactured by a BOC affiliate.

In addition, the bill mandates that the FCC will promulgate regulations requiring the Bell Telephone Companies to maintain at the FCC complete information regarding the protocols and technical requirements for connection with the telephone exchange network. This will preclude the BOCs from discriminating against other manufacturers by refusing to provide them information about the technical aspects of the network. The regulations must also require that a Bell Telephone Company not inform its affiliates of this type of information unless the information is immediately filed with the FCC. The FCC is authorized by the bill to promulgate further regulations to ensure that competitors have "ready and equal access" to this type of information.

To preclude discrimination in procurement, the bill requires that a Bell Telephone Company provide to other manufacturers of telecommunications equipment and customer premises equipment opportunities to sell such equipment that are comparable to those that it provides to its manufacturing affiliate. It further prohibits the Bell Telephone Company from subsidizing its manufacturing operations with revenues from its regulated telecommunications services and requires that it purchase equipment from its manufacturing affiliate only at the open market price.

Finally, it is important to point out that this bill does not grant the BOCs an exemption from the antitrust laws or change existing antitrust law in any way. It creates no immunity to any civil or criminal action under Federal or State antitrust laws. Nor does the legislation alter or restrict application of Federal or State antitrust law, including penalty provisions. The BOCs will remain fully subject to the antitrust laws and any pending or future antitrust actions against them. The safeguards included in this bill are intended, in some cases, to prevent possible antitrust abuse, but they are not intended to replace existing antitrust law liabilities or remedies in any way.

All of these safeguards are designed to, and should, preclude the BOCs from engaging in unlawful cross-subsidization, unreasonable discrimination against competition, or self-dealing. Combined with the abilities and inherent powers of the FCC and the State public service commissions, these safeguards will protect fair competition and the ratepayer without binding the BOCs under such rigid rules that they cannot compete with our international competitors. This bill delicately balances the need to allow the BOCs to take advantage of their assets, expertise and experience while preventing monopoly abuse. This will ensure that the bill fulfills its stated premise of increasing the economic growth and international competitiveness of American industry.

Domestic Manufacturing Provision

1. Need for a domestic requirement

The purpose of this bill is to reverse the trend of declining American competitiveness in communications equipment manufacturing. This bill is intended to promote research and development, create jobs, encourage investment, and enhance productivity here in the United States. These goals will not be achieved if the BOCs are permitted to manufacture outside of the United States. Nor will these goals be obtained if the BOCs import components from overseas that are available in this country under reasonable prices, terms and conditions. The bill thus includes provisions that ensure that the BOCs' manufacturing operations, from the initial design and development phases through the fabrication phase, will be done in the United States, and that ensure that the BOCs' entry into the manufacturing market will benefit domestic production of components.

Because of the current restrictions imposed under the consent decree the BOCs have conducted much of their manufacturing activities overseas. Since the divestiture, the BOCs have made enormous investments in other countries. They have invested billions of dollars in cellular communications systems, cable systems, personal communications systems, computer services and real estate in Europe since the divestiture.⁹⁴ Two Bell Companies (Bell Atlantic and Ameritech) recently purchased the New Zealand telephone company for \$2.4 billion, while another Bell Company (Southwestern Bell) participated in a consortium that purchased a stake in the Mexican telephone company for another \$1.8 billion. Bellcore, the BOCs' joint research center, has also entered several joint venture agreements with foreign-based manufacturers.⁹⁵

The recent history of AT&T is also noteworthy in this regard. Since the divestiture, AT&T has invested in or started up foreign manufacturing operations in 16 different countries. AT&T's Asian manufacturing facilities alone now employ at least 15,000 foreign nationals. AT&T frequently uses foreign-made components in the equipment that it assembles here in the U.S.⁹⁶ Also, several large foreign equipment manufacturers have filed comments in favor of lifting the manufacturing restriction. These companies believe the BOCs could provide significant amounts of much-needed capital to fund their manufacturing operations. This position indicates that these foreign companies expect the BOCs to become partners with them in their overseas operations.⁹⁷

⁹⁴ See "Global Markets Lure 'Baby Bells'", *New York Times*, Dec. 19, 1990, p. D1; "Reaching Out to Unchartered Territories: Seven 'Baby Bells' Look to Less-Predictable Overseas Markets for Growth", *Washington Post*, November 15, 1990, pp. E1, E12.

⁹⁵ Sixteen of 34 joint venture research projects entered into by Bellcore over the past five years have been with foreign companies. In 1990 alone, Bellcore signed joint research projects with the Toshiba Corp. of Japan, the Furukawa Electric Co., Ltd. of Japan, the Industrial Technology Research Institute of Taiwan, and Siemens Aktiengesellschaft of West Germany. Notices Filed in the Federal Register Pursuant to the National Cooperative Research Act of 1984; Department of Justice, Antitrust Division.

⁹⁶ Testimony at the hearings before the Communications Subcommittee indicated that 58 percent of the chips used in some AT&T circuit boards, for instance, are manufactured abroad.

⁹⁷ The danger that the BOCs would establish their manufacturing facilities overseas is also supported by the actions of several other major U.S. corporations. An article in the Harvard

Continued

This pattern of activity is not in the long-run best interests of the United States. The movement of jobs to offshore locations will eventually cause the American workforce to lose the expertise that attracts other manufacturing establishments. Increasing investment by foreign companies in the United States could cause U.S. technology and profits to be exported back to the home country of the foreign investor. If domestic companies focus too much on the possibilities of investment in foreign markets, the American economy will suffer from a lack of growth, especially in the latest technologies. These trends could lead to a serious decline in U.S. productivity, U.S. leadership in high technology industries, the availability of jobs, and the U.S. trade position.

2. *The domestic manufacturing provisions*

In the 101st Congress, S. 1981, the "Telecommunications Equipment Research and Manufacturing Competition Act of 1989," authorized Bell Telephone Companies to engage in manufacturing, but required that all such activity (including design, development, fabrication and the manufacturing of components) take place within the United States. That bill also contained additional language granting the FCC authority to waive the domestic manufacturing provision upon a showing of extraordinary circumstances.

Several parties, however, expressed concern that this waiver provision granted too much flexibility to the FCC. In an effort to address these concerns, the BOCs and the Communications Workers of America entered discussions as to how this provision could be drafted to accommodate some of these concerns. The two groups came to an agreement, and this agreement has been included, without any change, in S. 173.

As in last year's bill, S. 173 states that all manufacturing performed by the BOCs must be conducted within the United States, including design, development, and fabrication activities concerning communications equipment. This year's bill, however, contains new provisions regarding the BOCs' use of components that they do not make but that are included in the equipment they manufacture. The bill states that all component parts used in the manufacture of customer premises equipment and telecommunications equipment must have been manufactured in the United States. In place of the FCC waiver process, however, S. 173 states that component parts manufactured outside the United States may be used, but only after a BOC makes a good faith effort to find equivalent U.S. components made in the United States.

In granting a BOC authority to use foreign components under certain circumstances, S. 173 limits use of such components so that the aggregate cost of foreign-manufactured components in BOC-made equipment may not exceed a certain percentage of the BOCs'

Business Review documents the overall trend of U.S. companies to move their manufacturing operations, including their research and development facilities, overseas.

"The old trend of overseas capital investment is accelerating: U.S. companies increased foreign capital spending by 24 percent in 1988, 13 percent in 1989. But even more important, U.S. businesses are now putting substantial sums of money into foreign countries to do R&D work. According to National Science Foundation figures, American corporations increased their overseas R&D spending by 33 percent between 1986 and 1988, compared with a 6 percent increase in R&D spending in the United States." Robert B. Reich, "Who is Us?", *Harvard Business Review*, January-February 1990, pp. 54-55.

revenue from the sale of telecommunications equipment and customer premises equipment in any calendar year. This percentage is to equal the average percentage cost of foreign-made components present in all the communications equipment sold in the United States in any calendar year. (This percentage is set at 40 percent for the first year and is adjusted every year thereafter to correspond to the industry average.)⁹⁸

If foreign components are included in equipment manufactured by a BOC, that BOC is required to report quarterly such use to the FCC and certify that, prior to using such components, it made a good faith effort to find equivalent components manufactured in the United States at reasonable prices, terms and conditions. In addition, a BOC must certify to the FCC annually that for the aggregate of telecommunications equipment and CPE sold in the United States by such company in the previous year, the cost of foreign-made components did not exceed the statutorily prescribed percentage.

The bill contains specific safeguards to ensure BOC compliance with the domestic manufacturing obligation. It states that the FCC may impose penalties or forfeitures if it determines that the BOC did not make a good faith effort to obtain U.S.-made components prior to using foreign-made components or if the limit on the use of foreign-made components was exceeded. In addition, suppliers who claim to have been damaged as a consequence of BOC failure to comply with the "good faith effort" requirement may file a complaint with the FCC or bring suit for the recovery of actual damages.

Finally, S. 173 authorizes the BOCs to use intellectual property created outside the United States in the manufacture of telecommunications equipment and CPE in the United States. Research, design and development activities are occurring in laboratories all over the world, and especially in Europe and Japan. The BOCs' manufacturing affiliates must be able to take advantage of the latest developments in technology if they are to be competitive internationally.

3. Implications of the domestic manufacturing provisions on U.S. international trade policies

The domestic manufacturing provisions do not conflict with current U.S. policies or agreements concerning international trade.

⁹⁸ Some have suggested that it is improper to determine the "cap" on foreign components by dividing the cost of those components by the total sales revenue, and have proposed instead to divide the cost of the foreign-made components by the total cost of all components in equipment manufactured by a Bell Company. These persons suggest that, as currently drafted, a BOC could meet the 40 percent "test" even if it used all foreign-made components in its equipment because the sales revenue is often much higher than the cost of the components. While these comments may have some merit for the first year of operation, they have no merit after the first year. The 40 percent figure only applies for the first year after the bill's enactment. After that first year, the percentage is adjusted to correspond to the average for the entire industry. For these years, whether the denominator is the total sales revenue or the cost of all components is irrelevant because the BOC will be bound by the same standard as every other manufacturer in either case. Even if the suggestion may be apt for the first year, the BOCs are unlikely to be able to manufacture a significant amount during the first year after enactment of the bill. There is a substantial lead time required to establish any manufacturing facilities. Further, the bill provides that the BOC may not engage in any manufacturing until after the FCC has set forth regulations to implement the terms of the bill. The FCC is unlikely to issue such regulations prior to the 180 day deadline set forth in subsection (i).

The provisions are not intended to serve as a barrier to international trade, nor will they limit the ability of foreign manufacturers to market their products or services in the United States. Rather, as described below, the provisions will promote trade opportunities for both foreign and domestic manufacturers and will remove inhibitions to the economic growth of developing as well as developed countries.

First, S. 173 places no restrictions on foreign companies. The only restrictions in this bill are those imposed on American companies, the BOCs. This bill does not reduce the ability of foreign companies to market or invest in the United States. Under this bill, foreign manufacturers will be able to invest in the United States and sell their products and components in the United States as freely as they do today. While the bill does restrict the foreign activities of the BOCs, such restrictions do not conflict with international law. Our trade agreements and international understandings consistently recognize the right of a government to restrict the operations of its own companies within its borders in order to comply with domestic law or policy. The lifting of the manufacturing restriction is a domestic policy decision that our trade agreements recognize as completely legitimate.

Second, the domestic manufacturing provision is not a trade restriction, it is simply a condition of allowing the BOCs to enter the manufacturing market. Currently, the BOCs are prohibited from manufacturing; under international law, the U.S. Government has the right to decide to lift the manufacturing prohibition under whatever safeguards it chooses to impose. The restriction on the BOCs' use of foreign-made components is simply a condition of allowing the BOCs to enter this market.

Further, S. 173 expands the opportunities of foreign manufacturers to sell in the United States. By allowing the BOCs to engage in manufacturing, S. 173 opens the U.S. market to foreign providers more than ever before. Currently, foreign manufacturers do not sell any components to the BOCs since the BOCs cannot manufacture, they have no reason to purchase such components. The bill, however, allows the BOCs to purchase foreign components after they make a good faith effort to find those components in the United States under reasonable prices, terms and conditions. If those components are not available, the BOCs may purchase as many foreign components as other manufacturers. This legislation will thus give the BOCs the incentive and the ability to purchase such components for the first time since the divestiture.

Finally, the provision does not conflict with the U.S. obligations under the General Agreement on Tariffs and Trade (GATT). The GATT contains no restrictions on investment; thus, the requirement that the BOCs conduct all their manufacturing in the U.S. is consistent with the GATT. Second, the bill does not restrict the BOCs' purchase of foreign-made equipment for installation in its network or for direct resale to customers. The only restrictions occur on a BOC's use of foreign-made components in equipment that it manufactures. Thus, the BOCs may continue to purchase foreign-made telephones to sell in the United States and may continue to purchase central office switches for installation in the telephone network without any restriction. Third, the limitations on

the BOCs' use of foreign-made components does not discriminate based on whether the component was made by an American company or a foreign company. S. 173 treats all manufacturers of foreign-made products equally, whether the firm that made the components is U.S.-based or foreign-based. S. 173 thus treats all manufacturers of these products in the same manner, and does not discriminate based upon the nationality of the manufacturer. Since there is no discrimination here, the reported bill poses no conflict with the GATT.

Conclusion

Since the divestiture, both technological advances and the emergence of a global economy have completely altered the communications marketplace. The market is becoming more global in scope, and foreign manufacturers are taking advantage of the openness of the U.S. market to increase their U.S. and worldwide market shares. The United States is facing the possibility of being shut out of this emerging world market if it does not allow seven of its most potent and able companies to enter the market soon. The BOCs control 60 percent of the Nation's telecommunications assets and possess enormous technical expertise. The restriction that bars them from manufacturing cannot be justified on policy grounds.

The BOCs could bring enormous benefits to the market. Lifting the manufacturing restriction would allow them to take advantage of the natural efficiencies between the operations of the telephone network and the manufacture of equipment to be installed in that network. Permitting the BOCs to manufacture will promote research and development, exports, jobs, investment, and overall U.S. international competitiveness. Because of the significant changes in the communications market place and in the regulatory arena, there is little likelihood that the BOCs could cause harm to the nation's equipment marketplace through anticompetitive activities. Further, regulators are now well equipped to prevent harm from occurring to ratepayers or to the competitiveness of the U.S. market, and several provisions in S. 173 should assist regulators in preventing and detecting such activity.

If the United States expects to compete worldwide, domestic communications policy will have to abandon its excessive preoccupation with the alleged misbehavior of a company that no longer exists and embrace a vision of the future in which the seven RBOCs are full and active players in the international communications equipment marketplace.

LEGISLATIVE HISTORY

S. 173 is almost identical to S. 1981, a bill introduced by Senator Hollings, Chairman, Committee on Commerce, Science, and Transportation, in the 101st Congress. The Communications Subcommittee held two hearings on S. 1981 in that Congress. The Committee ordered S. 1981 reported by voice vote with an amendment in the nature of a substitute at its executive session on May 22, 1990. The bill was not considered by the full Senate.

Senator Hollings introduced S. 173 on January 14, 1991. The Communications Subcommittee held a hearing on the bill on Feb-

ruary 28, 1991. Witnesses at this hearing included the Chairman of the FCC, the Administrator of the NTIA, the Chief of the Antitrust Division of the DOJ, and representatives of the BOCs, AT&T, equipment manufacturers both opposed to and supportive of the bill, the Communications Workers of America, the National Association of State Utility Consumer Advocates, and the burglar alarm equipment manufacturers. The Committee ordered S. 173 reported by a vote of 18 to 1 at its executive session on March 19, 1991.

SUMMARY OF MAJOR PROVISIONS

The bill as reported adds a new section 227 to the 1934 Act that would lift the manufacturing ban on the BOCs as long as they comply with certain safeguards set forth in this new section. The bill does not address the two other lines of business restrictions on the BOCs (provision of information services or long distance services).

In conducting their manufacturing activities, the BOCs must comply with the following safeguards:

NO JOINT MANUFACTURING

To prevent collusion, the BOCs cannot manufacture in conjunction with one another. The bill requires that, if all of the BOCs decide to manufacture, they will create at least seven independent manufacturing entities that will compete with each other as well as with existing manufacturers.

SEPARATE AFFILIATES

The BOCs must conduct all their manufacturing activities from separate affiliates. The affiliate must keep books of account for its manufacturing activities separate from the telephone company and must file this information publicly.

NO SELF-DEALING

(1) The BOC may not perform sales advertising, installation, production, or maintenance operations for its affiliate. (2) The BOC must provide opportunities to other manufacturers to sell to the telephone company that are comparable to the opportunities it provides to its affiliate. (3) A BOC may only purchase equipment from its affiliate at the open market price.

NO CROSS-SUBSIDIZATION

The BOC is prohibited from subsidizing its manufacturing operations with revenues from its telephone services.

DOMESTIC MANUFACTURING REQUIREMENT

The BOCs must do all their manufacturing within the United States. This prohibits the BOCs from owning an equity interest in any manufacturer that manufactures outside in United States.

DOMESTIC COMPONENTS

Regarding components used by the BOCs that they do not manufacture, the BOCs must make a good faith effort to purchase com-

ponents that are made in the United States. The percentage of foreign-made components in products manufactured by the BOCs shall not exceed the industry average (set at 40 percent for the first year and adjusted each year thereafter).

LIMITATION ON EQUITY OWNERSHIP

A BOC may own no more than 90 percent of the equity of its affiliate. The remaining 10 percent must be made available to outside investors.

LIMITATION ON DEBT

The affiliate only may secure debt from the financial markets separate from the BOC. No creditor shall have recourse to the assets of the telephone company.

PROTECTIONS FOR SMALL TELEPHONE COMPANIES

A BOC manufacturing affiliate must make its equipment available to other telephone companies without discrimination or self-preference as to price, delivery, terms, or conditions.

DISCLOSURE OF NETWORK INFORMATION

The BOC must file with the FCC full and complete information concerning the telephone network immediately upon revealing any such information to its manufacturing affiliate.

CLOSE COLLABORATION

Any BOC may engage in close collaboration with any manufacturer.

ESTIMATED COSTS

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, April 4, 1991.

Hon. ERNEST F. HOLLINGS,
*Chairman, Committee on Commerce, Science, and Transportation,
U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has reviewed S. 173, the Telecommunications Equipment Research and Manufacturing Competition Act of 1991, as ordered reported by the Senate Committee on Commerce, Science, and Transportation on March 19, 1991. We estimate that implementation of this bill would result in additional costs to the federal government of about \$3 million annually in fiscal years 1992 through 1996, assuming appropriation of the necessary funds. The bill would not affect direct spending or receipts, and therefore would not affect pay-as-you-go scoring.

S. 173 would permit the Bell Telephone Companies to develop and manufacture telecommunications equipment, but only through separate affiliates. The bill would require the Federal Communications Commission (FCC) to prescribe regulations governing varying aspects of the operations of manufacturing affiliates within 180 days of enactment. The FCC would be required to issue regulations concerning the relationship of the affiliates and the companies. The regulations would cover areas including accounting, financing, recordkeeping, and reporting. The FCC also would be required to issue regulations to ensure that manufacturing affiliates make their equipment available to local telephone exchange carriers and allow other manufacturers to sell equipment to the Bell Companies.

Finally, S. 173 would require that manufacturing activity by affiliates be conducted within the United States, but would allow them to purchase component parts manufactured outside the United States under certain circumstances. The FCC would be required to determine the cost of foreign-made components in all relevant equipment sold in the United States as a percentage of sales revenue.

Based on information from the FCC, CBO estimates that development and implementation of the various regulations and procedures required by the bill would result in costs of about \$3 million a year over the next five years. Most of the costs would be for additional personnel to develop and implement the regulations. The FCC also would incur costs to revise its automated cost-accounting system to monitor the financial relationships between companies and their affiliates.

No costs would be incurred by state or local governments as a result of enactment of this bill.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Marjorie Miller, who can be reached at 226-2860.

Sincerely,

ROBERT D. REISCHAUER,
Director.

REGULATORY IMPACT STATEMENT

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation, as reported.

This legislation authorizes the BOCs to engage in the manufacture of telecommunications equipment and customer premises equipment, and the provision of telecommunications equipment. The bill would replace the current antitrust prohibition with several regulatory safeguards designed to prevent the BOCs from engaging in anticompetitive behavior. The bill requires the FCC to develop regulations to enforce the provisions of the bill. These regulatory provisions are necessary to ensure that the BOCs will not enter the manufacturing business at the expense of competition and telephone service ratepayers.

While these provisions will require some amount of increased regulatory activity by the FCC, it is important to note that any

concern about these potential burdens must be balanced against the desire to allow the BOCs to enter a new line of business that was previously prohibited to them. The increase in productivity in the private sector that will result from this bill is sure to outweigh any increase in regulatory activity.

NUMBER OF PERSONS COVERED

Most of the bill's regulatory provisions concern the activities of the BOCs' telephone operations, not the activities of their manufacturing affiliates. The BOCs' telephone operations, and their employees, are already heavily regulated by the various State commissions and the FCC. Thus, the regulatory provisions concerning the telephone operations are unlikely to increase the number of persons affected by regulation. Some provisions do concern the manufacturing affiliate, such as the requirement that the affiliate make the equipment it manufactures available to other telephone companies, and that the affiliate make public filings of its financial information. While the total number of persons affected by such regulations will increase as the BOCs' manufacturing affiliates become very successful, the additional productivity that will result from the BOCs' success is sure to outweigh any regulatory hindrances. In any case, these regulations are unlikely to be overly burdensome.

ECONOMIC IMPACT

As mentioned earlier, the economic impact of these regulations is likely to be minimal, especially considering the potential economic benefit that is likely to accrue from allowing the BOCs to enter the manufacturing arena. The BOCs' manufacturing arms would have the potential to stimulate jobs, investment, and export opportunities for the American economy. In addition to boosting overall economic output and productivity, these activities are likely to generate significant tax revenues for local, State and Federal Governments. Most of the regulatory provisions affect the activities of the telephone company's operations, which are already regulated, and are unlikely to impose much of an economic burden.

PRIVACY

The legislation will not have any adverse impact on the personal privacy of the individuals affected.

PAPERWORK

This bill requires the manufacturing affiliate of a BOC to make public filings of its financial information. The bill does not require the affiliate to generate new information but simply requires the public filing of information that it would collect in the regular course of business. The bill also requires the FCC to adopt rules to implement the provisions of the bill. Thus, the bill's reporting and rulemaking requirements, at first, will increase the paperwork burden on the BOCs and other interested parties, but these burdens will diminish over time. The bill imposes no regular reporting requirements on any company other than the BOCs' manufacturing affiliates.

SECTION-BY-SECTION ANALYSIS

SECTION 1

Section 1 states that the short title of the bill is the "Telecommunications Equipment Research and Manufacturing Competition Act of 1991."

SECTION 2

Section 2 states the findings of the Congress that the economic growth and international competitiveness of the United States would be assisted by permitting the BOCs to engage in manufacturing (including design, development and fabrication) and research regarding communications equipment.

SECTION 3

Section 3 adds a new section 227 to the 1934 Act. This new section sets forth the activities in which the BOCs may engage and specifies the obligations and regulations that will govern their participation in these activities. The following describes the provisions of this new section 227 of the 1934 Act:

Section 227(a) permits a BOC, through an affiliate, to engage in the manufacture and provision of telecommunications equipment and manufacture of CPE, notwithstanding any restriction or obligation contained in the MFJ. The provision does not grant the BOCs an exemption from pending or future antitrust actions. The provision also states that the BOCs may not engage in manufacturing "in conjunction with" a BOC with which it is not currently affiliated. For instance, this provision would permit Illinois Bell to engage in joint manufacturing with Michigan Bell because they are both owned by Ameritech, but would not permit Illinois Bell, owned by Ameritech, to manufacture in conjunction with New York Telephone, which is owned by NYNEX.

Also, a BOC may not avoid this "joint manufacturing" prohibition by becoming affiliated with a BOC with which it is not currently affiliated. For instance, were Ameritech to purchase NYNEX, this affiliation would not permit Illinois Bell to manufacture in conjunction with New York Telephone. This provision is intended to bar any form of joint activity that might permit the BOCs to engage in anticompetitive behavior.

This provision is not intended to change the status of Bellcore. Bellcore was created by the MFJ and is owned jointly and equally by the seven divested companies. It provides a centralized organization for the provision of engineering, administrative, and other services. One such service is providing a single point of contact for coordination of the BOCs to meet national security and emergency preparedness requirements. The Committee does not intend to disrupt Bellcore's current activities. Nor does the provision authorize Bellcore to do anything more than it is authorized to do today. In short, Bellcore may continue to perform any of its current activities under this bill, and anything that Bellcore is prohibited from doing today will continue to be barred.

Section 227(b) restates that a BOC may only engage in manufacturing through an affiliate and states that the affiliate must be

separate from the BOC. The manufacturing affiliate of a BOC may be a subsidiary of the BOC or a subsidiary of the RHC that owns or is owned by the BOC. This provision, for instance, does not require that each of the 22 BOCs establish its own separate affiliate; each of the seven RHCs may set up its own manufacturing affiliate or affiliates as long as those manufacturing affiliates are separate from any of the BOC's telephone service operations. There is no limit to the number of manufacturing entities with which a BOC may affiliate, as long as they are all separate from the BOC's telephone service operations, and as long as they comply with the prohibition on joint manufacturing contained in subsection (a).

The word "separate" is intended to ensure enough distance between the manufacturing affiliate and the BOCs' telephone service operations to allow regulators to detect any possible cross-subsidization or anticompetitive behavior. Although other provisions of the bill require specific measures and regulations concerning the activities of the BOCs and their manufacturing affiliates, these provisions establish the minimum regulatory requirements for such separation. The FCC may, after notice and comment, adopt rules that address issues not covered by this bill and that require further separation if the FCC finds that such rules are necessary to protect against cross-subsidization and anticompetitive behavior. In adopting such rules, however, the FCC shall balance the need for these rules with the need to permit the BOCs to compete on an international scale and the need to permit them to engage in close collaboration with any manufacturer, as set forth in section 227(f).

Section 227(b) also states that the use in section 227 of the term "manufacturing affiliate" refers to a BOC affiliate that is engaged in manufacturing or provision of equipment as authorized by section 227(a).

Section 227(c)(1) requires the manufacturing affiliate to maintain books, records, and accounts separate from its affiliated BOC. These materials must also identify all transactions between the manufacturing affiliate and the BOC. Even if the manufacturing affiliate is not a publicly held corporation, it must prepare financial statements which are in compliance with Federal financial reporting requirements for publicly held corporations, file such statements with the FCC, and make such statements available for public inspection.

Section 227(c)(2) requires that a BOC and its non-manufacturing affiliates may not perform sales, advertising, installation, production, or maintenance operations for a manufacturing affiliate. In other words, the manufacturing affiliate must conduct these activities on its own behalf, either with its own employees or using an agent that is independent of the affiliated BOC or its affiliates. The BOC and its manufacturing affiliates may carry out institutional advertising not related to specific telecommunications (or customer premises) equipment as long as the manufacturing affiliate pays its pro rata share of the costs of such advertising.

This section does not prohibit a BOC from installing or maintaining equipment that it purchases from its manufacturing affiliate for use in its own communications network. It would be unnecessary and inefficient for a BOC to be required to bring in persons from outside the telephone company to install or maintain equip-

ment that the BOC uses for its own purposes. A BOC cannot, however, install or maintain equipment purchased by a third party for use by that party. This section also prohibits a BOC from purchasing and then reselling to third parties equipment manufactured by its affiliate. There are no efficiencies in permitting a BOC to sell the equipment of its affiliate, but there would be a potential for the BOC to discriminate in favor of the equipment manufactured by its affiliate if it were allowed to sell such equipment. Thus, the bill prohibits a BOC from selling its affiliate's equipment.

Section 227(c)(3) contains several provisions to promote the domestic manufacturing industry. In general, Section 227(c)(3) requires the BOCs to conduct all their manufacturing activities within the United States and encourages them to employ components made in the United States. This provision will stimulate jobs, research and development, investment, and productivity in the United States.

Under subparagraph (A) of section 227(c)(3), a BOC manufacturing affiliate is required to conduct its manufacturing of telecommunications equipment and CPE in the United States. It also is required to conduct its manufacturing of components used in the manufacture of telecommunications equipment and CPE in the United States, although exceptions are provided in subsequent subparagraphs.

Under subparagraph (B), a BOC may use foreign-made components in its manufacturing of telecommunications equipment and CPE in the United States under certain limited circumstances. Prior to using foreign-made components, a BOC manufacturing affiliate must first make a good faith effort to obtain equivalent components from a manufacturer in the United States at reasonable prices, terms, and conditions.

Notwithstanding good faith efforts on the part of a BOC manufacturing affiliate, its cost of foreign-made components may not exceed 40 percent (or adjusted percentage in subsequent years) of the revenue derived from its sale of telecommunications equipment and CPE in the United States in any calendar year.

Under subparagraph (C), a BOC manufacturing affiliate that uses foreign-made components must certify quarterly to the FCC its good faith efforts to obtain equivalent components manufactured in the United States at reasonable prices, terms, and conditions; certification must list foreign-made components by type. The affiliate also must certify annually to the FCC that, in the previous calendar year, its cost of foreign-made components did not exceed 40 percent (or adjusted percentage in subsequent years) of the revenue derived from its sale of telecommunications equipment and CPE in the United States.

Under subparagraph (D), the FCC is authorized to impose penalties or forfeitures as provided for in title V of the 1934 Act when, after reviewing the quarterly certification, the FCC determines a BOC manufacturing affiliate failed to make a good faith effort to obtain equivalent components manufactured in the United States at reasonable prices, terms, and conditions.

The FCC also is authorized to impose penalties or forfeitures as provided for in title V of the 1934 Act when, after reviewing the annual certification, the FCC determines a BOC manufacturing af-

filiate sold telecommunications equipment and CPE in the United States in the previous calendar year containing foreign-made components whose cost was in excess of 40 percent (or adjusted percentage in subsequent years) of the sales revenue from the equipment.

Also under subparagraph (D), suppliers of components manufactured in the United States who claim they were damaged because a BOC manufacturing affiliate failed to make a good faith effort to obtain equivalent components that were manufactured in the United States at reasonable prices, terms, and conditions are authorized to file complaints with the FCC, or bring suit in Federal court. Suppliers are expected to follow standard procurement, marketing and sales practices.

Under subparagraph (E), the FCC, in consultation with the Secretary of Commerce, is required to conduct an inquiry to determine the cost of foreign-made components as a percentage of the sales revenue from all telecommunications equipment and CPE sold in the United States during the previous calendar year; this inquiry, which must be done annually, must conform to administrative procedure practices set forth in title 5, U.S. Code.

Under subparagraph (F), a BOC manufacturing affiliate may use intellectual property created outside the United States in its manufacturing of telecommunications equipment and CPE in the United States.

Under subparagraph (G), the FCC is prohibited from waiving or altering any of the requirements of Section 227(c) except that the FCC is required to replace the 40 percent figure in subsequent years with the number resulting from the annual FCC/Department of Commerce inquiry in any calendar year.

For purposes of this subsection, the term "manufacturing" does not include "provision of telecommunications equipment". Section 227 is not intended to bar the BOC manufacturing affiliates from being able to sell telecommunications equipment abroad. In fact, it is hoped that the BOCs will produce goods that can be exported and can help to improve the U.S. balance of trade.

Section 227(c)(4) requires that a BOC and its affiliates may own no more than 90 percent of the equity of any of its affiliated manufacturers. In other words, a BOC manufacturing affiliate cannot manufacture unless at least 10 percent of the equity of such affiliate is owned by a private entity or entities not affiliated with that BOC. This 10 percent equity share must be made available for purchase on the open market; the BOC and any affiliate of the BOC may not be involved in selecting or in any way restricting the owners of this 10 percent share. Further, section 227(a), discussed earlier, prevents any other BOC, or any affiliate of any other BOC, from purchasing any equity interest in that manufacturing affiliate.

The intention of this provision is to increase the oversight of the operations of the affiliate by outside parties and to ensure that the manufacturing affiliate operates as an independent, market-driven competitive entity separate from the BOC. Independent manufacturers are most likely to be interested in making this equity investment so as to obtain shareholder and financial information of the company. These outside entities can act as "private police officers" by scrutinizing the activities of the manufacturing affiliate and

bringing any possible violations of the law to the attention of regulators. These outside investors also can exercise their rights as shareholders to bring suit against the directors of the corporation should they fail to fulfill their legal obligations.

This provision also will ensure that the affiliate faces the same commercial incentives as any other manufacturer. In order to attract outside investors of this 10 percent share, the affiliate must attempt to be a profit-making entity; it cannot simply pass through the costs of its manufacturing activities to the purchasers of such equipment without attempting to earn a profit. This will ensure that the manufacturing affiliate has the same incentives to become efficient and market-driven as any other manufacturer and will prevent the manufacturing affiliate from being able to benefit unfairly from its relationship with the BOC.

Section 227(c)(5) recognizes that the manufacturing affiliate may choose to incur debt as part of its capitalization. This section provides that such debt may not be issued by any affiliate of the manufacturing affiliate, which includes any affiliate of the BOC with which it is affiliated. The purpose of this provision is to prevent the BOC or RHC from loaning money to its manufacturing affiliate at a below-market rate. Such a loan both could harm ratepayers of the telephone company and could give the manufacturing affiliate an anticompetitive advantage over other manufacturers. In essence, section 227(c)(5) requires that the BOC acquire its debt on the open market in the same manner that most other manufacturers acquire their debt.

Also, any debt incurred by the manufacturing affiliate cannot permit a creditor, on default, to have recourse to the assets of the BOC's telephone service operations. The purpose of this provision is to protect the independence and viability of the BOC's basic telephone service in recognition of the vital service that these companies provide and the necessity to keep these companies solvent.

Paragraphs (6) and (7) of section 227(c) clarify the separation requirement of section 227(b). Section 227(c)(6) makes it clear that section 227(b) only requires that the manufacturing affiliate be separate from the BOC. It does not require the manufacturing affiliate to separate from any other affiliate of the BOC or the RHC. For instance, if the BOC or RHC has a real estate affiliate, the manufacturing affiliate need not operate separately from that real estate affiliate.

However, section 227(c)(7) further clarifies that, if the manufacturing affiliate operates on an unseparated basis with an affiliate other than a BOC, that affiliate itself becomes a manufacturing affiliate and must operate separately from the BOC and otherwise comply with the provisions of the reported bill. For instance, if the manufacturing affiliate operates on an unseparated basis with a real estate affiliate, that real estate affiliate then becomes treated as a manufacturing affiliate and must operate separately from the BOC.

The purpose of these two provisions is to provide a "wall" of separation between the telephone company and any affiliate that operates with the manufacturing affiliate. These provisions ensure that the BOC cannot avoid the separation requirements of the bill by using another affiliate as a conduit.

Section 227(c)(8) requires BOC manufacturing affiliates to make any telecommunications equipment they manufacture available to all local exchange carriers without discrimination or self-preference as to price, delivery, terms, or conditions. There are approximately 1,400 carriers that provide local exchange telephone service in the United States. These carriers interconnect with each other and with interexchange carriers to provide nationwide telephone service. These 1,400 local telephone companies need access to the latest advances in telecommunications equipment to maintain high-quality telephone service. High-quality telecommunications service is particularly important in rural areas, often served by independent telephone companies, because of the need to stimulate jobs and economic growth in those regions.

The Committee assumes that the BOCs will continue to manufacture equipment (including software) for which there is reasonable demand, taking into account the profitability of manufacturing the product, the price the buyer is willing to pay for the product, alternative sources of the product, the importance of the product to the local telephone companies, the quantity demanded, the obsolescence of the product, and other appropriate factors. The telecommunications equipment that the BOCs must make available to other local telephone companies must be intended for use in the public telecommunications network (including for use with information services) and includes software that is integral to such telecommunications equipment. This provision is not intended to obligate a BOC manufacturing affiliate to sell to companies providing directly competitive local exchange service within the BOC's service area.

The manufacturing affiliate's obligation to sell telecommunications equipment to an unaffiliated local telephone exchange carrier is a reciprocal one. This obligation is only enforced if the local telephone company either does not manufacture equipment (by itself or through an affiliated entity), or it agrees to make available to the BOC any telecommunications equipment (including software integral to such equipment) that the local telephone company manufactures (by itself or through an affiliated entity) without discrimination or self-preference as to price, delivery, terms or conditions.

Section 227(d) imposes certain information disclosure obligations on the BOCs. The BOCs' telephone exchange service facilities are essential facilities for a wide variety of telecommunications products and services, including long distance services, cellular services, information services, CPE, and telecommunications equipment. Those who interconnect with and those who manufacture equipment to operate with the local exchange network are dependent on the BOC for full and complete information about protocols and the technical requirements for such interconnection. To design customer premises equipment and telecommunications equipment, for instance, manufacturers of such equipment must know what interfaces will be made available for the interconnection of their equipment to telephone exchange facilities.

In presenting the antitrust case against AT&T, the DOJ made several allegations that AT&T had withheld critical information concerning the operation of the telephone network from outside equipment manufacturers in order to favor its affiliated manufac-

turing affiliate, Western Electric. Although the conditions of the market have changed substantially since that case was argued before the courts, some continue to assert that the BOCs would have the same ability and incentive to control their use of the information concerning their networks to favor their manufacturing affiliates.

To prevent the possibility that the BOCs might engage in such behavior, paragraph (1) directs the FCC to prescribe regulations to require a BOC to file and make publicly available the protocols and technical information concerning the operation of its network for the use of those that must interconnect with that network. The BOCs must report promptly to the FCC any material changes or planned changes to such protocols and technical requirements, and the schedule for implementation of such changes or planned changes. This provision is intended to cover all technical information necessary for the interconnection of other service providers to the network as well as for the interconnection and use of CPE and telecommunications equipment with that network. It is also intended that the BOCs will reveal when and where such changes to the network will take place as soon as these changes are planned.

Under paragraph (2), the BOCs must reveal the information required to be filed under paragraph (1) as early as possible, but at a minimum, no later than immediately upon making such information available to any of its affiliates. The purpose of this requirement, once again, is to ensure that competitive manufacturers of CPE and telecommunications equipment have an opportunity to compete on an equal footing with the BOCs' manufacturing affiliates. This notification requirement takes effect immediately when a BOC makes available the information to any of its affiliates, not just its manufacturing affiliates. The purpose of applying this provision to all affiliates is, of course, to ensure that a BOC would not attempt to avoid the "immediately" requirement by passing the information to its manufacturing affiliate through one of its other affiliates.

Further, such information should not be limited solely to the minimum information necessary for interconnection of equipment available at that time. The BOCs should reveal protocols and technical information that may be useful for the design and development of new equipment that interconnects with that network, including both CPE and telecommunications equipment. Paragraph (2) should not be interpreted to permit a BOC to withhold information concerning the network from both its affiliated and other unaffiliated manufacturers if such information could be useful to such unaffiliated manufacturers in designing new products or equipment that would be of benefit to the public.

All carriers providing regulated local exchange service, including the BOCs, are required under paragraph (3) to provide timely information concerning the deployment of telecommunications equipment in their networks to other regulated carriers serving the same area of interest. For the purposes of this section, the term "area of interest" means a geographic area encompassing one or more franchise exchange areas serving common social, economic, and other purposes related to the provisions of telephone exchange service by local exchange carriers. The geographic areas and the

number of franchise exchange areas covered by this term are not required to be uniform but may vary to meet differing conditions and requirements.

This paragraph does not require these carriers to engage in joint network planning because of the potential anticompetitive and antitrust difficulties with such a requirement. The BOCs and the local carriers located in the same area of interest should, however, take whatever steps are necessary to ensure that efficient, transparent telephone service, using the latest technology, continues to be made available at the highest possible level to all members of the public.

As with subsection (c)(8), this provision is not intended to extend to a carrier that competes with a BOC in the same geographic area in the provision of local telephone service. This requirement on the BOCs does not lessen their obligations under paragraph (1) to make any material or proposed changes to the technical requirements of the network available to everyone.

Finally, paragraph (4) recognizes the FCC's authority to prescribe other regulations as may be necessary to ensure that manufacturers competing with a BOC's manufacturing affiliate have as ready and equal access to information with respect to the protocols and technical requirements for connection with and use of its telephone exchange service facilities that is necessary for such competition as do the manufacturing affiliates. The FCC, as it has in the past, should protect commercially sensitive information. The BOCs' manufacturing affiliates are entitled to earnings based on their intellectual property and to protect the proprietary nature of their commercially valuable information.

Section 227(e) imposes additional obligations on the BOCs to protect competition and the ratepayer. Paragraph (1) requires that any BOC that has an affiliate that engages in manufacturing must provide to other manufacturers of telecommunications and CPE opportunities to sell such equipment to the BOC that are comparable to the opportunities it provides to its own manufacturing affiliate. "Comparable" as used in this section means that the BOC must seek out technically suitable, available equipment of good value and benefit to the corporation regardless of source.

The provision recognizes that it may be impossible to provide any two companies, affiliated or not, with "equal" opportunities to sell equipment. Such a requirement would be unrealistic and could subject the BOCs to such stringent standards and frequent litigation that they would choose not to enter the manufacturing market at all. It is also important to note that no other carrier, including AT&T, which purchases all its own equipment for its network, is obliged to provide a comparable opportunity to other manufacturers. The bill, however, does require the BOCs to strive to provide competitive manufacturers with opportunities that are as equal as possible to the opportunities they provide to their manufacturing affiliates.

Paragraph (2) requires the FCC to prescribe regulations to prohibit a BOC from subsidizing its manufacturing operations with revenues from the BOCs' regulated telecommunications services. The FCC may take whatever action it deems appropriate to pre-

vent such cross-subsidization, including regulatory measures that go beyond those contained explicitly in this bill.

Paragraph (3) requires the FCC to prescribe regulations requiring that a BOC may only purchase (or acquire) equipment from its manufacturing affiliate at the open market price. The open market price of a product that incorporates sophisticated and rapidly changing technology generally reflects multiple product dimensions (e.g., product quality, specificity, and compatibility of design, timely availability, specific technology, future product support, and technology development). This provision is intended to protect both against anticompetitive self-dealing and cross-subsidization.

Section 227(f) permits the BOCs and their affiliates to work in close collaboration with any manufacturer of CPE or telecommunications equipment. This provision, for instance, permits a BOC to work closely with AT&T, or any other manufacturer, in manufacturing a piece of equipment to be used in the BOC's network or elsewhere. During the hearings on S. 173, several witnesses testified that the manufacturing restriction reduces efficiency and dampens innovation because it prevents the BOCs from collaborating closely with manufacturers of CPE and telecommunications equipment. A collaborative effort is often necessary to design and develop a successful product. Collaboration between manufacturers and network engineers and researchers can produce efficiencies that can lead to new products and innovative services. The inability to collaborate can cause delays and increased expense.⁹⁹

The Committee intends to allow BOC personnel, personnel of its manufacturing affiliate, and any other affiliate, and any manufacturer, to work together in the design and development of CPE and telecommunications equipment, including hardware and software. Such collaboration, however, is not intended to override the separation requirement between the BOC and the manufacturing affiliate under subsection (b) and the other provisions of the bill. Further, such collaboration is permitted only subject to the rights of unaffiliated manufacturers to obtain access to all necessary technical information concerning the operation of the network at least as early as it is received by the BOCs' manufacturing affiliates under subsection (d). Finally, this provision is not intended to change the status of Bellcore. As mentioned earlier, this bill allows Bellcore to continue to conduct those activities that it is authorized to do today, but no more.

Section 227(g) authorizes the FCC to prescribe such additional rules and regulations as the FCC determines necessary to carry out the provisions and the purposes of this section.

⁹⁹ "One of the factors that helps explain the relatively poor American showing in manufacturing performance and technology is the link between production and research/development/design. Constant flows of people, information, and ideas between research and production is characteristic of Japanese firms. In American firms, the processes of research (or design) and production are more often sequential, with the results of developmental work handed over to a different set of people for management of production. There is much less interaction between the designers of the product and the production managers."

See, "Paying the Bill: Manufacturing & America's Trade Deficit", Office of Technology Assessment, Congress of the United States, June 1988, p. 34. See also, "Special Report: Manufacturing: A Smarter Way to Manufacture: How 'concurrent engineering' can reinvent American industry", *Business Week*, April 30, 1990.

Section 227(h) recognizes that the FCC has the same authority over the BOCs and their manufacturing affiliates that the FCC has in enforcing the 1934 Act with respect to any common carrier subject to the Act.

Section 227(i) requires the FCC to prescribe regulations to enforce this section within six months after the date of enactment of this section. The BOCs shall only be permitted to engage in the manufacturing authorized by subsection (a) after the regulations to enforce subsections (c), (d), and (e) are in effect.

Section 227(j) permits the BOCs to continue to engage in activities in which they were authorized to engage prior to the enactment of this bill. The District Court has granted waivers permitting the BOCs and their affiliates to manufacture and provide telecommunications and customer premises equipment outside the United States. This bill does not alter or void such authority.

These waivers prohibit the BOCs from importing back to the United States the telecommunications and customer premises equipment that they manufacture outside the United States under the authority previously granted by the District Court. Paragraph (3)(F) of subsection (c), however, does permit a BOC to use intellectual property created outside the United States in the manufacture of equipment in the United States, including intellectual property created by a BOC manufacturing operation engaged in manufacturing outside the United States under the waivers granted by the District Court. This provision is essential if the BOC is to be allowed to compete effectively in the worldwide market. Were this provision on intellectual property not included in the bill, a BOC would have an incentive to increase its overseas manufacturing operations in order to take advantage of the intellectual property that is available there. This is precisely the result that the Committee is trying to avoid.

Subsection 227(k) contains several definitions. Among the most important are:

Paragraph (1) defines the term "affiliate" to mean any entity that owns or controls, or is owned or controlled by, or is under common ownership with a BOC. Occasionally, as in section 227(c)(8), the term "affiliate" refers to the affiliate of a non-BOC telephone company, which is clear from context.

Paragraph (2) refers to a BOC as including any successor or assign of a BOC. Prior to divestiture, AT&T controlled and operated the Bell System's cellular businesses. At divestiture, AT&T transferred those businesses to the seven RHCs, not to the BOCs under the control of the RHCs. Therefore, the cellular businesses are not to be considered either successors or assigns of the BOCs for the purposes of this section. Such cellular companies, are, of course, affiliates of the BOCs.

Paragraph (4) defines the term "manufacturing" as it is defined by the District Court in its decision interpreting the term as it is used in the MFJ. Such term includes the design and development of equipment, including software integral to the operations of that equipment.

Section 3(b) of last year's bill, S. 1981, contained a conforming amendment to section 2(b) of the 1934 Act to recognize the FCC's authority to regulate the operations of the BOCs in relation to

their manufacturing affiliates and the operations of the manufacturing affiliates themselves. This section was interpreted by some as preempting the States from regulating the activities of the BOCs and their manufacturing affiliates. That provision was not intended to pre-empt the States from exercising their regulatory responsibilities and did not do so. To avoid this interpretation, that provision was not included in this bill, S. 173. This bill makes no change in the authority of State regulatory officials to regulate in the best interests of their residents.

ROLLCALL VOTES IN COMMITTEE

In accordance with paragraph 7(c) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following description of the record votes during its consideration of S. 173:

At the close of debate on S. 173, the Chairman announced a rollcall vote on the bill. On a rollcall vote of 18 yeas and 1 nays as follows, the bill was ordered reported:

Yeas—18	Nays—1
Mr. Hollings	Mr. Pressler
Mr. Ford ¹	
Mr. Exon	
Mr. Gore	
Mr. Rockefeller	
Mr. Bentsen ¹	
Mr. Kerry	
Mr. Breaux	
Mr. Bryan	
Mr. Robb	
Mr. Danforth	
Mr. Packwood	
Mr. Stevens	
Mr. Kasten	
Mr. McCain	
Mr. Burns	
Mr. Gorton	
Mr. Lott	

¹ By proxy.

ADDITIONAL VIEWS OF MR. FORD

Mr. Chairman, I am pleased to support this bill. I know you have put forth great effort and have built a strong case for removing the manufacturing restrictions from the Regional Bell Telephone Companies.

When passed into law, S. 173 will promote U.S. competitiveness in domestic and global telecommunications equipment markets, stimulate employment opportunities in the U.S. and preserve U.S. leadership in developing new, innovative technologies.

I support the Chairman in reporting this bill as it is presented today, however, I do want to convey my concern about the minority ownership provision. The purpose of this provision is to increase the oversight of the operations of the manufacturing affiliate by outside parties. This appears to be unnecessary since S. 173 already contains numerous and adequate safeguards. A more reasonable approach would be to require the filing of an annual independent audit with the FCC concerning compliance with safeguards contained in S. 173, particularly the one dealing with Bell Company purchases from affiliated manufacturers at the open market price.

Again, I want to express my support for the Chairman's leadership on this effort. This legislation is significant for the future of our telecommunications industry and U.S. positioning in the global economic market.

WENDELL FORD.

ADDITIONAL VIEWS OF MR. KERRY

Mr. Chairman, last year I expressed several concerns with S. 173, Senator Hollings' bill to lift the manufacturing restriction on the Regional Bell Operating Companies (RBOC's). I supported the objectives of the bill, but I was concerned that the potential risks outweighed the possible benefits.

Having had more time to examine the complex issues raised by the proposal, I sense that the gains could be very large. We should look for ways to realize these gains and not be blinded by the risks. The concerns that I had last year remain—and I hope that the most important can be addressed before this bill gets to the floor—but they will not force me to oppose this bill today.

Obviously the world in general, and the telecommunications industry in particular, have changed since the break up of AT&T and the Modified Final Judgement. Competition in the telecommunications area has become increasingly fierce and increasingly global. Moreover, telecommunications and the Nation's productivity and overall competitiveness have never been so tightly linked.

In this environment of the 1990's, we have to ask ourselves if our current system of regulating telecommunications remains appropriate. I believe that allowing the RBOC's to compete in manufacturing can strengthen the competitive position of the U.S. globally. First, no longer will half of the Nation's telecommunication assets, and most of the network know-how, be sidelined. This is not a criticism of the companies that are currently in the industry; it is simply a belief that in an area as critical as telecommunications America must bring all of the resources at its disposal to bear.

Second, not only will the entrance of the RBOC's provide the U.S. with substantial international clout, but it will also dismantle an artificial barrier between R&D and product development. Part of the competitiveness problem in this country is due to the inability to convert a lead in basic R&D into a lead in new product development. The bill will clearly correct a structural barrier to communication within the business system and, in doing so, will undoubtedly generate efficiencies.

But, as was stated in the minority views of last year, one man's efficiencies can be another man's cross-subsidies. That is one of the dilemmas that policy makers face on this issue. Should we risk cross-subsidies in order to generate efficiency gains, or should we maintain a severe structural solution to the problem of cross-subsidies at the cost of efficiency losses?

Given the vital importance of telecommunications to our Nation's future and the increasingly fierce nature of global competition, I maintain that the potential gains from lifting the manufacturing restriction outweigh the possible risks. However, this support is contingent on our doing everything in our power to effectively protect not only ratepayers, but also existing manufacturers.

A continuing danger in passing S. 173 in its present form is that the RBOC's will find ways to hurt ratepayers and competitors through cross-subsidy and preferential treatment. Furthermore, the very competitiveness that we are seeking to improve could be hurt if the RBOC's ally with foreign competitors and share profits and market knowledge and find ways to manufacture abroad.

The safeguards in the bill are extremely important in preventing these abuses from occurring. Personally, I would like to have seen them go further. For example, a safeguard prohibiting the RBOC's from purchasing from themselves, at least until such time as there is sufficient competition in the local exchange, would eliminate the problem of preferential treatment and still leave six-sevenths of the domestic market available. Moreover, a prohibition against joint ventures with companies from countries whose markets are not open to U.S. manufacturers would keep us from getting suckered into giving foreigners more access to our market than we have to their markets. I intend to see whether changes to this end can be made before we pass this on the floor.

With adequate safeguards policed with vigor—which is critical—this bill has the potential to benefit the telecommunications industry in this country. I envision an industry in which the RBOC's can lever their network knowledge to design new products and redesign existing products more efficiently. In this market for manufactured products, the RBOC's will face robust competition from existing players, who will not be afraid to cry foul when they see competitive abuses. As a result, I can envision an innovative industry in which no single RBOC dominates the market as a seller like Western Electric once did nor dominates the market as a buyer like AT&T once did. I can envision an industry in which the RBOC's under increasing competitive pressures in their bread and butter business of local network services look to the highest quality products at the lowest possible prices. Finally, I can envision an industry that is increasingly powerful internationally and not retrenching further at home.

Mr. Chairman, I hope that my deep concerns can be addressed as this bill moves forward.

JOHN F. KERRY.

ADDITIONAL VIEWS OF MR. LOTT

Mr. Chairman, thank you for your diligent effort in moving this legislation forward. I am pleased to support this bill as it involves an issue I have followed for many years.

Before coming to the Senate, I introduced legislation in the House to allow the seven Bell operating companies to manufacture telecommunications equipment. Even then U.S. competitiveness in domestic and global telecommunications market was losing ground. Today over 60,000 American telecommunications manufacturing jobs have been eliminated since 1984. Practically all telephone sets and one-third of all telephone processing equipment are manufactured overseas. Major foreign companies are acquiring American telecommunication and related high-tech companies to increase their market share in this global economy.

S. 173 is timely and targeted to address many of these problems. The Regional Bell Operating Companies (RBOCs) represent over one half of the nation's telecommunications assets. They are greatly underutilized sources of opportunity and innovation for the U.S. The telecommunications equipment market is being divvied up before our very eyes, it is high time we unleash our best players.

Along this line, there are two provisions of this bill which I would like to request clarification on. In order to assure an equitable playing field I would like to revisit the provision dealing with debt issuance. This bill states that affiliates may not issue debt on behalf of a manufacturing affiliate. It also prohibits manufacturing affiliates from incurring debt in a manner that permits creditors to have recourse to the assets of the affiliated telephone company's telecommunications business. It is my understanding that the intent of this provision is to assure manufacturing affiliates do not have an unfair advantage over those manufacturers not affiliated with a Bell company. Secondly, the objective is to protect the local telephone company and its ratepayers from any risk incurred by manufacturing affiliates.

It seems to me that this provision actually puts manufacturing affiliates at a disadvantage by prohibiting *non-telephone company* affiliates of manufacturers from issuing debt on the manufacturer's behalf. Rather than neutralizing any advantage manufacturing affiliates have, it overlooks the fact that competitors such as NEC, Fujitsu, and Siemens are internally financed or receive lower cost of capital because of their corporate affiliation and proven track record. A more proper safeguard for the ratepayer is to prohibit regulated telephone companies from issuing debt on behalf of their manufacturing affiliates.

I would also like to express concern over the 90/10 provision dealing with oversight of a manufacturing affiliate's operations. This legislation states that the FCC must prescribe regulations to ensure that no more than 90 percent of the equity of a Bell Tele-

phone Company's manufacturing affiliate may be owned by that Bell Telephone Company and its affiliates. The purpose of the provision is to increase oversight and a more effective way would be to require the filing of an annual independent audit with the FCC concerning S. 173 safeguards, particularly the one dealing with Bell Company purchases from affiliated manufacturers at the open market price.

On the whole, I am very supportive of this bill and am confident that these two matters can be resolved. I realize this legislation is critical to the future of the nation's telecommunications industry and I want to express my strong support of it. Once again, I commend the Chairman for bringing it to markup this morning.

TRENT LOTT.

MINORITY VIEWS OF MR. INOUE

For some 25 years, the Chairman of this Committee and I have served on the Commerce Committee. In that time, I can only count a few times that we have disagreed on a communications issue. I have learned that the Chairman is extremely knowledgeable about these matters and generally knows how to strike the proper balance. It is for that reason that I have had to think long and hard about opposing this legislation. At the end, however, I feel strongly that this legislation will not achieve its objective of increasing American competitiveness in the international telecommunications market. In fact, it may do just the opposite.

In Washington, we often believe history is what was on last night's news and ignore its import and significance. I consider that unfortunate. We ignore important lessons and wind up repeating our mistakes. I am afraid that by approving this legislation, this Committee has taken this narrow view of history and that we are setting in motion a cycle of conflict and uncertainty that may eventually lead back to the courts for resolution.

To comprehend the issue debated here, it is essential to remember a fundamental fact: the nation's local telephone companies are not like other businesses. Because they control essential telephone facilities and because they are rate regulated, they have incentives to act anticompetitively when they enter into unregulated lines of business. It is not that the people who work there are malevolent. On the contrary, I have found just the opposite to be the case. It is simply that these incentives cause them to use their undue market power to the detriment of competitors.

That is why the United States government has brought four anti-trust actions against AT&T in the past seventy-five years.¹ Three of these actions resulted in AT&T divesting some of its operations. All of these actions resulted in AT&T or its progeny being prohibited from engaging in certain actions.

That is why companies and individuals filed dozens of private antitrust actions against AT&T during the years when newcomers were trying to enter into the telecommunications marketplace. These suits resulted in multimillion dollar awards.

With the most recent court action, we thought we had put most of these problems to rest. The source of this undue market power—the essential (bottleneck) local telephone facilities—was given to seven different companies (the Regional Bell Operating Companies or RBOCs) and these companies were forbidden to vertically inte-

¹ The first action resulted in the 1913 Kingsbury Commitment. AT&T agreed to sell its holdings in Western Union and to refrain from purchasing any local telephone company. The second action, in 1926, resulted in AT&T divesting its ownership of a nationwide radio programming network. The third action resulted in the 1956 Consent Decree, which in effect barred AT&T from offering data processing type services. The final action is the 1984 Modified Final Judgment.

grate into certain businesses: the provision of long distance and information services and the manufacturing of communications equipment. Without the threat of anticompetitive acts, firms in these three "forbidden" sectors have flourished. Their growth rates are stunning.²

We are now asked to undo this arrangement based on vague promises that regulators can do a better job and that these firms have some special ability that can improve our lot. Untested theories, unproven approaches, and unknown protections do not give me any solace. The result will almost certainly be that all of the benefits gained by the Modified Final Judgment—at a not insignificant cost—will be for naught.

A closer examination of the specifics of this debate over the telecommunications manufacturing prohibition further demonstrates my points.

THE MODIFIED FINAL JUDGMENT

The last two antitrust actions brought by the U.S. government were founded on the same premise: the structure of AT&T was inherently anticompetitive. Firms providing long distance or information services required AT&T's local telephone facilities to complete their calls. Firms manufacturing telecommunications equipment could hardly stay in business if they could not sell to AT&T's local telephone companies. Yet, AT&T, with control of almost all of this country's local telephone facilities, too was engaged in providing long distance and information services and in manufacturing equipment. Not surprisingly, AT&T, the government argued, acted to favor its own enterprises, either by cross-subsidizing them from regulated telephone revenues or by discriminating against competitors. In other words, because it controlled "bottleneck" facilities, AT&T had both the incentive and ability to foreclose competition. As a result, it was virtually impossible to compete against AT&T and for the Government's pro-competitive policy to be successful.

In the area of equipment manufacturing, the Government alleged that AT&T acted to foreclose competition in several ways. First, AT&T gave to its manufacturing subsidiary, Western Electric, ready and immediate access to key engineering and technical information about the local telephone network. At the same time, this information was withheld from or not given as quickly to competitors. Without timely information, competitors found they were at a grave disadvantage in designing and manufacturing equipment for the local telephone companies.

Second, AT&T used revenues from regulated telephone services to subsidize the local company's purchase of equipment from Western Electric and the sale of Western-provided customer premises equipment. More specifically, the Government claimed that costs of equipment research, design, and development were allocated to design of the basic telephone network. Thus, competitors were harmed by facing products sold at below cost, and ratepayers were harmed since their revenues paid for this predatory conduct.

² See the Testimony of Michael J. Birck, chairman, Telecommunications Industry Association, Before the Subcommittee on Communications, on S. 173, February 28, 1991 and on S. 1981, May 9, 1990, pp. 1-6.

Third, even where competitors produced a better product at cheaper rates, AT&T simply purchased from Western as a matter of practice. With the enormity of the Bell System and the relative lack of regulatory oversight, the odds of getting caught were slim.

The consequence of these practices was that the local Bell telephone companies purchased virtually all of their products from Western Electric, regardless of effectiveness, quality, or price. After all, how does a firm compete with a fully integrated monopolist that can merely turn to its subsidiary when it wants something? That is what the antitrust actions tried to remedy.

The obvious question at this point is: what happened to the regulators? Weren't they supposed to police these anticompetitive actions? To some extent, the regulators tried. The FCC conducted lengthy, but totally unsuccessful, proceedings into AT&T's manufacturing operations. State regulators only occasionally reviewed an equipment purchase by local telephone companies. Neither had direct jurisdiction over manufacturing operations, and neither spent much time in this area.

Despite the obvious lack of oversight of this area by regulators, AT&T argued at the beginning of the last antitrust case that regulatory oversight was so pervasive that the courts should not hear the case and should permit regulators to work their will. The court (Judge Waddy) soundly rejected this argument after a thorough review of the extent of the FCC's oversight of AT&T. The court concluded that the Commission failed to adequately oversee many AT&T activities, leaving more than ample room for anticompetitive conduct.³

The antitrust case thus continued. In early 1982, DOJ and AT&T entered into a consent decree, which later became, after court review, the Modified Final Judgment (MFJ). The overall thrust of the MFJ was to separate competitive activities from those that would continue to be regulated monopolies. AT&T kept the former, and the newly created seven BOCs were given the latter along with conditions restricting them from certain activities.

THE TELECOMMUNICATIONS MANUFACTURING RESTRICTION

The MFJ prohibits the BOCs from manufacturing telecommunications equipment and customer premises equipment. In a 1987 opinion, the court found that this manufacturing prohibition includes "the entire manufacturing process, including design, development, and fabrication."⁴ The court went on to support this finding by stating:

The decree was aimed at preventing in the future the anticompetitive practices in which the Bell System was assumed to have been engaged in the past. Yet the Bell System's practices in design and development were responsible for the section II(D)(2) restriction as much as, if not

³ Judge Joseph C. Waddy, *Memorandum Opinion and Order on Jurisdictional Issues*, November 24, 1976, U.S. v. AT&T, CA No. 74-1698, 427 F. Supp. 57 (D.D.C., 1976); *AT&T v. U.S.*, AT&T, *Petition for Writ of Certiorari to the United States District Court for the District of Columbia*, January 6, 1977. AT&T appealed this ruling, but both the Court of Appeals and the Supreme Court refused to overturn it.

⁴ *United States v. Western Electric Co.*, Civil Action No. 82-0192, filed Dec. 3, 1987, U.S. District Court for the District of Columbia.

more than, its practices with regard to fabrication. In fact, in virtually every "manufacturing episode" that was the subject of a pretrial charge by the government or that produced evidence at the trial, it was design and development manipulation that was the focus or the sole subject rather than discrimination with respect to fabrication.⁵

The scope of the manufacturing prohibition thus goes to the entire process. Yet, it is vital to this debate to understand that this does not mean that all the BOCs can do is issue generic requests and sit back to await the results. They can engage in a variety of manufacturing related activities, including close coordination with manufacturers to ensure that they obtain the necessary products. The following list provides a description of manufacturing activities within and outside the scope of the prohibition:

Manufacturing activity	Can EOCs provide?
Market research.....	Yes.
Product conception—Generic specifications and functions of a product	Yes.
Manufacturing ownership (in house, acquisition, joint venture)	No.
Select exclusive manufacturer	Yes.
Fund manufacture development	Yes.
Engineering—Design of product.....	No (but can work closely with manufacturer).
Manufacture prototype.....	No (but can work closely with manufacturer).
Sell products they develop:	
CPE.....	Yes.
Network.....	No.

Despite the rhetoric heard during the MFJ debate, the BOCs' are able to work relatively closely with manufacturers in the design and development of products. For example, they meet regularly with equipment manufacturers through a group known as the Multi-Vendor Interaction program. Through Bellcore (the research and standards arm of the seven RBOCs), they have offices located at or near the plants of major switch manufacturers; and they regularly come to these plants to provide specifications for equipment and carry out tests.

The vice-president of Technology Systems for Bellcore demonstrated this close working relationship in a 1989 statement:

Not only have we solved the immediate problems of divestiture, but we have as an industry, moved well beyond our immediate post-divestiture circumstances. In particular, we have seen major progress towards the opening of the telecommunications marketplace through a free flow of information on architectures, requirements, and interfaces. The response has been an outpouring of products that Bellcore's clients [the BOCs] are using to grow and evolve their networks, to provide existing services more economically than heretofore and to provide new services . . .

In January 1984, our supplier database contained 2,000 companies; by January 1986, that number has grown to 4,850, and now we have 9,000 suppliers in our database

⁵ Ibid. Pp. 17-18.

and 500 shelf feet of supplier information in our library . . .

The two-way communications that has been established between Bellcore and the telecommunications supplier community is one of the successes of divestiture.⁶

All of this success is based on the fact that the BOCs cannot engage in manufacturing and thus have no reason to act anticompetitively. All of this success is in jeopardy if this manufacturing prohibition is lifted.⁷

Without having an in-house equipment manufacturer, the BOCs have embarked on a sophisticated strategy that meets their needs. They have used their enormous size and purchasing power to ensure they are not beholden to any single vendor. They have made sure that, for each product, equipment vendors compete to provide it. That way the BOCs obtain the best, most innovative equipment at the lowest price,

Moreover, over time, they have, in effect, forced vendors to tailor their products to specific BOC needs. For example, the BOCs had been concerned that the software in their switches was written in a way that required them to return to the vendors each time they wanted to change or create a service. Each such change may take up to a year or two. Because this delayed the provision of service, the BOCs met with the switch vendors and now the software is written in functions so that the BOCs can make these changes themselves. It is thus incorrect to state that the BOCs cannot work closely with manufacturers or have no control over vendors. Their very size ensures they are assiduously courted by each vendor.

Despite this working relationship, the proponents of this legislation allege that the full competitive might of the BOCs could be used much more extensively to increase our economic strength. They further argue that the regulators can control any anticompetitive problems, despite the fact that the regulators have never been able to do so. They contend that regulators have new tools at their disposal. Since these safeguards are fundamental, they should be explored more fully. Once they are, it is again clear that they are not sufficient.

SAFEGUARDS

While the BOCs may argue that their bottleneck strength is rapidly eroding, no other party—not even among their supporters in the Government—believes this to be the case.⁸ Four years ago in its first triennial review of MFJ, DOJ found that the BOC's carried 99.99 percent of all interexchange access traffic in their service areas. While there has been some growth in local exchange competition, the fact remains that except for some of the largest global businesses in metropolitan areas, users are still totally dependent

⁶ Bellcore, *Digest of Technical Information*, January, 1989, pp. 1-4.

⁷ For a more complete discussion of the interaction between the BOCs and equipment vendors, see the Testimony of Michael J. Birck, chairman, Telecommunications Industry Association, Senate Subcommittee on Communications Hearings on S. 173, February 28, 1991, and S. 1981, May 9, 1990, pp. 14-19.

⁸ See, for example, *The Geodesic Network, 1987 Report on Competition in the Telephone Industry*, Department of Justice (Huber Report), Chapter 2.

on local exchange companies for telephone service. New technologies are making competition in the local exchange technically possible, but competition does not yet exist. Were competition in the local exchange a reality, then there would be no basis for maintaining the manufacturing restriction on the BOC's.⁹

There is no real dispute that by permitting the BOC's to enter restricted markets in the absence of competition, they would have the same type of vertical monopoly structure that gave birth to DOJ suit against AT&T and many private anti-trust suits. This might also subject ratepayers to higher rates if adequate protections are not instituted. Are any remedies sufficient to protect against these anti-trust concerns while permitting entry?

There are two general types of anti-competitive conduct by the BOC's that must be addressed. First, they may cross-subsidize these new ventures. It is likely that new ventures, especially those now restricted, would share corporate resources, both people and telephone plant, with local telephone operations. The costs of these resources may be capable of being allocated specifically to each activity, but in many cases they will not. There is then the potential for some of these shared costs to be picked up in a greater proportion than proper by the ratepayer, giving rise to predatory pricing. For example, how should we allocate the costs of research that spawns innovations in both basic telephone services and unregulated equipment manufacturing? What about administrative overhead, such as legal services? What about a telephone switch that provides various functions?

Second, the local telephone companies may give preferential treatment to their own ventures. Such preferences may take the form of advance notice of new products, services, or standards. It may involve use of existing customer information. Competitors may find themselves with a lesser grade of interconnection or with slower service. These and other types of preferences comprise a host of ways for competitors to be unfairly discriminated against.

CROSS-SUBSIDIZATION

In regard to the matter of cross-subsidization, the BOC's claim that they can construct a proper scheme of accounting for these common costs such that the ratepayer would not be harmed. The FCC, after many years of examining this matter, has finally established rules for such an accounting scheme.¹⁰ At the Committee's May 1990 hearing on S. 1981, the Chairman of the FCC stated that these rules are in place and are working and that these rules require annual independent audits to ensure compliance with the rules. The true value of these rules, however, is very limited.

At the outset, it is questionable whether the FCC rules correctly allocate these common costs between regulated telephone operations and unregulated ventures. No one can deny that some of these allocation rules are arbitrary. Because they have been in

⁹ In fact, several states have statutes that provide exclusive franchise for local exchange service. Two States, Michigan and Colorado, are considering adopting similar restrictions.

¹⁰ *Separation of Costs of Regulated Telephone Service from Costs of Nonregulated Activities*, FCC Docket No. 86-111, Report and Order, FCC 86-564, released February 6, 1987.

place only a short time, no one can say with certainty whether they can work.

A GAO report of a few years ago questioned whether the Commission can ever implement an effective accounting scheme. This view is shared by almost all non-BOC entities. They argue that any allocation would be by its very nature arbitrary and that these accounts are too complex to track accurately, especially by the FCC with its limited resources. In any event, even if there is a successful accounting scheme, it does not address other financial aid the telephone parent can give the new venture. For example, the parent can guarantee debt acquired by the new venture. The parent also funds other key start-up costs. In each of these instances, ratepayers might well pick up costs not attributable to local telephone service.

An elaborate description of the problems involved in detecting cross-subsidization was contained in a letter to the staff working on the 1987 Huber report on behalf of the Telecommunications Committee on the Western Conference of Public Service Commissions:

The presence or extent of cross-subsidy is obscured by the following three phenomena: cost allocation factors, indirect subsidies, and the shifting of risk from competitive to monopoly ventures . . .

. . . the nature of joint and common costs is such that they cannot be associated with particular services on the basis of cost causation. Conventional practice has used cost allocation factors in a fully distributed cost study to allocate joint and common costs to the various services . . . The absence of a consensus on these cost allocation factors precludes state commissions from having confidence that cross-subsidization has been effectively prevented.

. . . [Indirect subsidies occur] when an intangible asset is developed in the utility business—often at considerable expense to monopoly ratepayers—and the benefit of the intangible asset is effectively transferred to a non-utility line of business. This sort of transfer occurs when an affiliate is allowed access to the utility's pool of highly trained and experienced personnel, and when it is able to rely upon the utility's name and reputation of marketing information and usage patterns—all without proper compensation.

. . . it may happen that competitive lines of business into which utilities diversify are inherently more risky than the franchised, monopoly utility operations. If that is the case, the diversified company's cost of capital will rise as a direct consequence of the diversification. If no adjustment is made, the utility subsidizes its affiliate by bearing a portion of the risk of the affiliate's line of business. Unfortunately, there is no consensus—either among regulators, utilities, or the professions—on methods for calculating the magnitude of this subsidy and removing its effect from the utility's proper share of aggregate costs.

There is then no reason to believe the FCC has finally crafted rules that properly allocate these common costs between regulated

and unregulated activities so as to preclude cross-subsidization. But, even assuming they do, there are two additional significant weaknesses in relying on these rules. First, they do not apply to the states, which control most of the BOC costs. Second, they cannot be adequately enforced.

The FCC's common cost rules only apply to activities controlled by the Commission, that is, activities over the facilities used for interstate telephone calls. But, about three-quarters of the facilities (and costs) of the telephone company are not used for interstate calls. The states control activities over these facilities. The states, however, do not have to follow the FCC's rules; and few have comparable rules for the allocation of common costs. In addition to the lack of effective oversight in many states, because each BOC is in many states and because there is some flexibility in locating facilities and operations, they have some ability to avoid those few states with strict regulations.

While the FCC's independent audit requirement helps ensure that whatever is on the accounting ledgers complies with the common cost rules, it does little more. Some agency not only needs to check on the independent audits but has to look behind the ledgers. There are at least four reasons for more careful oversight: each BOC (1) adopts its own cost manual, (2) chooses its own cost allocation procedures, (3) selects its own auditors, and (4) uses its own reporting categories and terminology. The FCC has assured us they will carry out this task; however, the GAO recently indicated that the FCC has only enough resources to audit fully each major telephone company once every 16 years.

Both the FCC Chairman and the Chairman of BellSouth claimed at the Committee's hearing that the GAO figure is misleading and they pointed to the success of the recent FCC audit of NYNEX Material Enterprises. They claim that a full audit is rarely required and that selective enforcement is effective.

There are two major problems with this interpretation. First, the actions of NYNEX occurred about five years ago, and it was not until a short time ago that the FCC ruled on this matter. While FCC enforcement after such a long time may make the ratepayer whole, it does nothing for competing equipment providers. There is no way to make up for lost sales, especially when competition is stiff and margins are slim. Slow enforcement for these competitors is tantamount to no enforcement.

Second, selective enforcement only works when the auditors know what area to target. How did this work with respect to the NYNEX audit? The FCC acted only after disclosures were made to the "Boston Globe." So, the Commission was not in the posture of aggressively auditing or looking for problems. It was initially passive. As anyone knows, disclosures of the type in the NYNEX case are rare. It is at best misleading for the FCC to portray its policies as successful based on this case. It is more an example of regulation by good fortune. This is hardly a policy for the long run.

The FCC Chairman and the BOCs have also argued that the regulators are turning away from rate of return regulation and changing to price based on incentive regulation and that this will lessen the opportunities for cross-subsidization. First of all, rate regulation will always serve as a basis for overseeing the regulated tele-

phone companies. Even under the FCC's price cap approach, the BOCs will be regularly evaluated to determine whether their earnings are excessive. In addition, if the BOCs ever find themselves underearning, they will seek changes in the regulations. This, in fact, occurred recently in New York where New York Telephone sought changes in its incentive plan when it found it was underearning by hundreds of million dollars. Second, whether this incentive regulation will be successful in lessening cross-subsidization depends entirely on how the plan is constructed. The FCC's proposal for the BOCs groups too many different services together and thus will not provide little protection. At the state level, the approaches tried so far are either short-term contracts that can be changed or complete deregulation (thus no control) of certain service offerings.

The best way to sum up all of these problems with policing cross-subsidization is to turn to a 1990 statement by FCC Commissioner Barrett—the only Commissioner who has also been a state regulator: "I contend there's a distinct possibility that there's not a regulatory body in the country that would recognize a cross-subsidy if it smacked them in the face."¹¹ There is simply no reason to have any faith that regulators can solve this problem. They have never had this ability; they have not acted to change this fact.

DISCRIMINATION AND PREFERENTIAL TREATMENT

As for the matter of preferential treatment, the BOC's claim that the FCC and state regulators can impose certain rules of conduct that will prevent such activities. The FCC, for example, has rules that require the disclosure of network information and the protection of telephone customer information from improper release. These rules, however, provide little solace for competitors; there continue to exist opportunities for preferential treatment that are too numerous for any regulatory body to police effectively.

At the outset, the supporters of this legislation argue that the world has changed: There are now seven companies, instead of one, and the market is global, not domestic. These supporters then go to argue that an equipment firm could not be successful selling just to itself and that this would aid detection. To begin with, there is a fundamental flaw in these arguments; the MFJ assumed this to be the case and still believed that the prohibitions on BOC activities were necessary even with the break-up of AT&T. That is because the MFJ is based on the BOCs' control of local exchange bottlenecks, and there is no doubt that the BOCs' control remains as great today.

While there are now seven companies, each company has a monopoly in its operating region (about 12 percent of the U.S. market). There is no question that this market power is sufficient to translate into total control over smaller equipment vendors. It will also translate into greatly increased leverage over even the largest vendors. In fact, the Department of Justice in its filing in the First Triennial Review of the MFJ admits that if the manufacturing restriction were lifted, each BOC could satisfy all or nearly

¹¹ *Communications Daily*, March 5, 1990, p. 1.

all of its equipment needs from its own manufacturing affiliate.¹² The Huber Report for the Department "(The Geodesic Network, 1987 Report on Competition in the Telephone Industry)" estimates that in-house purchases by each BOC will foreclose anywhere from five to fifteen percent (and for some items as much as 20 percent) of the U.S. equipment market.¹³ Under traditional antitrust analysis, serious competitive concerns are raised when as low as seven or eight percent of a market is foreclosed as the result of leveraging by a regulated utility. Consequently, the BOCs even in this new incarnation continue to pose a substantial threat to competition if they become vertically integrated, and the facts demonstrate that this threat is not diminished by regulatory oversight.

For regulatory oversight of discrimination to be successful, there must be similar prices for similar products (the so-called benchmarks). It should be noted first that the FCC had benchmarks prior to divestiture—in companies like GTE and United—but was unable to police anticompetitive acts. Second, benchmarks only work if there are outside sales. However, there is no certainty this will occur to any great extent. In most sectors of the communications equipment market, sales to one BOC would be considered enough to ensure a firm's success. Third, the 1987 Huber Report concludes that telecommunications equipment prices for similar products can vary, sometimes greatly. For example, the Report found that prices for similar switches can vary by about 20 percent, "a competitively significant margin."¹⁴

Not only is it difficult to find similar prices, it is difficult to find similar products. Many telecommunications products behave more as "custom" items than as commodities. More importantly, even for products where price variations have not been great, the BOCs have an incentive to make every product into a "custom" product. This makes regulatory detection virtually impossible.

Even assuming that it is easy to find similar products with similar prices, FCC oversight will likely prove ineffective in policing discrimination. First, the Commission acts after the fact, after a BOC has not bought a product from a competitor. The competitor must first present a case to the Commission that he offered a similar quality product at rates, terms, and conditions that were at least as good. The Commission then must get a response from the BOC, and then investigate and weigh the evidence. In the early 1970s, a company, Datran, brought such a complaint to the FCC. Before the FCC could complete its years of investigation, Datran went bankrupt.

More recently, US West admitted to four violations of the Modification of Final Judgment, including discriminatory pricing, and agreed to pay a record fine of \$10 million (the largest civil penalty ever levied by the DOJ Antitrust Division). US West admitted to charging the GSA less for access than it charged AT&T, the competitive bidder for a GSA contract for the sale of switching equipment. This discriminatory pricing occurred between September,

¹² *Report and Recommendations of the United States Concerning the Line of Business Restrictions Imposed on the Bell Operating Companies by the Modification of Final Judgment, February 7, 1987, pp. 169-179.*

¹³ See Huber Report at 1.15, 14.8, and 14.13-14.

¹⁴ See Huber Report at 14.18.

1985 and June, 1987. In addition, US West admitted to two violations of the MFJ information services restriction and one violation of the manufacturing restriction.¹⁵

Second, every year, the BOCs enter into many thousands of equipment transactions. Even if a small percentage of these were taken to the FCC, the Commission would have to increase its resources many times over to be able to deal with them. The reality is such that these resources will simply not be expended and that effective enforcement will simply not occur.

Finally, while the FCC has adopted rules requiring disclosure of technical information, these rules make this information available only at the "make/buy" point, that is when the BOC makes the decision to procure the product. However, prior to this point, there are extensive discussions about the technical make-up of the network. If the BOCs were permitted into equipment manufacturing, they would be part of these extensive discussions, giving them a head start over the competition.

THE SEPARATE SUBSIDIARY SAFEGUARD IN S. 173

Supporters of this legislation admit that the existing regulations are insufficient to control anticompetitive acts by the BOCs. S. 173 proposes that these activities be carried out through separate affiliates with some outside financing. The purported value of these separate affiliates is that while they do not change incentives to act anticompetitively, they make these activities somewhat easier to detect.

There are two major problems with S. 173's separate affiliate approach. First, this approach was rejected by the antitrust experts in the AT&T case as insufficient. They recognized that such an approach continues to rely on regulatory oversight, and they had no indication that such oversight would ever be adequate. Second, the idea behind separate affiliates is to separate costs and activities as much as possible. S. 173 begins down this road and then turns around to permit greater commingling by the parent and the offspring in order to gain the benefits sought by this legislation. By this maneuver, the ease of detection gained through separate affiliates is greatly diminished.

Further, S. 173 as reported has been severely weakened since it was initially introduced as S. 1981 in the 101st Congress. The Bell Companies have succeeded in having several of the original safeguards removed from the bill. For instance, the original bill required the Bell Companies to manufacture out of separate subsidiaries, required them to deal with the subsidiary on an "arms-length" basis, and required the subsidiary to be "fully" separate from the telephone company. S. 173 as reported changes the subsidiary to an affiliate, and it deletes the "arms-length" and "fully separate" requirements.

In fact, S. 173 goes further by specifically adding language that allows a Bell Company affiliate to "engage in close collaboration with any manufacturer . . . during the design and development of

¹⁵ The Department of Justice agreed to drop nine other pending investigations against US West. See *U.S. v. Western Electric Co. et al.* (Civ. Action No. 82-0192/HHG), Feb. 15, 1991.

hardware, software, or combinations thereof . . ." This language specifically recognizes that a Bell telephone company can work closely with its affiliated manufacturer to the exclusion of any other manufacturer. This provision almost invites discriminatory self-dealing.

In sum, the safeguards relied upon in this legislation are chimerical. Ratepayers and competitors will have to return to the pre-MFJ days and continually go hat-in-hand to the regulators and ask for help. No one has come before us with good reason why regulators have all of a sudden gained the skills and the will necessary to do this job. Even the Chairman of the FCC appears unsure of the abilities of regulators. In his statement before the Committee in 1990, he stated, "Finally, Mr. Chairman, we should bear in mind that, while S. 173 would change limitations imposed under the 1982 AT&T consent decree, it would have no effect on the potential antitrust exposure of Bell Companies . . ." ¹⁶ Thus, the Chairman understands that regulation may not work and that the antitrust laws have an important role to play. Why then, don't we let them work? Why then, are we going down a road that will most likely lead back to where we already are?

THE PUTATIVE BENEFITS OF S. 173

Even the proponents of this legislation are convinced that some measures must be enacted to prevent anticompetitive acts by the BOCs. These proponents argue that any problems with these safeguards are more than offset by the benefits that can come from BOC entry into equipment manufacturing. It is therefore important to examine these putative benefits. In the end, they are just as imaginary as the proposed safeguards.

To begin with, the BOCs have absolutely no expertise in equipment manufacturing. They have no idea what the manufacturing process entails. They have never designed, made, sold, and serviced a product (with the exception of selling and maintaining customer premises equipment). For them to gain this expertise would take far too long, especially in today's dynamic environment. It is therefore almost certain that they will enter through acquisition, merger, and joint venture.

Likely candidates for deals with the BOCs are foreign manufacturers, all of whom are eager to sell in the American market. S. 173 correctly recognizes this threat, and the bill contains a domestic content provision. I commend the Chairman for including this provision. However, it is doubtful that the administration can accept it. Since this provision is fundamental to the objectives of this bill being achieved, I am greatly concerned that we will move this bill forward assuming that this provision will remain—when in fact it may vanish. If it does vanish, the effect of this bill will be to turn over our domestic manufacturing to foreign concerns. That would be a disaster.

Assuming the provision remains, what do the BOCs bring to the manufacturing market? First of all, the proponents argue that the

¹⁶ Statement of Alfred C. Sikcs, Chairman, FCC, Before the Senate Subcommittee on Communications, Hearing on S. 1981, May 9, 1990, p. 7.

BOCs will bring their technical expertise in transmission and networking and will be able to integrate this into the creation of new products. While there may be economies of scale in the operation of telephone networks and the creation of equipment, there is no evidence that they are so great that a vast amount of new and better products will be introduced more quickly. There is also no evidence that many of these economies are not already captured by the close working relationship of the BOCs and equipment vendors or that they could not be captured with just a few minor changes to the MFJ (that would not threaten renewed anticompetitive activity).

In addition, one man's economies are another man's cross-subsidies. Inherent in these ties between the regulated telephone activities and these new equipment activities is increased commingling and the blurring of lines. It was this very problem—that was unsolvable over seventy-five years of antitrust disputes with AT&T—that brought about the equipment prohibition in the MFJ.

The proponents also argue that the BOCs bring money. They argue that our small, high-tech firms are going under because they cannot find capital and that the BOCs can fill this void. This "BOCs as bankers" argument is somewhat puzzling. First, the capital markets in the United States are generally thought to work efficiently. Money flows fairly easily and constantly. If for some reason these markets are not working properly, we should address them directly.

Second, the BOCs do not have unlimited capital; and if they have excessive amounts, the regulators should examine whether their returns from regulated telephone operations should be lowered. With their capital, the BOCs make decisions on what can give the highest return. Today, they are investing this capital in the telephone network and overseas. They are also increasing shareholder dividends. There is no inherent reason why they would all of a sudden decide to invest in small, high-tech companies.

The proponents of this legislation next argue that by removing this prohibition on manufacturing our telecommunication trade balance will improve. While it is true that the years immediately following divestiture saw a substantial trade deficit, that trend has been reversed. Between 1989 and 1990, there was a 70 percent drop in the trade deficit in telecommunications equipment from \$2.6 billion in 1988 to only \$.8 billion in 1990. Exports completely overshadowed imports with a growth rate of 24 percent annually versus import growth of 2 percent in 1990.

Moreover, the United States continues to run a trade surplus in the higher value, telephone network products. In switching equipment used in telecommunications networks, the U.S. trade surplus increased from \$115 million in 1988 to \$710 million in 1990, an increase of over 500 percent in just two years. It is in this area of switching hardware and software that the issue of international competitiveness is most relevant and significant, for this segment requires the largest investment in capital and research and development, demands the greatest skills and knowledge about advanced technologies, and provides the greatest promises for advances in information movement and management.

We run a trade deficit in the low end consumer and customer premises equipment, which are akin to consumer electronics products. However, representatives of the BOCs who testified before the subcommittee in the 1990 and 1991 hearings testified that they do not intend to enter this lower end market on a large scale. Thus, even the passage of this bill, by the BOC's own admission, will not improve the trade deficit in lower value equipment.

The greater fear here is that the BOCs will further worsen our balance of trade. As stated above, this legislation is precariously balanced on the domestic content provision. If this provision is weakened or removed entirely, this fear is likely to become a reality as the BOCs venture with eager foreign partners.

The proponents next turn to research and development, claiming that by permitting the BOCs to manufacture, the amounts expended here will increase dramatically. First as a general matter, it is incorrect to compare the R&D expenditures of the BOCs with those of American and foreign manufacturers because the BOC's are service companies, not manufacturers. The BOC's lower level of investment is entirely consistent with the nature of their business—they provide telecommunications services, not costly telecommunications products and data processing products.

Even if such gross comparisons were appropriate, we should not rely on a single quantitative statistic as the benchmark of competitiveness. It was recently noted that:

Cultivating core competence does not mean outspending rivals in research and development. In 1983, when Canon surpassed Xerox in world wide unit market share in the copier business, its R&D budget in reprographics was but a small fraction of Xerox's. Over the past 20 years, NEC has spent less on R&D as a percentage of sales than almost all its American and European competitors.¹⁷

In addition, it must be noted that the amounts expended on R&D by domestic manufacturers have gone up steadily since divestiture. At that time, AT&T spent about \$2 billion on R&D. Today, the divested AT&T alone spends about \$3 billion. To this amount needs to be added the amount expended by the other domestic manufacturers as well as the amount expended by the BOCs and Bellcore. The total amount expended for R&D today by all domestic firms is about twice that expended at the time of divestiture. Because BOC entry would almost certainly cut into sales by existing businesses, particularly AT&T, while BOC R&D might grow, R&D for other companies—now with lower sales—would fall. In fact, it may well have the result of causing severe problems for current R&D efforts, including those by Bell Labs.

CONCLUSION

The Chairman has often stated that there's no education in the second kick of a mule. That goes for the third and fourth kicks as well; yet, we continue to show we have not learned our lesson.

¹⁷ C.K. Prahalad and Gary Hamel, "The Core Competence of the Corporation", *Harvard Business Review*, May-June 1990, p. 83.

Given the opportunity to become vertically integrated, the BOCs will use their essential facilities to undermine the competition. We have 75 years of evidence to demonstrate this point.

The proponents argue that the world has changed—that in the global marketplace, we need the BOCs to use their strength to help us compete and that on balance the regulatory safeguards are sufficient. But, we have only vague promises that the BOCs can bring to the marketplace. In contrast, we know that they will try to act to the detriment of ratepayers and competitors. The trust we put into the regulators to protect these parties is greatly misplaced. Not only have they not demonstrated they deserve our trust; but, as soon as we pass this legislation, the BOCs will be back before the regulators looking to ease existing requirements—and they will continue to press all of these regulators until this is accomplished.

No one wanted AT&T to be divested, but we let it happen, believing it would bring benefits to the public and our nation. We went through years of uncertainty and problems because of this decision. Now, we are seeing the benefits, and they are substantial. I have heard no cogent reason why this should all be undone.

Finally, I would like to point out that the telecommunications manufacturing industries opposed to S. 173 proposed a compromise that was rejected by the supporters of this legislation. I believe that the proposed compromise was a genuine effort by the opponents of this bill to try to address the concerns of the BOCs and more importantly to try to find a common ground. I believe that the public interest would be better served if the interested parties devoted some efforts to resolving their differences on this legislation.

DANIEL K. INOUE.

MINORITY VIEWS OF MR. PRESSLER

I share Chairman Hollings' goal to increase American innovation and growth in the telecommunications equipment industry, and applaud his leadership on this key issue. This legislation passed the committee by voice vote last year.

At that time, though, a number of consumer groups, senior citizens, small business organizations, and state regulators voiced concern that, because of the lack of adequate anti-competitive safeguards, some companies may abuse the freedom this legislation would give them. These groups were concerned that a BOC could use its control of the local phone market to gain an unfair advantage when it enters an unregulated line of business. They argued that higher residential telephone rates could result from a BOC's decision to underwrite with ratepayer supported capital and personnel the expenses of launching its unregulated business ventures. These groups were concerned that consumers and competitors could be harmed by having to compete against products subsidized by ratepayer funds. And detection of these practices could be made very difficult by informal agreements and "creative accounting" of huge corporations who could bury ratepayer subsidization in the books, even with the separate subsidiary and other protection devices incorporated in this bill.

These groups and individuals argued that telephone companies are a unique business. My understanding of this aspect of their concern was best summarized by U.S. District Court Judge Harold Greene's comment that:

To the extent that these companies perceive their new unregulated businesses as more exciting and more profitable than the provision of local telephone service—as they obviously do—it is inevitable that their managerial talents and financial resources will be diverted.

They point out that because telephone companies control the local telephone exchanges and are guaranteed a rate-regulated income, they have access to ratepayer funded capital and possess the market power to use against their competitors in unregulated lines of businesses. This concern is predicated on the belief that a company could effectively hide prohibited practices through informal agreements, creative accounting, or other methods.

Last year I did not object to this legislation. At that time I was not personally aware of any systematic evidence of violations or of deliberate efforts to undermine efforts to investigate ratepayer impact issues related to this legislation. However, I became concerned when I read subsequent press reports of a DOJ investigation into consent decree violations by US West, which serves my constituents in South Dakota. The investigation led to the assessment of a record \$10 million fine against US West for engaging in anti-

competitive behavior, providing information services prohibited by the consent decree, and violating the consent decree's ban on manufacturing telecommunications equipment. Part of the agreement was to drop the investigation of these and other activities under question. Because of the importance the US West case had to my state, and because of its relevance to this legislation, I tried to obtain more information as to how these practices could affect ratepayers in my state.

The nature of US West's record keeping make it impossible for regulators or government officials to prove or disprove with certainty whether violations occurred. A DOJ memorandum filed in Judge Harold Greene's U.S. District Court warned US West that: "[US West's] admitted history of noncompliance will provide a substantial basis for finding that any similar additional conduct is 'willful' and hence actionable as criminal contempt of the decree."

As a practical matter it is clear that a company of this size can frustrate legitimate investigative efforts, as I have recently learned first hand. I hold no great hope that any regulatory agency will have any better luck at receiving definitive answers in the future if US West continues its present practice of apparent stonewalling.

Because the majority of my constituents are US West ratepayers, this case is of particular concern to me. Although DOJ wisely and admirably stipulated that the \$10 million fine should come out of shareholder funds rather than ratepayers, even they acknowledged that the fungibility of money makes it impossible to insulate the consumer from paying the ultimate tab.

In addition to the potential consumer impact of the fine, I raised concerns about the ratepayer impact of US West's actions to the extent that telephone company funds, which are generated by the ratepayers, are being used to develop, market, and operate these theoretically unrelated businesses. During questioning at the Senate hearings, Mr. James Rill, Assistant Attorney General, Antitrust Division, DOJ, indicated his confidence that US West telephone companies and their employees had engaged in the activities involved in the violation of the consent decree, but had no basis on which to estimate the magnitude of ratepayer impact related to the 13 activities in question. Only US West could answer this question definitely.

I think it is important to ascertain the amount of ratepayer resources directed towards these activities. Not only would such resource diversion put ratepayer service and funds at risk, but it also would put competitors at an unfair disadvantage. And as Judge Greene notes, it can distract them from their primary mission of providing and improving basic telephone service. I contacted DOJ and the FCC to ascertain background information on this matter, and asked US West to supply information on the extent to which ratepayer funds were used in connection with the development, operations, marketing, etc., related to these activities. Understandably, neither the FCC or the DOJ are able to answer the ratepayer impact question without complete information from US West.

Despite my repeated attempts to obtain answers from US West, they responded by altogether ignoring or redefining the questions as to how much ratepayer funding was used to launch and operate the practices questioned in the DOJ lawsuit. At best, their response

can be characterized as avoiding the question; at worst it was disingenuous and misleading. For example, US West in an initial response sent to my office five boxes of paper with no organization or information describing the contents. In subsequent letters it misrepresented staff telephone conversations and later simply redefined the question so narrowly as to be—as one consumer advocate put it—“an insult to our intelligence.” Further inquiries on basic information as to how much telephone company staff time and resources were invested in developing and marketing the 13 activities questioned by DOJ were answered with “we couldn’t provide that type of information.” Yet US West went to great pains to provide spontaneously, in writing, exactly how many hours and employees it claims to have devoted to my simple, straight-forward request for information. So I find it hard to understand how a business so efficient at record keeping in one area is so incapable of keeping track of how it spends ratepayers’ resources. This uncooperative non-response makes it impossible to determine the ratepayer impact of US West actions, and gives me great concern that an unwilling corporation of this magnitude cannot be monitored sufficiently to protect its ratepayers from the abuses mentioned by consumer groups, seniors, small businesses, and others.

I am beginning to understand the frustration Judge Greene expressed in the earlier stages of this case when he noted that: “US West has been engaged in a systematic and calculated effort to frustrate the Justice Department’s legitimate demands for information, frequently by patently frivolous and usually dilatory maneuvers.”

I commend the Chairman for his efforts to include safeguards in this legislation in hopes they will prevent actions similar to those US West has undertaken. The US West experience, however, leads me to wonder whether those legislative safeguards can prevent such a huge corporation from using its local monopoly to compete unfairly, and from juggling and confusing its book work so as to make it impossible for any regulatory agency or watchdog group to adequately protect consumers. Virtually every group we contacted regarding this case voiced the unanimous opinion that US West’s response not only avoided the question but was carefully crafted to avoid supplying any meaningful information from which to conduct an independent analysis using realistic definitions and relevant data.

The bottom line here is trust and corporate accountability. My experience with most telephone companies would generally lead me to give them the benefit of the doubt, as I have done in the past. I have found the vast majority to be straightforward in their dealings. I still hope US West will be more directly responsive in the future. But my first priority is to my constituents, and they are monopoly bound to US West. My vote against this bill in Committee was based in large part on my disappointment with US West’s dilatory tactics and misrepresentations to date. Like Judge Greene I have felt frustrated in attempts to get straight answers to the questions asked. US West is our largest single telephone company, with monopoly control over most of my State. Its actions have a profound impact on the vast majority of my constituents. I will continue in my attempt to get a straight answer to my inquiry. Pend-

ing the outcome of that process, I will reserve judgment with respect to future votes on this legislation. I agree with Senator Holling's desire to move this technology forward. But we must take care to protect consumers, seniors, and small businesses in the process. I hope we can do so. But for the time being, I must reluctantly voice my opposition to this legislation based on this particular case which affects my state so profoundly.

LARRY PRESSLER.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new material is printed in italic, existing law in which no change is proposed is shown in roman):

COMMUNICATIONS ACT OF 1934

Title II of that Act

TITLE II—COMMON CARRIERS

SEC. 201-225. * * *

REGULATION OF MANUFACTURING BY BELL TELEPHONE COMPANIES

SEC. 227. (a) Subject to the requirements of this section and the regulations prescribed thereunder, a Bell Telephone Company, through an affiliate of that Company, notwithstanding any restriction or obligation imposed before the date of enactment of this section pursuant to the Modification of Final Judgment on the lines of business in which a Bell Telephone Company may engage, may manufacture and provide telecommunications equipment and manufacture customer premises equipment, except that neither a Bell Telephone Company nor any of its affiliates may engage in such manufacturing in conjunction with a Bell Telephone Company not so affiliated or any of its affiliates.

(b) Any manufacturing or provision authorized under subsection (a) shall be conducted only through an affiliate (hereafter in this section referred to as a "manufacturing affiliate") that is separate from any Bell Telephone Company.

(c) The Commission shall prescribe regulations to ensure that—

(1) such manufacturing affiliate shall maintain books, records, and accounts separate from its affiliated Bell Telephone Company which identify all transactions between the manufacturing affiliate and its affiliated Bell Telephone Company and, even if such manufacturing affiliate is not a publicly held corporation, prepare financial statements which are in compliance with Federal financial reporting requirements for publicly held corporations, file such statements with the Commission, and make such statements available for public inspection;

(2) consistent with the provisions of this section, neither a Bell Telephone Company nor any of its non-manufacturing affiliates shall perform sales, advertising, installation, production, or maintenance operations for a manufacturing affiliate; except that institutional advertising, of a type not related to

specific telecommunications equipment, carried out by the Bell Telephone Company or its affiliates shall be permitted if each party pays its pro rata share;

(3)(A) such manufacturing affiliate shall conduct all of its manufacturing within the United States and, except as otherwise provided in this paragraph, all component parts of customer premises equipment manufactured by such affiliate, and all component parts of telecommunications equipment manufactured by such affiliate, shall have been manufactured within the United States;

(B) such affiliate may use component parts manufactured outside the United States if—

(i) such affiliate first makes a good faith effort to obtain equivalent component parts manufactured within the United States at reasonable prices, terms, and conditions; and

(ii) for the aggregate of telecommunications equipment and customer premises equipment manufactured and sold in the United States by such affiliate in any calendar year, the cost of the components manufactured outside the United States contained in the equipment does not exceed 40 percent of the sales revenue derived from such equipment;

(C) any such affiliate that uses component parts manufactured outside the United States in the manufacture of telecommunications equipment and customer premises equipment within the United States shall—

(i) certify to the Commission that a good faith effort was made to obtain equivalent parts manufactured within the United States at reasonable prices, terms, and conditions, which certification shall be filed on a quarterly basis with the Commission and list component parts, by type, manufactured outside the United States; and

(ii) certify to the Commission on an annual basis that for the aggregate of telecommunications equipment and customer premises equipment manufactured and sold in the United States by such affiliate in the previous calendar year, the cost of the components manufactured outside the United States contained in such equipment did not exceed the percentage specified in subparagraph (B)(ii) or adjusted in accordance with subparagraph (G);

(D)(i) if the Commission determines, after reviewing the certification required in subparagraph (C)(i), that such affiliate failed to make the good faith effort required in subparagraph (B)(i) or, after reviewing the certification required in subparagraph (C)(ii), that such affiliate has exceeded the percentage specified in subparagraph (B)(ii), the Commission may impose penalties or forfeitures as provided for in title V of this Act;

(ii) any supplier claiming to be damaged because a manufacturing affiliate failed to make the good faith effort required in subparagraph (B)(i) may make complaint to the Commission as provided for in section 208 of this Act, or may bring suit for the recovery of actual damages for which such supplier claims such

affiliate may be liable under the provisions of this Act in any district court of the United States of competent jurisdiction;

(E) the Commission, in consultation with the Secretary of Commerce, shall, on an annual basis, determine the cost of component parts manufactured outside the United States contained in all telecommunications equipment and customer premises equipment sold in the United States as a percentage of the revenues from sales of such equipment in the previous calendar year;

(F) a manufacturing affiliate may use intellectual property created outside the United States in the manufacture of telecommunications equipment and customer premises equipment in the United States;

(G) the Commission may not waive or alter the requirements of this subsection, except that the Commission, on an annual basis, shall adjust the percentage specified in subparagraph (B)(ii) to the percentage determined by the Commission, in consultation with the Secretary of Commerce, as directed in subparagraph (E);

(4) no more than 90 percent of the equity of such manufacturing affiliate shall be owned by its affiliated Bell Telephone Company and any affiliates of that Bell Telephone Company;

(5) any debt incurred by such manufacturing affiliate may not be issued by its affiliates, and such manufacturing affiliate shall be prohibited from incurring debt in a manner that would permit a creditor, on default, to have recourse to the assets of its affiliated Bell Telephone Company's telecommunications services business;

(6) such manufacturing affiliate shall not be required to operate separately from the other affiliates of its affiliated Bell Telephone Company;

(7) if no affiliate of a Bell Telephone Company becomes affiliated with a manufacturing entity, such affiliate shall be treated as a manufacturing affiliate of that Bell Telephone Company within the meaning of subsection (b) and shall comply with the requirements of this section; and

(8) such manufacturing affiliate shall make available, without discrimination or self-preference as to price, delivery, terms, or conditions, to all local telephone exchange carriers, for use with the public telecommunications network any telecommunications equipment manufactured by such affiliate so long as each such purchasing carrier—

(A) does not either manufacture telecommunications equipment, or have a manufacturing affiliate which manufactures telecommunications equipment, or

(B) agrees to make available, to the Bell Telephone Company affiliated with such manufacturing affiliate or any of the other affiliates of such Company, any telecommunications equipment manufactured by such purchasing carrier or by any entity or organization with which such carrier is affiliated.

(d)(1) The Commission shall prescribe regulations to require that each Bell Telephone Company shall maintain and file with the Commission full and complete information with respect to the proto-

cols and technical requirements for connection with and use of its telephone exchange service facilities. Such regulations shall require each such Company to report promptly to the Commission any material changes or planned changes to such protocols and requirements, and the schedule for implementation of such changes or planned changes.

(2) A Bell Telephone Company shall not disclose to any of its affiliates any information required to be filed under paragraph (1) unless that information is immediately so filed.

(3) When two or more carriers are providing regulated telephone exchange service in the same area of interest, each such carrier shall provide to other such carriers timely information on the deployment of telecommunications equipment.

(4) The Commission may prescribe such additional regulations under this subsection as may be necessary to ensure that manufacturers in competition with a Bell Telephone Company's manufacturing affiliate have ready and equal access to the information required for such competition that such Company makes available to its manufacturing affiliate.

(e) The Commission shall prescribe regulations requiring that any Bell Telephone Company which has an affiliate that engages in any manufacturing authorized by subsection (a) shall—

(1) provide, to other manufacturers of telecommunications equipment and customer premises equipment, opportunities to sell such equipment to such Bell Telephone Company which are comparable to the opportunities which such Company provides to its affiliates;

(2) not subsidize its manufacturing affiliate with revenues from its regulated telecommunications services; and

(3) only purchase equipment from its manufacturing affiliate at the open market price.

(f) A Bell Telephone Company and its affiliates may engage in close collaboration with any manufacturer of custom premises equipment or telecommunications equipment during the design and development of hardware, software, or combinations thereof relating to such equipment.

(g) The Commission may prescribe such additional rules and regulations as the Commission determines necessary to carry out the provision of this section.

(h) For the purposes of administering and enforcing the provisions of this section and the regulations prescribed thereunder, the Commission shall have the same authority, power, and functions with respect to any Bell Telephone Company as the Commission has in administering and enforcing the provisions of this title with respect to any common carrier subject to this Act.

(i) The authority of the Commission to prescribe regulations to carry out this section is effective on the date of enactment of this section. The Commission shall prescribe such regulations within one hundred and eighty days after such date of enactment, and the authority to engage in the manufacturing authorized in subsection (a) shall not take effect until regulations prescribed by the Commission under subsections (c), (d), and (e) are in effect.

(j) Nothing in this section shall prohibit any Bell Telephone Company from engaging, directly or through any affiliate, in any manu-

facturing activity in which any Company or affiliate was authorized to engage on the date of enactment of this section.

(k) As used in this section:

(1) The term "affiliate" means any organization or entity that, directly or indirectly, owns or controls, is owned or controlled by, or is under common ownership with a Bell Telephone Company. Such term includes any organization or entity (A) in which a Bell Telephone Company and any of its affiliates have an equity interest of greater than 10 percent, or a management interest of greater than 10 percent, or (B) in which a Bell Telephone Company and any of its affiliates have any other significant financial interest.

(2) The term "Bell Telephone Company" means those companies listed in appendix A of the Modification of Final Judgment, and includes any successor or assign of any such company, but does not include any affiliate of any such company.

(3) The term "customer premises equipment" means equipment employed on the premises of a person (other than a carrier) to originate, route, or terminate telecommunications.

(4) The term "manufacturing" has the same meaning as such term has in the Modification of Final Judgment as interpreted in *United States v. Western Electric*, Civil Action No. 82-0192 (United States District Court, District of Columbia) (filed December 3, 1987).

(5) The term "Modification of Final Judgment" means the decree entered August 24, 1982, in *United States v. Western Electric*, Civil Action No. 82-0192 (United States District Court, District of Columbia).

(6) The term "telecommunications" means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received, by means of an electromagnetic transmission medium, including all instrumentalities, facilities, apparatus, and services (including the collection, storage, forwarding, switching, and delivery of such information) essential to such transmission.

(7) The term "telecommunications equipment" means equipment, other than customer premises equipment, used by a carrier to provide telecommunications services.

(8) The term "telecommunications service" means the offering for hire of telecommunications facilities, or of telecommunications by means of such facilities.



Document No. 165

ANTITRUST REFORM ACT OF 1992

AUGUST 12, 1992.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. BROOKS, from the Committee on the Judiciary,
submitted the following

R E P O R T

together with

DISSENTING AND ADDITIONAL VIEWS

[To accompany H.R. 5096]

[Including cost estimate of the Congressional Budget Office]

The Committee on the Judiciary, to whom was referred the bill (H.R. 5096) to supersede the Modification of Final Judgment entered August 24, 1982, in the antitrust action styled U.S. v. Western Electric, Civil Action No. 82-0192, United States District Court for the District of Columbia; and for other purposes, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

The amendment is as follows:

Strike out all after the enacting clause and insert in lieu thereof the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Antitrust Reform Act of 1992".

SEC. 2. AUTHORIZATION FOR BELL OPERATING COMPANY MONOPOLY TO ENTER COMPETITIVE LINES OF BUSINESS.

(a) APPLICATION.

(1) IN GENERAL.—After the applicable date specified in paragraph (2), a Bell operating company may apply to the Attorney General for authorization, notwithstanding the Modification of Final Judgment—

- (A) to engage in research and development relating to telecommunications equipment or customer premises equipment,
- (B) to provide information services,

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(C) to manufacture or provide telecommunications equipment, or manufacture customer premises equipment, or

(D) to provide interexchange telecommunications.

The application shall describe with particularity the nature and scope of each activity, and of each product market, service market, and geographic market, for which authorization is sought.

(2) **APPLICABLE DATES.**—For purposes of paragraph (1), the applicable date after which a Bell operating company may apply for authorization shall be the date of the enactment of this Act.

(3) **PUBLICATION.**—Not later than 10 days after receiving an application made under paragraph (1), the Attorney General shall publish the application in the Federal Register.

(b) **DETERMINATION BY THE ATTORNEY GENERAL.**—

(1) **COMMENT PERIOD.**—Not later than 60 days after the application is published under subsection (a)(3), interested persons may submit comments to the Attorney General regarding the application.

(2) **DETERMINATION.**—(A) After the time for comment under paragraph (1) has expired, but not later than 120 days after the application is published under subsection (a)(3), the Attorney General shall issue a written determination with respect to granting the authorization for which the Bell operating company has applied.

(B)(i) The Attorney General shall grant such authorization only to the extent that the Attorney General believes that such company would satisfy the proof requirements described in subsection (c)(2)(A)(i).

(ii) The Attorney General shall deny the remainder of the requested authorization.

(C) A determination granting any part of a requested authorization shall describe with particularity the nature and scope of each activity and of each product market, service market, and geographic market to which the authorization granted applies.

(3) **PUBLICATION.**—Not later than 10 days after issuing a determination under paragraph (2), the Attorney General shall publish the determination in the Federal Register, together with a description of the findings, studies, and analyses relied on for the determination.

(4) **FINALITY.**—The Attorney General's determination regarding an application made under this subsection shall be final unless a civil action with respect to such application is timely commenced under subsection (c)(1).

(c) **DE NOVO JUDICIAL DETERMINATION.**—

(1) **CIVIL ACTION.**—Not later than—

(A) 60 days after a determination by the Attorney General is published under subsection (b)(3), or

(B) 60 days after the expiration of the 130-day period beginning on the date the Attorney General receives an application made under subsection (a)(1),

whichever occurs earlier, the Bell operating company that applied to the Attorney General under subsection (a), or any person who might be injured in its business or property as a result of any determination regarding such company's engaging in the activity described in such company's application, may commence a civil action against the Attorney General, in any district court of the United States in the district in which such company resides or is found or has an agent, for a de novo determination regarding the application. Such company and any such person shall also have the right to intervene as a party in the civil action.

(2) **JUDGMENT.**—(A)(i) The court shall enter a judgment granting the authorization for which the Bell operating company applied to the Attorney General only to the extent that such company proves that there is no substantial possibility that such company or its affiliates could use monopoly power to impede competition in any relevant market for the activity to which the application relates.

(ii) The court shall enter a judgment denying the remainder of the requested authorization.

(B) A judgment granting any part of a requested authorization shall describe with particularity the nature and scope of each activity and of each product market, service market, and geographic market to which the authorization granted applies.

(3) **STAY.**—A judgment entered under paragraph (2) shall be stayed until the time for all appeals with respect to such judgment has expired.

(d) **SPECIAL APPLICABLE DATE.**—For purposes of subsection (a)(1), the applicable date for which a Bell operating company may apply for authorization with respect to providing interexchange telecommunications, or an information service relating to an alarm monitoring service, shall be 5 years after the date of the enactment of this Act.

SEC. 3. AUTHORIZATION AS PREREQUISITE.

(a) **PREREQUISITE.**—Until a Bell operating company is so authorized in accordance with section 2, it shall be unlawful for such company, directly or through an affiliated enterprise, to engage in an activity described in section 2(a)(1).

(b) **EXCEPTION FOR PREVIOUSLY AUTHORIZED ACTIVITIES.**—Subsection (a) shall not prohibit a Bell operating company from engaging—

(1) in any activity to the extent authorized by an order entered by the United States District Court for the District of Columbia pursuant to section VIII(C) of the Modification of Final Judgment, if—

(A) such order was entered on or before the date of the enactment of this Act, or

(B) a request for such authorization was pending before such court on the date of the enactment of this Act,

(2) in research and development in which any such company was lawfully engaged at any time in the period beginning on January 1, 1984, and ending on the date of the enactment of this Act, or

(3) in providing a specific information service (other than an information service relating to an alarm monitoring service) in a particular geographic market to the extent such company was lawfully engaged in providing such service to customers in such market at any time in the period beginning on October 7, 1991, and ending 60 days before the date of the enactment of this Act.

SEC. 4. PROHIBITIONS.

(a) **ANTICOMPETITIVE DISCRIMINATION.**—A Bell operating company with monopoly power in any exchange service market that is engaged (directly or through an affiliated enterprise) in an activity described in section 2(a)(1) shall not discriminate, in any relevant market, between itself or an affiliated enterprise and any other person, or between any two such other persons, with respect to any product or service related to the provision or use of a telecommunications service if the effect of such discrimination may be to substantially lessen competition, or to tend to create a monopoly, in any line of commerce.

(b) **ANTICOMPETITIVE CROSS-SUBSIDIES.**—A Bell operating company with monopoly power in any exchange service market shall not use (directly or indirectly) proceeds obtained from providing exchange service in such market to subsidize, in any relevant market, an activity described in section 2(a)(1).

(c) **ANTICOMPETITIVE CONCENTRATION AMONG BELL OPERATING COMPANIES.**—(1) Except as provided in paragraph (2), a Bell operating company with monopoly power in any exchange service market shall not become an affiliated enterprise of, or acquire (directly or indirectly) any exchange service assets of, another Bell operating company if the effect of such affiliation or acquisition may be to substantially lessen competition, or to tend to create a monopoly, in any line of commerce.

(2) Paragraph (1) shall not prohibit any acquisition by a Bell operating company from another Bell operating company if the 2 companies are affiliates of each other on the date of such acquisition and were affiliates of each other on the date of the enactment of this Act.

(d) **ANTICOMPETITIVE JOINT ACTIVITY AMONG BELL OPERATING COMPANIES.**—(1) Except as provided in paragraph (2), it shall be unlawful for a Bell operating company with monopoly power in any exchange service market to engage jointly (directly or through an affiliated enterprise) with another Bell operating company, in any relevant market, in an activity described in section 2(a)(1) in restraint of trade.

(2) **EXCEPTIONS.**—Paragraph (1) shall not prohibit Bell operating companies from jointly engaging in an activity—

(A) at Bell Communications Research (commonly known as “Bellcore”) if such companies were lawfully engaging in such activity at Bell Communications Research at any time in the period beginning on January 1, 1984, and ending on the date of the enactment of this Act,

(B) if such companies are affiliates of each other while jointly engaging in such activity and were affiliates of each other on the date of the enactment of this Act, or

(C) if such companies were lawfully engaging jointly in such activity on the date of the enactment of this Act.

SEC. 5. COMPLIANCE.

(a) **DUTY TO ADVISE CERTAIN MANAGEMENT EMPLOYEES OF OBLIGATIONS UNDER ACT.**—Each Bell operating company shall advise, in writing, each of its officers and other management personnel with significant responsibility for matters addressed in this Act, of the requirements of this Act, and that violations of this Act may result in criminal liability.

(b) **CERTIFICATION OF COMPLIANCE.**—Not later than 30 days after the end of each calendar year, the chief executive officer of (or another officer responsible for the operation of) each Bell operating company that is not (directly or indirectly) owned or controlled by another Bell operating company shall certify in writing to the Attorney General whether such company and its affiliates have complied throughout such year with sections 3 and 4 and with subsection (a).

SEC. 6. ENFORCEMENT.

(a) **EQUITABLE POWERS OF UNITED STATES ATTORNEYS.**—It shall be the duty of the several United States attorneys, under the direction of the Attorney General, to institute proceedings in equity in their respective districts to prevent and restrain violations of this Act.

(b) **CRIMINAL LIABILITY.**—Whoever knowingly engages or knowingly attempts to engage in an activity that is prohibited by section 3, 4, or 5 shall be guilty of a felony, and on conviction thereof, shall be punished to the same extent as a person is punished upon conviction of a violation of section 1 of the Sherman Act (15 U.S.C. 1).

(c) **PRIVATE RIGHT OF ACTION.**—Any person who is injured in its business or property by reason of a violation of this Act—

(1) may bring a civil action in any district court of the United States in the district in which the defendant resides or is found or has an agent, without respect to the amount in controversy, and

(2) shall recover threefold the damages sustained, and the cost of suit (including a reasonable attorney's fee).

The court may award under this section, pursuant to a motion by such person promptly made, simple interest on actual damages for the period beginning on the date of service of such person's pleading setting forth a claim under this Act and ending on the date of judgment, or for any shorter period therein, if the court finds that the award of such interest for such period is just in the circumstances.

(d) **PRIVATE INJUNCTIVE RELIEF.**—Any person shall be entitled to sue for and have injunctive relief, in any court of the United States having jurisdiction over the parties, against threatened loss or damage by a violation of this Act, when and under the same conditions and principles as injunctive relief is available under section 16 of the Clayton Act (15 U.S.C. 26). In any action under this subsection in which the plaintiff substantially prevails, the court shall award the cost of suit, including a reasonable attorney's fee, to such plaintiff.

(e) **JURISDICTION.**—(1) The courts of the United States shall have exclusive jurisdiction to make determinations with respect to a duty, claim, or right arising under this Act, other than a determination by the Attorney General under section 2(b)(2).

(2) No action commenced to assert or enforce a duty, claim, or right arising under this Act shall be stayed pending any such determination by the Attorney General.

(f) **SUBPOENAS.**—In an action commenced under this Act, a subpoena requiring the attendance of a witness at a hearing or a trial may be served at any place within the United States.

SEC. 7. DEFINITIONS.

For purposes of this Act:

(1) **AFFILIATE.**—The term "affiliate" means a person that (directly or indirectly) owns or controls, is owned or controlled by, or is under common ownership or control with, another person. For purposes of this paragraph, to own refers to owning an equity interest (or the equivalent thereof) of more than 50 percent.

(2) **AFFILIATED ENTERPRISE.**—The term "affiliated enterprise" means, with respect to a Bell operating company, a person—

(A) that such company or its affiliate (directly or indirectly) owns or controls, is owned or controlled by, or is under common ownership with, to any extent whatsoever, or

(B) in whose gross revenues such company or its affiliate has any direct or indirect financial or proprietary interest, through a revenue sharing arrangement, royalty arrangement, or otherwise.

(3) **ANTITRUST LAWS.**—The term "antitrust laws" has the meaning given it in subsection (a) of the first section of the Clayton Act (15 U.S.C. 12(a)), except that such term includes the Act of June 19, 1936 (49 Stat. 1526; 15 U.S.C. 13 et seq.),

commonly known as the Robinson Patman Act, and section 5 of the Federal Trade Commission Act (15 U.S.C. 45) to the extent that such section 5 applies to monopolies, attempts to monopolize, and unlawful restraints of trade.

(4) **BELL OPERATING COMPANY.**—The term “Bell operating company” means—

(A) Bell Telephone Company of Nevada, Illinois Bell Telephone Company, Indiana Bell Telephone Company, Incorporated, Michigan Bell Telephone Company, New England Telephone and Telegraph Company, New Jersey Bell Telephone Company, New York Telephone Company, US West Communications Company, South Central Bell Telephone Company, Southern Bell Telephone and Telegraph Company, Southwestern Bell Telephone Company, The Bell Telephone Company of Pennsylvania, The Chesapeake and Potomac Telephone Company, The Chesapeake and Potomac Telephone Company of Maryland, The Chesapeake and Potomac Telephone Company of Virginia, The Chesapeake and Potomac Telephone Company of West Virginia, The Diamond State Telephone Company, The Ohio Bell Telephone Company, The Pacific Telephone and Telegraph Company, or Wisconsin Telephone Company,

(B) any successor or assign of any such company, or

(C) any affiliate of any person described in subparagraph (A) or (B).

(5) **CUSTOMER PREMISES EQUIPMENT.**—The term “customer premises equipment” means equipment employed on the premises of a person (other than a person engaged in the business of providing a telecommunications service) to originate, route, or terminate telecommunications, and includes software relating to such equipment.

(6) **ELECTRONIC PUBLISHING.**—The term “electronic publishing” means the provision via telecommunications, by a Bell operating company or affiliated enterprise to a person other than an affiliate of such company, of information—

(A) which such company or affiliated enterprise has, or has caused to be, originated, authored, compiled, collected, or edited, or

(B) in which such company or affiliated enterprise has a direct or indirect financial or proprietary interest.

(7) **EXCHANGE AREA.**—The term “exchange area” means a contiguous geographic area established by a Bell operating company such that no exchange area includes points within more than 1 standard metropolitan statistical area, consolidated statistical area, or State, except as expressly permitted under the Modification of Final Judgment before the date of the enactment of this Act.

(8) **EXCHANGE ACCESS.**—The term “exchange access” means exchange services provided for the purpose of originating or terminating interexchange telecommunications.

(9) **EXCHANGE SERVICE.**—The term “exchange service” means a telecommunications service provided within an exchange area.

(10) **INFORMATION.**—The term “information” means knowledge or intelligence represented by any form of writing, signs, signals, pictures, sounds, or other symbols.

(11) **INFORMATION ACCESS.**—The term “information access” means specialized exchange services provided by a Bell operating company for the purpose of originating, terminating, transmitting, forwarding, or routing telecommunications to or from a provider of information services.

(12) **INFORMATION SERVICE.**—The term “information service” means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include the use of any such capability to engage in the business of providing an exchange service.

(13) **INTEREXCHANGE TELECOMMUNICATIONS.**—The term “interexchange telecommunications” means telecommunications between a point located in an exchange area and a point located outside such exchange area.

(14) **MODIFICATION OF FINAL JUDGMENT.**—The term “Modification of Final Judgment” means the order entered August 24, 1982, in the antitrust action styled U.S. v. Western Electric, Civil Action No. 82-0192, in the United States District Court for the District of Columbia, and includes any judgment or order with respect to such action entered on or after August 24, 1982.

(15) **PERSON.**—The term “person” has the meaning given it in subsection (a) of the first section of the Clayton Act (15 U.S.C. 12(a)).

(16) **RESEARCH AND DEVELOPMENT.**—The term “research and development” means—

(A) theoretical analysis, experimentation, or systematic study of phenomena or observable facts,

- (B) development or testing of basic engineering techniques,
- (C) extension of investigative findings or theory of a scientific or technical nature into practical application for experimental or demonstration purposes, but does not include production or testing of models or prototypes,
- (D) collection or analysis of research information,
- (E) establishment or operation of facilities for conducting any activity included under subparagraph (A), (B), (C), or (D), or
- (F) prosecution of applications for patents, or the granting of licenses, for the results of any such activity.

(17) **TELECOMMUNICATIONS.**—The term “telecommunications” means the transmission of information between points by electromagnetic means.

(18) **TELECOMMUNICATIONS EQUIPMENT.**—The term “telecommunications equipment” means equipment, other than customer premises equipment, used to provide a telecommunications service, and includes software relating to such equipment.

(19) **TELECOMMUNICATIONS SERVICE.**—The term “telecommunications service” means the offering for hire of transmission facilities or of telecommunications by means of such facilities.

(20) **TRANSMISSION FACILITIES.**—The term “transmission facilities” means equipment (including wire, cable, microwave, satellite, and fiber-optics) that transmits information by electromagnetic means or that directly supports such transmission, but does not include customer premises equipment.

SEC. 8. RELATIONSHIP TO OTHER LAWS.

(a) **MODIFICATION OF FINAL JUDGMENT.**—This Act shall supersede the Modification of Final Judgment, except that this Act shall not affect—

(1) section I of the Modification of Final Judgment, relating to AT&T reorganization,

(2) section II(A) (including Appendix B) and II(B) of the Modification of Final Judgment, relating to equal access and nondiscrimination,

(3) section IV(F) and IV(I) of the Modification of Final Judgment, with respect to the requirements included in the definitions of “exchange access” and “information access”,

(4) section VIII(B) of the Modification of Final Judgment, relating to printed advertising directories,

(5) section VIII(E) of the Modification of Final Judgment, relating to notice to customers of AT&T,

(6) section VIII(F) of the Modification of Final Judgment, relating to less than equal exchange access,

(7) section VIII(G) of the Modification of Final Judgment, relating to transfer of AT&T assets, including all exceptions granted thereunder before the date of the enactment of this Act,

(8) with respect to the parts of the Modification of Final Judgment described in paragraphs (1) through (7)—

(A) section III of the Modification of Final Judgment, relating to applicability,

(B) section IV of the Modification of Final Judgment, relating to definitions,

(C) section V of the Modification of Final Judgment, relating to compliance,

(D) section VI of the Modification of Final Judgment, relating to visitorial provisions,

(E) section VII of the Modification of Final Judgment, relating to retention of jurisdiction, and

(F) section VIII(I) of the Modification of Final Judgment, relating to the court’s sua sponte authority.

(b) **ANTITRUST LAWS.**—Nothing in this Act shall be construed to modify, impair, or supersede the applicability of any other antitrust law.

(c) **FEDERAL, STATE, AND LOCAL LAW.**—(1) Except as provided in paragraph (2), this Act shall not be construed to modify, impair, or supersede Federal, State, or local law other than law expressly referred to in this Act.

(2) This Act shall supersede State and local law to the extent that such law would impair or prevent the operation of this Act.

(d) **CUMULATIVE PENALTY.**—Any penalty imposed, or relief granted, under this Act shall be in addition to, and not in lieu of, any penalty or relief authorized by any other law to be imposed with respect to conduct described in this Act.

SEC. 9. AMENDMENT TO DEFINITION OF ANTITRUST LAWS APPEARING IN THE CLAYTON ACT.

Subsection (a) of the first section of the Clayton Act (15 U.S.C. 12(a)) is amended by inserting "the Antitrust Reform Act of 1992;" after "thirteen;"

EXPLANATION OF AMENDMENT

Inasmuch as H.R. 5096 was ordered reported with a single amendment in the nature of a substitute, the contents of this report constitute an explanation of that amendment.

SUMMARY AND PURPOSE

A. INTRODUCTION

H.R. 5096, the "Antitrust Reform Act of 1992," would simply codify the antitrust entry test of the Consent Decree which settled the Justice Department's 1974 antitrust suit by divesting the competitive lines of telecommunications business from the old consolidated Bell System.¹ The 1982 AT&T Consent Decree, also known as the Modification of Final Judgment ("MFJ"), thus created the framework for a competitive environment in which the divested lines of business could finally flourish free of the coercive and market-distorting effects of the underlying local exchange monopoly.

In preserving the vitality of the antitrust principles underlying the MFJ, the legislation merely transfers from the courtroom to the statute books the antitrust test under which the regional Bell telephone monopolies may engage in manufacturing telecommunications equipment, providing information services, and providing long distance (interexchange) services. However, it is carefully drafted not to interfere with or in any way alter the existing regulatory framework in place to oversee non-antitrust aspects of the telecommunications industry.

It is now abundantly clear that, under the MFJ, these lines of business have flourished since their separation from the Bell System. Nevertheless, the antitrust laws have never functioned as a shield to be used to protect any particular competitors; they are in place only to ensure that competition is safeguarded in the distinctive American free-enterprise system.² For that reason, H.R. 5096 would codify a mechanism to encourage entry by the Bell operating companies into these restricted markets as soon as antitrust considerations permit.

For over 80 years, the antitrust laws have co-existed with the telecommunications regulatory apparatus as an independent and essential element of congressional policy. Certainly, the regulatory apparatus plays the central role in overseeing the day-to-day technical complexities of the telecommunications industry. But overarching these telecommunications industry specifics is the larger picture of competitive vigor at the market level. It is at this level where antitrust has functioned as the ultimate guarantor of product and service diversity and price competition to the benefit of the

¹ *United States v. American Tel. and Tel. Co.*, 552 F. Supp. 131 (D.D.C. 1982), *aff'd mem. sub. nom. Maryland v. United States*, 460 U.S. 1001 (1983) [hereinafter *MFJ Opinion*].

² *Brown Shoe Co. v. United States*, 370 U.S. 294, 320 (1962) (antitrust laws were enacted for "the protection of competition, not competitors").

American consumer.³ In this sense H.R. 5096 functions precisely in the same manner as the antitrust merger statutes, which are complementary to—but independent of—other regulatory procedures found in such diverse agencies as the Securities and Exchange Commission and the Federal Reserve.

The 1974 antitrust enforcement action was not the first time the Justice Department found it necessary to invoke the Sherman Act in order to strike out against monopolistic practices of the Bell System. Twice before in this century, the Sherman Act was also enlisted to root out anticompetitive evils in an industry that was neither open nor free-moving.⁴ Both in 1913 and 1949, as in 1974, the Justice Department commenced Sherman Act litigation after a crisis developed in the regulatory process in the face of clearly anticompetitive activities of a completely entrenched monopoly entity.⁵

Unfortunately, the first two Sherman Act enforcement actions were ultimately undercut by a loss of nerve at the political levels of the Federal Government in the face of intense political pressure brought to bear by the Bell System. In the 1913 case, the structural relief obtained was soon officially nullified; in the 1949 case, the structural relief sought was abandoned entirely. In both cases, the responsibility for reining in the Bell System's monopolistic tendencies was surrendered to the regulatory apparatus, accompanied by solemn professions of faith in a new-found regulatory capability and resolve.⁶

When the MFJ was approved in 1982, there was hope that this frustrating cycle had finally been broken and that the Sherman Act would be allowed to work as intended. Under the MFJ, AT&T agreed to divest its local monopoly telephone operations so that the competitive markets in which it was engaged would not be tied to the monopoly structure. To ensure that the divested local Bell telephone monopolies would not re-create the past problems of unfair exploitation of monopoly ownership of access to the local telephone lines, the MFJ reinforced the divestiture by forbidding the Bells from providing information services, manufacturing telecommunications equipment, or providing long distance services—all competitive functions dependent on access to the local telephone system. A Bell monopoly could remove these restrictions upon showing that there was “no substantial possibility that it could use its monopoly power to impede competition in the market it seeks to enter.”⁷ Before the MFJ took effect in 1984, the presiding judge, Harold Greene, permitted the 22 local Bell monopolies to recombine into seven regional Bell holding companies (RBOCs), creating seven

³ The benefits of free-market competition for consumers, and the detrimental effect of monopolism, was observed by no less an authority on the free market than Adam Smith:

The price of monopoly is upon every occasion the highest which can be got. The natural price, the price of free competition, on the contrary, is the lowest which can be taken. . . . The one is upon every occasion the highest which can be squeezed out of the buyers. . . . The other is the lowest which the sellers can commonly afford to take, and at the same time continue their business.

Adam Smith, *Wealth of Nations* 61 (Modern Lib. ed. 1937).

⁴ *United States v. AT&T* (D. Or. 1914) (consent decree entered March 26); *United States v. Western Elec. Co.*, 1956 Trade Cas. (CCH) ¶68,246 (D.N.J. January 24, 1956).

⁵ See *infra* text accompanying notes 96–111, 134–43, 193–228.

⁶ See *infra* text accompanying notes 112–17, 144–77.

⁷ *MFJ Opinion*, *supra* note 1, 552 F. Supp. at 225. See *infra* text accompanying notes 252–253.

dominant regional monopolies where a monolithic nationwide monopoly had existed before.⁸

The MFJ set in place a competitive market structure in which competition has never been more vigorous and which has provided one of the strongest engines of economic growth and job creation at a time when the overall economy has been generally stagnant.⁹ The American consumer now enjoys a wider selection of telecommunications goods and services than has ever existed and, in accordance with basic antitrust principles, is the ultimate beneficiary of market-driven price competition. In this sense, the consequences of the AT&T Antitrust Consent Decree are precisely the procompetitive effects that would be predicted in a free market system safeguarded by the antitrust laws.

Eight years of relentless and pervasive political and public relations pressure by the Bell monopolies, however, has begun to take its toll on the integrity of the MFJ's competitive market structure. Judge Greene has now been compelled by an appellate panel—premised on a procedural quirk,¹⁰ but reflecting a fundamental disregard for the respective roles of the Justice Department and the courts under the antitrust laws and the Constitution¹¹—to cast aside the MFJ's restriction against Bell monopoly entry into the information services market, despite his conviction that:

the most probable consequences . . . will be the elimination of competition . . . and the concentration of the sources of information of the American people in just a few dominant, collaborative conglomerates, with the . . . local telephone monopolies as their base.¹²

The judge's decision is now on appeal. Meanwhile, the Bell monopolies are working to build congressional support for removing the manufacturing and long distance restrictions as well, promising that the regulatory apparatus will fill any gap left by removal of the MFJ's structural protection.

The unraveling of the MFJ's competitive structure is causing extreme uncertainty and instability in this trillion-dollar industry.

⁸ *United States v. Western Elec. Co.*, 569 F. Supp. 1057 (D.D.C. 1983). See *infra* text accompanying note 255.

⁹ See *infra* text accompanying notes 262-77, 371, 383.

¹⁰ See *infra* text accompanying notes 331-332.

¹¹ H.R. 5096 serves an important purpose in congressional intent regarding the Antitrust Procedures and Enforcement Act (the "Tunney Act"). This law, which was enacted in 1974, was designed to ensure that the Federal judiciary performed an independent role in reviewing and scrutinizing antitrust consent decrees. The Tunney Act was enacted as a result of Judiciary Committee and Congressional concerns that undue political influence was improperly affecting the disposition of large antitrust cases. (For example, the Committee was particularly concerned about the unusual and suspicious circumstances surrounding the final negotiations surrounding the 1956 AT&T consent decree.)

In the Department's 1974 Sherman Act action, the Federal trial court held extensive Tunney Act proceedings. Consistent with its Tunney Act mandate, the court retained jurisdiction to review decree alterations and motions to remove the line-of-business restrictions. Unfortunately, but perhaps not surprisingly, political influence has been exercised in a manner aimed at having the Department reverse its position on the MFJ—and by so doing, renounce the very basis of the antitrust case. At the urging of the Department, the D.C. Circuit issued an opinion which had the effect of removing the Federal courts from many MFJ line-of-business deliberations. This opinion is at odds with separation-of-powers principles and the 100-year history of the antitrust laws, as expressed through the Tunney Act. The D.C. Circuit decision strikes at the very heart of the Nation's antitrust laws, and it is imperative that the proper roles of the Department and the Judiciary be clarified yet again by the Congress. See *infra* text accompanying notes 178-92, 333-34.

¹² *United States v. Western Elec. Co.*, 767 F. Supp. 308, 326 (D.D.C. 1991).

The thousands upon thousands of competitive enterprises now thriving in information service, telecommunications equipment, and long distance markets face the prospect of their future prosperity being decided by the self-interested designs of a monopoly with "bottleneck" control over the local telephone exchange on which they all depend.¹³ This is precisely the problem the 1974 Justice Department action and the MFJ sought to prevent.

H.R. 5096 embodies a firm resolve by the Judiciary Committee that the Government not lose its nerve once again and allow an industry born in monopoly to be reborn in monopoly. For the sake of the democratic economic and political values which depend on the preservation of free markets,¹⁴ it is imperative that Congress step in to reaffirm the basic competitive structure of the MFJ. Nothing less than a continuation of the strong antitrust foundation will secure a telecommunications marketplace in which the American people can be confident that they will be able to make choices on the basis of quality and price. Only in this environment will the best competitors have a fair chance to prosper. The Committee specifically intends that these competitors will eventually include the Bells—as soon as, but no sooner than, their entry is possible without unacceptably endangering the free market environment.

H.R. 5096 preserves the principles of the Sherman Act and the competitive structure established under the MFJ, while responding to the Bells' desire for a fresh consideration of the MFJ's specific line-of-business restrictions.¹⁵ The bill removes those restrictions from the jurisdiction of Judge Greene's court and places them in a statutory framework under which the Bell monopolies may apply to the Attorney General for entry into a restricted line of business.¹⁶ Applications are reviewed under a competitive entry test

¹³ A few small equipment manufacturers, perceiving it in their self-interest to be absorbed into the economic orbit of the Bells' monopoly power, have thrown their lot with the Bells. And various segments of society have fallen sway to the Bells' siren song proclaiming that their entry will somehow make these markets *more* competitive, that they are somehow in a unique position to offer new products and services that a robustly competitive market has thus far, curiously, been unable to provide.

¹⁴ The threat of the monopolist to political freedom as well as economic independence is well known. *See, e.g., Eleanor M. Fox, The Sherman Act and the World: Let Freedom Ring*, 59 *Antitrust L.J.* 109 (1990).

Justice Harlan recounted the widespread public concern regarding industrial monopolization which led to enactment of the Sherman Act in 1890:

All who recall the condition of the country in 1890 will remember that there was everywhere, among the people generally, a deep feeling of unrest. The Nation had been rid of human slavery—fortunately, as all now feel—[but] the conviction was universal that the country was in danger from another kind of slavery sought to be fastened on the American people, namely, the slavery that would result from aggregations of capital in the hands of a few individuals and corporations controlling, for their own profit and advantage exclusively, the entire business of the country, including the production and sale of the necessaries of life. Such a danger was thought to then be imminent, and all felt that it must be met firmly and by such statutory regulations as would adequately protect the people against oppression and wrong.

Standard Oil Co. of New Jersey v. United States, 221 U.S. 1, 83-84 (1911) (Harlan, J., concurring and dissenting).

¹⁵ For a more detailed description of the bill, *see infra* text accompanying note 467, and *infra* Part VI: Section-by-Section Analysis.

¹⁶ For the long distance and alarm security information service markets, the Bells are eligible to apply for entry after a five-year transition period. This transition period is designed to provide appropriate notice before dramatic changes are made in the competitive structure of these two sensitive lines of business. A two-year transition period for equipment manufacturing and information services (other than alarm monitoring services), and a five-year transition period for electronic publishing, were removed during Committee markup by a vote of 18 to 15. As a result, the Bells are eligible to apply for entry into these markets immediately. *See infra* Part V(E): Markup of H.R. 5096.

which assesses whether there is still a substantial risk that monopolistic abuse would result from Bell entry. The test and application procedure, while lifted from the MFJ, include refinements designed to maximize opportunities for Bell entry by encouraging the Bells to focus their efforts where the test is most likely to be met, and by encouraging all parties to work toward accommodation whenever possible.¹⁷

In reporting this antitrust legislation, the Committee does not intend, or imply by indirection, that the Federal Communications Commission and State regulatory bodies should not continue to play their important role in overseeing the operation of the multifaceted telecommunications industry. H.R. 5096 in no way diminishes or constrains the province of these bodies as the appropriate implementers of regulatory policy developed in other Committees of Congress with jurisdiction over non-antitrust telecommunications regulatory policy. Thus, H.R. 5096 is carefully drafted to deal only with the antitrust policy implicated in the structural injunctions set forth in the MFJ. To this effect, the bill includes an explicit savings clause for all other Federal laws.

B. THE CASE FOR H.R. 5096

During the Subcommittee's examination of the MFJ and the history of competition policy in the telecommunications industry, several recurring patterns became apparent. First is the pattern of deferring to the regulatory process until a competitive crisis reveals its fundamental shortcomings. Second is the pattern of resorting in such crisis to Sherman Act antitrust action to free the marketplace from the Bell System's monopolistic chokehold. Third is the pattern of reverting to oblivious reliance on the regulatory process in lieu of sustained antitrust enforcement. Fourth is the pattern of realization that continuing congressional oversight is essential to ensure that vigorous antitrust enforcement is not compromised. And fifth is the pattern of unremitting effort by the Bell System to undermine public and congressional support for sustained antitrust enforcement through a litany of canards about its destructive effects on the telecommunications industry and about the multiplicity of societal "benefits" to be derived from unleashing the Bell monopoly to serve its self-appointed role as the handmaiden of technological progress.

The Bells monopolies' reaction to H.R. 5096 is all-too-consistent with this pattern. Although H.R. 5096 is designed to *facilitate* entry by the Bell monopolies into the restricted markets in accordance with competitive considerations, the Bells are pressing for no less than unconditional surrender of the MFJ restrictions. In furtherance of this objective, a number of myths and distortions have been leveled against the bill. They are addressed briefly here, and in more detail throughout the body of this report.

¹⁷ See *infra* text accompanying note 467 and *infra* Part VI: Section-by-Section Analysis.

The bill also contains four prohibitions, based on the antitrust statutes and the antitrust principles underlying the MFJ, which apply after Bell entry into competitive telecommunications-related markets, for so long as the Bell company continues to have monopoly power. The prohibitions are against anticompetitive discrimination, anticompetitive cross-subsidies, anticompetitive recombination among the Bell monopolies, and anticompetitive joint activity among the Bell monopolies.

1. Role of antitrust law

The Bell monopolies claim that H.R. 5096 places telecommunications policy in the courts under antitrust law, instead of in the regulatory bodies where it rightfully belongs. But the bill in no way intrudes into telecommunications policy or into the province of telecommunications regulators. H.R. 5096 deals only with the core Sherman Act antitrust concern of preserving the competitive framework of the telecommunications marketplace. Experience has demonstrated repeatedly that the regulatory apparatus is incapable of protecting a competitive marketplace against the determined resistance of a colossal monopoly.¹⁸ Likewise, the antitrust laws make no claim to administer any aspect of telecommunications policy which does not result in a monopoly or a restraint of trade.

Stanford University law professor William F. Baxter, who as President Reagan's first Antitrust Division Chief prevailed on the Bell System to enter into the MFJ,¹⁹ has written the Committee in strong support of H.R. 5096. Professor Baxter reaffirmed the MFJ's line-of-business restrictions as:

the only effective and lasting solution to the Bell System's anticompetitive activities . . . especially in a complex and rapidly changing field like telecommunications . . .

As Assistant Attorney General, it was my hope that the MFJ would provide a lasting foundation for the growth of competition in business vertically related to local exchange service. Due to the incessant legal challenges to the MFJ by the [RBOCs], however, it has become clear to me that legislation is needed to restore certainty to the marketplace.²⁰

The Committee has also received statements endorsing the competitive principles embodied in the MFJ, prepared by two of the Nation's foremost antitrust experts, Philip Areeda of Harvard Law School and Judge Robert Bork.²¹

2. Special interests

The Bell monopolies claim that H.R. 5096 is designed to serve a narrow group of special interests seeking protection *against* competition. The Bells claim that it is precisely because they would be such vigorous competitors that they are being opposed. But this assertion is contradicted by the fact that the supporters of H.R. 5096 include not just those who would be attempting to compete in the shadow of the Bell monopolies—the thousands upon thousands of businesses, large and small, already competing vigorously against each other in a vibrant free market. The supporters of H.R. 5096 also include major governmental and non-profit consumer advocates, senior citizen groups, and current and former law enforce-

¹⁸ See *infra* text accompanying notes 96-111, 134-43, 193-228, 292-313.

¹⁹ See *infra* text accompanying notes 236-241.

²⁰ William F. Baxter, *Letter to Chairman Jack Brooks* 2, 4 (May 19, 1992).

²¹ Written statements of Robert Bork, Philip Areeda, *Competition Policy in the Telecommunications Industry: A Comprehensive Approach (Part II), Hearings before the Subcomm. on Economic and Commercial Law of the House Comm. on the Judiciary*, 102d Cong., 2d Sess. (February 19, 1992) (forthcoming 1992) (attachment to testimony of Robert E. Allen).

ment officials, as well as hundreds upon hundreds of large business and educational *users* of telecommunications services.

While competitive telecommunications businesses have a natural concern about the size and financial resources of a company that can draw upon a guaranteed rate of return from its regulated monopoly, that concern is not so parochial in this instance. For the Bell companies at this time control the lifeline to the customers of every competitor in the telecommunications market: the local telephone exchange bottleneck. In antitrust terminology, the local telephone exchange bottleneck is an "essential facility," which gives the Bells an inherent ability and—for activities in which they are engaged themselves—a natural incentive to impede competition in lines of business dependent on that essential facility.²² As one witness testifying before the Subcommittee on Economic and Commercial Law put it, "We do not fear competition. We fear unfair competition."²³ That this distinction is genuine in their minds is supported by the fact that in 1989, when Judge Greene lifted the temporary restriction against entry into electronic publishing by AT&T—itself a giant, with \$37 billion in assets, but no longer possessing monopoly power in long distance—not a single electronic publisher was opposed.²⁴

3. Jobs²⁵

The Bell monopolies claim that H.R. 5096 prevents them from creating new American jobs. But this claim is not only refuted by the historical tendency of a monopoly to depress healthy competition—and, therefore, innovation and job creation.²⁶ It is also refuted by a recent Labor Department study which estimated that, for the telecommunications switching equipment market alone, Bell entry could result in an estimated loss of 18,000–27,000 American jobs.²⁷

This Bell claim is also refuted by an officer of the International Brotherhood of Electrical Workers, who told the Subcommittee in 1991:

[L]ifting . . . the restrictions on the Regional Bell Operating Companies . . . would, in effect, be re-creating seven smaller versions of the old Bell monopoly which would actually suppress, rather than enhance, competition within the telecommunications, industry . . . Our first and foremost concern . . . is the loss of thousands of union jobs in America . . . If the RBOCs are free to manufacture for

²² See *infra* notes 225, 253, and accompanying text.

²³ Testimony of Robert M. Johnson, quoted *infra* in text accompanying note 377.

²⁴ *United States v. Western Elec. Co.*, 1989-2 Trade Cas. (CCH) 68,673 (D.D.C. July 28, 1989).

²⁵ See also *infra* discussion of Bell claims regarding Competition, New Products, Rural America, The Disabled and Other Special Needs.

²⁶ Judge Learned Hand observed the lessons of history:

Possession of unchallenged economic power deadens initiative, discourages thrift, and depresses energy; that immunity from competition is a narcotic, and rivalry a stimulant, to industrial progress; that the spur of constant stress is necessary to counteract an inevitable disposition to let well enough alone.

United States v. Aluminum Corp. of America, 148 F.2d 416, 427 (2nd Cir. 1945).

²⁷ Department of Labor, *Employment Implications of Eliminating the Domestic Manufacturing Prohibition of the AT&T Consent Decree* (December 1989) (transmittal memorandum from Roderick DeArment, Deputy Secretary of Labor, to Michael Boskin, Chairman of the Council of Economic Advisors).

themselves, why would they purchase equipment from any other supplier? We know from past history, that when the telephone companies are able to manufacture for themselves, little or nothing is purchased from anyone else.²⁸

The Bell claim is also refuted by the president of the Communication Workers of America, who told the Subcommittee in 1989 that CWA opposed lifting any of the MFJ restrictions except under the competitive entry test.²⁹

4. The entry test

The Bell monopolies claim that the test under H.R. 5096 for their entry into competitive markets is draconian. But the line-of-business restrictions in the MFJ are precisely what has created and nurtured the competitive markets.³⁰ The bill's entry test is premised on core Sherman Act principles, and is based on the MFJ's entry test—a court-imposed *relaxation* of the more permanent isolation of the Bells' local telephone monopoly power envisioned in the Justice Department's enforcement action and agreed to by the Bell System.³¹ The bill further relaxes the entry test through refinements to the application process and an emphasis on market-by-market evaluation.³²

5. Competition³³

The Bell monopolies claim that H.R. 5096, by not granting them immediate entry into the competitive markets, harms competition and innovation and costs jobs. But it is the Sherman Act-mandated *absence* of the Bell monopolies from these markets that has allowed competition to take root and flourish. There are now millions of

²⁸ Testimony and statement of Stephen T. Lynn, *infra* text accompanying notes 453-454.

²⁹ See Statement of Morton Bahr, *infra* text accompanying notes 365-68. Curiously, in 1991—after winning RBOC support for a provision in S. 173 purporting to obligate the RBOCs to include a modicum of domestic content in any telecommunications equipment they manufactured—CWA appeared to have completely reversed field on the manufacturing and information services restrictions, while continuing to oppose lifting the long distance restriction because of the very same dangers of monopoly abuse. See *infra* notes 426-35 and accompanying text.

The validity of CWA's strange conversion is brought into serious question by a letter received recently by a Member of Congress from a CWA officer, complaining that the Bell monopolies were coercing their employees into writing and calling their Representatives in Congress in opposition to H.R. 5096.

The C&P Companies, under the direction of their parent company, Bell Atlantic, are presently encouraging all of their employees to contact their Congressional Representatives and ask them to vote against H.R. 5096.

Our members and your constituents are being intimidated and harassed by C&P into contacting their Congressman and urge defeat of H.R. 5096 in a way which I believe is unprofessional, unacceptable and un-American.

It is one thing to ask employees to lobby for or against legislation, but to conduct one-on-one meetings and demand acknowledgement of their actions is wrong. This is America and everyone has the right to participate, or not, without fear of intimidation. My office has received numerous calls from our members complaining about C&P and their tactics. These tactics send a false message from your constituents and certainly one that was not made freely . . .

We in the Labor Movement are strong advocates of political involvement, but unlike Bell Atlantic management, we believe that if your case is just, you don't have to intimidate people to gain their support.

Letter from Peter G. Catucci, Vice President, Communications Workers of America (July 24, 1992).

³⁰ See *infra* text accompanying notes 262-77, 371, 383.

³¹ See *infra* text accompanying notes 252-53, 467.

³² See *infra* Part VI: Section-by-Section Analysis.

³³ See *supra* discussion of Bell monopoly claims regarding Jobs; see *infra* regarding New Products, Rural America, The Disabled and Other Special Needs.

jobs being provided by thousands of competing equipment manufacturing, long distance, and information service firms.³⁴ These firms have entered the market or increased their market presence on the promise of a free market shielded from the cutthroat monopolistic practices that typified the industry under the Bell System.³⁵ No theoretical econometric model purporting to show that Bell entry would create new competition (or its corollary, new jobs) has taken into account the tendency of monopolies to *stifle* competition, *retard* innovation, and *reduce* employment.³⁶

6. *New products*³⁷

The Bell monopolies claim that H.R. 5096 prolongs the denial of important new products and services to the public that only they are in a position to provide. But the MFJ has resulted in a proliferation of new products and services.³⁸ Throughout its history, with few exceptions, the Bell System strenuously *resisted* the introduction of new products and services, either by itself or by competitors.³⁹ The Bells currently have a monopoly only on local phone service in their regions; they certainly do not enjoy a monopoly on technological creativity or expertise. History has proven that the most conducive environment for innovation and new product availability is a competitive market. Accordingly, H.R. 5096 facilitates Bell entry into the competitive markets as soon as their entry no longer constitutes a major anticompetitive threat.

7. *Information services*

The Bell monopolies claim that H.R. 5096 unfairly “turns back the clock” by restricting their entry into information services, despite the fact that Judge Greene has lifted the restriction. But Judge Greene made clear that he believed he was *forced* to lift the restriction—despite the fact that the competitive entry test had not been satisfied, and in disregard of the proper respective roles of the Justice Department and the courts in antitrust matters.⁴⁰ His decision is on appeal, and the information services restriction may yet be reinstated judicially. It is essential that an appropriate competitive entry test remain the cornerstone of antitrust policy in the move away from the MFJ restrictions. Nonetheless, H.R. 5096 permits a Bell monopoly to continue engaging in an information service to the extent it is already lawfully doing so.⁴¹

8. *Focus on the Bell monopolies alone*

The Bell monopolies claim that H.R. 5096 is unconstitutional because it replaces the MFJ with a statutory framework that applies only to them rather than to all local telephone companies generi-

³⁴ See *infra* text accompanying notes 269, 274, 276.

³⁵ See *infra* text accompanying notes 373, 392.

³⁶ See *supra* note 26; see *infra* text accompanying notes 86-95, 193-224.

³⁷ See *supra* discussion of Bell monopoly claims regarding Jobs, Competition; see *infra* regarding Rural America, The Disabled and Other Special Needs.

³⁸ See *infra* text accompanying notes 262-77, 371, 383.

³⁹ See *supra* note 26; *infra* text accompanying notes 86-95, 193-224.

⁴⁰ See *infra* text accompanying notes 333-336.

⁴¹ The bill extends this special exemption to any information service which the Bell was providing to customers as of 60 days prior to enactment. Of course, should the final judgment in the case reverse the district court's decision, this provision would be moot.

cally. They claim that this not only amounts to a “bill of attainder,” but also violates separation-of-powers requirements by supplanting a judicial decision. But Supreme Court precedent clearly indicates that there is no constitutional impediment to passing legislation that supplants a judicial decision—even legislation directed to a particular subset of a group—provided there is a rational, non-punitive governmental basis for doing so.⁴²

Congress’s constitutional authority to make competition policy is well-settled.⁴³ The rational governmental basis for directing this particular legislation at the Bell monopolies is two-fold. First, the Bells alone exercise immense local exchange monopoly power concentrated throughout a vast contiguous region; the local exchange operations of even the Bells’ closest runners-up are widely dispersed. Second, the very purpose of H.R. 5096 is to provide a proper mechanism to govern the orderly *release* of the Bell monopolies from the line-of-business restrictions; it would make no sense to *impose* these restrictions on firms who were never parties to the Justice Department’s Sherman Act enforcement action and are not seeking to be excused from an antitrust consent decree.⁴⁴

9. Free speech

The Bell monopolies also claim that H.R. 5096 is unconstitutional because it prohibits their provision of information services unless the competitive entry test is satisfied. They claim that this violates their First Amendment freedom of expression. But freedom of expression does not include the right to monopolize a medium of expression, and the absolute breadth of the Bells’ contention disregards critical and accepted distinctions in First Amendment law between “pure” speech and “commercial” speech. The core values underlying the First Amendment—the American *public’s* right to receive information from a wide diversity of sources—depend on the existence of a free information marketplace.⁴⁵ In providing antitrust-based protection to the free market in information services, the bill further not only antitrust values, but also First Amendment values.

⁴² *E.g.*, *Nixon v. Administrator of General Services*, 433 U.S. 425, 468–84 (1977); *See infra* notes 489–99 and accompanying text.

⁴³ *See, e.g.*, *Standard Oil Co. of New Jersey v. United States*, 221 U.S. 1 (1911); *Addyston Pipe & Steel Co. v. United States*, 175 U.S. 211 (1899); *United States v. Joint-Traffic Ass’n*, 171 U.S. 505 (1898).

⁴⁴ *See infra* Part VI: Section-by-Section Analysis. The impassioned constitutional arguments leveled against H.R. 5096 have been refuted by a wide variety of legal scholars, including one commissioned by *the Bell monopolies themselves* to refute those arguments when they were leveled against a Bell-supported bill in a previous Congress. He wrote:

In this paper, we consider whether Congress has the power to establish policy with respect to the line-of-business restrictions imposed on the Bell Operating Companies (BOCs) by the antitrust consent decree now applicable to those companies. A review of the relevant case law demonstrates that there is no legal bar to such legislation. . . . As a matter of law, it is appropriate for Congress to remove or modify these restrictions. . . .

Memorandum of Robert Pitofsky, Professor of Law, Georgetown University School of Law, *Legislating With Respect to Line-of-Business Restrictions on Bell Operating Companies: An Appropriate Role for Congress 1* (August 1, 1989).

⁴⁵ In *Associated Press v. United States*, 326 U.S. 1, 20 (1945), the Supreme Court stated that the purpose of the First Amendment is to achieve “the widest possible dissemination of information from diverse and antagonistic sources.” In *Red Lion Broadcasting v. FCC*, 395 U.S. 367, 390 (1969), the Court stated that “[i]t is the purpose of the First Amendment to preserve an uninhibited marketplace of ideas in which truth will ultimately prevail, rather than to countenance monopolization of that market.”

These constitutional arguments against the MFJ and H.R. 5096 have been rejected wholesale by other legal scholars, and most pertinently, by Judge Greene as well.⁴⁶

10. *De novo court determination*

The Bell monopolies claim that the requirement in H.R. 5096 that contested applications for entry be assessed *de novo* by a court is unnecessarily burdensome and time consuming, and that the court should give more deference to the Attorney General's viewpoint. But the bill's procedure follows closely the procedure for Justice Department involvement under the MFJ and other antitrust laws.⁴⁷ To eliminate *de novo* review would radically alter the Justice Department's traditional role as enforcer, not adjudicator, of the antitrust laws. For constitutional separation-of-powers reasons as well, it is essential that the chief enforcement department of the Executive Branch not be given adjudicatory responsibilities.⁴⁸

The bill does, however, eliminate *de novo* court consideration of applications which are not further contested after the Attorney General's determination. Only if the Attorney General's determination is contested does the court make an independent, *de novo* determination regarding the application. In this regard the bill departs from the MFJ and adopts the suggestion of the Bell monopolies.⁴⁹

11. *The transition period*

The Bell monopolies claim that the phased transition period in H.R. 5096 for Bell eligibility to apply for entry is unnecessary; that the transition should take place immediately upon enactment, particularly if there is to be an entry test of any kind.⁵⁰ But a transition period phased in over a reasonable period of time provides an orderly transition from the MFJ to the more open process set forth in the bill. It also parallels the MFJ, which provides for three-year "breathing periods" between reviews of the line-of-business restrictions. A transition period provides fair notice to the many thousands of businesses already present in the competitive market, whose livelihoods would be directly affected. During the hearings before the Subcommittee on Economic and Commercial Law, the concept of a phased-in transition period was endorsed by numerous witnesses, including witnesses who generally supported the Bell

⁴⁶ *MFJ Opinion*, *supra* note 1, at 183-85, 224. See *infra* notes 471-88 and accompanying text.

⁴⁷ See *infra* discussion of *de novo* review in Part VI: Section-by-Section Analysis. The distinction the bill makes between contested and uncontested applications is important because it preserves the right of any interested party to appeal—the same right and framework that has been upheld and utilized in other antitrust applications. See *id.*

⁴⁸ The concern is far from abstract. Questionable Justice Department conduct in negotiating past antitrust consent decrees led Congress in 1973 to stop judicial deference to the Department by conditioning entry of a proposed consent decree, or proposed change to a consent decree, on court approval after public notice and extensive judicial review. And the current uncertainty regarding the legal status of the information services restriction is due in large measure to the appeals court's apparent disregard for the presiding court's preeminent role. See *infra* text accompanying notes 333-34.

⁴⁹ See *infra* discussion in Part VI: Section-by-Section Analysis.

⁵⁰ This claim made some headway during the Committee markup, when the entire transition period was eliminated in one stroke by a roll call vote of 18 to 15. Later in the markup, however, the Committee upon reconsideration restored the transition period for long distance service and for alarm security information services.

monopolies' position regarding some of the line-of-business restrictions.⁵¹

12. Rural America

The Bell monopolies claim that H.R. 5096 deprives rural America of the benefits of the "information age," because only the Bells will extend the services outside the major population centers. This is a variation of the recurring Bell argument that the Bell monopolies are somehow uniquely suited to provide something that a robust free market has failed to provide.⁵² In the case of Rural America, this argument is refuted by ancient as well as recent history.

Originally, the Bell System grew up in the cities, ignoring the needs of rural areas. Responsibility for rural telephone service was thus typically assumed by independent competitors.⁵³ Even today; the Bells provide service to much of rural America only through interconnection with small independent telephone companies—interconnection that the Bell System agreed to provide only after the Justice Department brought a Sherman Act enforcement action.⁵⁴

Today, a Bell monopoly is free to make available *any* information service to *anyone*, *anywhere* in its region, through the "gateways" authority granted by Judge Greene in 1988.⁵⁵ Rural America has not benefited from the Bells' new authority, however, because the Bells have not used it to any appreciable extent.⁵⁶ The Bells have sought to excuse their failure on the grounds that it is "not profitable" for them to provide information services that they do not control. But a fundamental tenet of antitrust is that the price at which a service becomes sufficiently "profitable" to entice a monopolist to provide it is always higher than the price which will entice a firm in a competitive environment to provide it.⁵⁷

The thrust of the entry test in H.R. 5096 is that as soon as the prospect of Bell entry into a competitive market truly heralds more competition rather than less, Bell entry will be permitted.

13. The disabled and other special needs

The Bell monopolies claim that H.R. 5096 prevents them from providing special services to the disabled, to educational institutions, and to various others with special needs. This is yet another variation of the recurring Bell argument that the Bell monopolies will do more than a robust free market will do.⁵⁸ And the argument is refuted in the same way: a free market will spur innovation into all market niches in which a reasonable profit can be

⁵¹ See *infra* text accompanying notes 361-63, 386.

⁵² See *supra* discussion of Bell monopoly claims regarding Jobs, Competition, New Products; see *infra* regarding The Disabled and Other Special Needs.

⁵³ See *infra* note 88 and accompanying text.

⁵⁴ See *infra* notes 102-110, 358 and accompanying text.

⁵⁵ See *infra* note 329 and accompanying text.

⁵⁶ See *infra* notes 329, 378, 382 and accompanying text.

⁵⁷ See *supra* notes 3, 26.

⁵⁸ See *supra* discussion of Bell monopoly claims regarding Jobs, Competition, New Products, Rural America.

made, and it always takes more profit to satisfy a monopolist than to satisfy a firm competing under free market conditions.⁵⁹

Again, the thrust of the entry test in H.R. 5096 is that as soon as the prospect of Bell entry into a competitive market truly heralds more competition, rather than less, Bell entry will be permitted.

14. Regulatory capabilities

The Bell monopolies claim that H.R. 5096 is unnecessary—as are the MFJ's line-of-business restrictions—because regulation will adequately limit the Bells' anticompetitive tendencies. But a review of past regulatory experiences and current regulatory limitations reveals that regulation is no match for the entrenched Bell monopolies. The Justice Department commenced each of its three Sherman Act enforcement actions against the Bell System during this century precisely because regulation had utterly failed to rein in the Bell System's anticompetitive tendencies.⁶⁰

Judge Greene concluded in his 1987 triennial review decision that regulation was still "entirely inadequate"—that "discrimination against competitors and cross-subsidization are far more difficult to detect, prevent, and rectify through regulation now than they were in 1982."⁶¹ In a 1987 study, the General Accounting Office found that FCC staffing limitations allowed only infrequent audits, "conceivably once every 16 years."⁶²

And there has been no discernable improvement in regulatory capability or resources since then.⁶³ In fact, Federal regulation has proven incapable of limiting Bell monopoly abuses in those fields where Judge Green considered the risk of anticompetitive harm to be minimal and permitted Bell entry.⁶⁴

HEARINGS

On May 7, 1992, Congressman Jack Brooks, Chairman of the House Judiciary Committee, introduced H.R. 5096, a bill to supersede the line-of-business restrictions in the AT&T Consent Decree and to codify its antitrust-based test for lifting those restrictions.

H.R. 5096 is an outgrowth of oversight hearings of the telecommunications industry conducted by the Subcommittee on Economic and Commercial Law of the House Committee on the Judiciary during the 101st and 102d Congresses.⁶⁵

During the 101st Congress, the Subcommittee met on August 1 and 2, 1989, to receive testimony from Stephanie Biddle, Executive Vice President, Computer & Communications Industry Association; Lee G. Camp, Vice President and General Manager of Information

⁵⁹ When a Bell monopoly representative was recently questioned regarding the absence of any provision for special education in the new educational information service it was developing, he replied: "I don't know, I guess there's really no money in that segment of the educational market." Spokesman for Ameritech, *quoted in Communications Daily*, June 17, 1992, at 4.

⁶⁰ See *infra* text accompanying notes 18, 96-111, 134-43, 193-228, 292-313.

⁶¹ *United States v. Western Elec. Co.*, 673 F. Supp. 525, 569 (D.D.C. 1987) [hereinafter *District Court Triennial Review Opinion*], *aff'd in part, rev'd in part*, 900 F.2d 283 (D.C. Cir. 1990), *cert. denied*, 111 S. Ct. 283, 112 L.Ed. 283 (1990).

⁶² General Accounting Office, *Telephone Communications—Controlling Cross-Subsidy Between Regulated and Competitive Services* 54 (October 23, 1987).

⁶³ See *infra* notes 283-291, 461 and accompanying text.

⁶⁴ See *infra* text accompanying notes 292-313.

⁶⁵ The Subcommittee also held oversight hearings on the MFJ during the 96th, 97th, and 100th Congresses under Chairman Rodino. See *infra* note 349.

Service, Pacific Bell; Barbara Easterling, Executive Vice President, Communications Workers of America; William T. Esrey, President and Chief Executive Officer, United Telecommunications, Inc.; Allen R. Frischkorn, President, Telecommunications Industry Association; Sam Ginn, Chairman and Chief Executive Officer, Pacific Telesis Group; Albert Halprin, Partner, Myerson, Kuhn & Sterret; Alan C. Hasselwander, Chairman, United States Telephone Association, and President and Chief Executive Officer, Rochester Telephone Corp.; Robert M. Johnson, President, and Chief Executive Officer, Newsday, Inc., on behalf of the American Newspaper Publishers Association; Gene Kimmelman, Legislative Director, Consumer Federation of America; William G. McGowan, Chairman, MCI Communications Corporation; Brian R. Moir, Partner, Fisher, Wayland, Cooper & Leader, on behalf of the International Communications Association; Wayne Robins, Chairman, the Competitive Telecommunications Association, and President, ITT Communications Services, Inc.; Casimir Skrzypczak, Vice President, Science and Technology, NYNEX Corp.; Thomas F. Smith, Chairman, Alarm Industry Communications Committee, and Chairman, Security, Inc.; Edwin B. Spievack, President, North American Telecommunications Association; Philip L. Verveer, Partner, Wilkie Farr & Gallagher, on behalf of the National Cable Television Association; Patricia M. Worthy, Vice Chairman, National Association of Regulatory Commissioners, and Chairman, District of Columbia Public Service Commission; John D. Zeglis, General Counsel and Senior Vice President for Government Affairs, American Telephone and Telegraph Company.

The Subcommittee held three hearings on this issue during the 102d Congress. On August 1, 1991, the Subcommittee heard testimony regarding the operation of the AT&T Consent Decree from William G. McGowan, Chairman and Chief Executive Officer, MCI Communications Corporation; Edward E. Whitacre, Jr., Chief Executive Officer, Southwestern Bell; Cathleen Black, President and Chief Executive Officer, American Newspaper Publishers Association; Gene Kimmelman, Legislative Director, Consumer Federation of America; Edward B. Spievack, President/Executive Director, North American Telecommunications Association; Ken Allen, Senior Vice President, Information Industry Association; Ronald J. Binz, President, National Association of State Utility Consumer Advocates; Barbara J. Easterling, Executive Vice President, Communications Workers of America.

Chairman Brooks convened a second hearing on February 18, 1992, to consider competition policy in the telecommunications industry. Testimony was received from Robert E. Allen, Chairman and Chief Executive Officer, American Telephone & Telegraph Company; David Easterly, President, Cox Newspapers; Cathleen Black, President and Chief Executive Officer, American Newspaper Publishers Association; Ivan Seidenberg, Vice Chairman, Telecommunications, NYNEX Corporation; Bert C. Roberts, Jr., President and Chief Executive Officer, MCI Communications Corporation; Dwight D. Opperman, President and Chief Executive Officer, West Publishing Company; Stephen T. Lynn, President, International Brotherhood of Electrical Workers, Local 1898; Daniel J. Bruns, President & Chief Executive Officer, General Videotex Corporation;

John V. Roach, President & Chief Executive Officer, Tandy Corporation.

On March 18, 1992, the Subcommittee met again to receive testimony from government witnesses on competition in the telecommunications industry. Testimony was received from James F. Rill, Assistant Attorney General, Antitrust Division, U.S. Department of Justice; Thomas J. Sugrue, Acting Assistant Secretary for Communications and Information, U.S. Department of Commerce; Alfred C. Sikes, Chairman, Federal Communications Commission; Hubert H. Humphrey, III, Attorney General, State of Minnesota; Charlie Donaldson, Assistant Attorney, Chief, Energy and Utilities Unit, New York State Department of Law; David W. Rolka, Chairman, Pennsylvania Public Utility Commission; William J. Cowan, General Counsel, New York State Public Service Commission.

Additional statements were submitted to the Subcommittee from other interested parties.

COMMITTEE ACTION AND VOTE

On May 28, 1992, the Subcommittee on Economic and Commercial Law met to mark up H.R. 5096. The Subcommittee ordered the bill favorably reported to the full Committee by a rollcall vote of 10 to 6.

The Committee on the Judiciary convened on July 1, 1992, to mark up H.R. 5096. Chairman Brooks offered an amendment to shorten the applicable dates after which a Bell operating company may apply for authorization to enter a restricted line of business. The amendment was adopted by voice vote. Next, Chairman Brooks offered an amendment which would except from the bill's competitive entry test information services in which Bell operating companies have been engaged during the period beginning October 7, 1991, and ending 60 days before enactment. A perfecting amendment was offered by Congressman Bryant to except alarm monitoring services offered by Bell operating companies from this grandfather clause. The Bryant perfecting amendment was accepted, and the Brooks amendment, as modified by the Bryant amendment, was adopted by voice vote.

An amendment offered by Congressman Campbell that further tailored the post-entry antitrust prohibitions to conform more precisely to certain other antitrust statutes was adopted by voice vote. The phase-in periods amended earlier by the Brooks amendment were eliminated entirely by an amendment offered by Congressman Fish, which passed by a rollcall vote of 18 to 15. In response to the Fish amendment, Congressman Bryant offered an amendment to restore the five-year phase-in periods for interexchange and alarm monitoring services, which was agreed to by voice vote. On a rollcall vote of 24 to 9, a quorum being present, the Committee ordered H.R. 5096, as amended, favorably reported to the House with recommendation that it pass.

DISCUSSION

I. HISTORICAL BACKGROUND

A. Origin of the Sherman Antitrust Act and the birth of the Bell monopoly

The Bell monopoly was hardly unique in its origins and its actions in consolidating concentrated power in the late nineteenth century. It may, however, have been singular in its tenacious ability to retain and project such monopoly power into the closing decades of the 20th century.

As the Industrial Revolution transformed the American economy in the decades following the Civil War, vast concentrations of economic power began accumulating in the hands of a few private interests. The ascendancy of the Age of the Robber Baron was characterized by the monopolization of vital U.S. industries through trust and cartel arrangements and predation of competitors.⁶⁶

To counter the threat posed by unrestrained monopoly power to American economic liberty and political democracy, Congress enacted the Sherman Act in 1890.⁶⁷ Senator John Sherman, a Republican from Ohio, explained during debate the magnitude of the threat:

The popular mind is agitated with problems that may disturb social order, and among them all none is more threatening than the inequality of condition, of wealth, and opportunity that has grown within a single generation out of the concentration of capital into vast combinations to control production and trade and to break down competition. These combinations already defy or control powerful transportation corporations and reach State authorities . . . Congress alone can deal with them, and if we are unwilling or unable there will soon be a trust for every production and a master to fix the price for every necessity of life.⁶⁸

The Sherman Act enshrines competition as the "charter of economic liberty"⁶⁹ by criminally prohibiting any "contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade," and any "monopoliz[ation of], or attempt to monopolize, any part of . . . trade or commerce."⁷⁰ The Sherman Act not only im-

⁶⁶ See, e.g., The Legislative History of the Federal Antitrust Laws and Related Statutes, pt. 1, vol. 1, at 7-13 (Earl W. Kintner ed., 1978); Walter Adams and James W. Brock, *The Sherman Act and the Economic Power Problem*, 35 Antitrust Bulletin 25 (1990); A.D. Chandler, *The Managerial Revolution in American Business* (1977). See generally H. Lloyd, *Wealth Against Commonwealth* (1984); M. Josephson, *The Robber Barons* (1934); G. Porter, *The Rise of Big Business, 1860-1910* (1973).

⁶⁷ 15 U.S.C. 1 *et seq.* See William H. Taft, *The Anti-Trust Act and the Supreme Court*, ch. 1 (1914); H. Thorelli, *The Federal Antitrust Policy: Organization of an American Tradition* 129 (1955). See generally The Legislative History of the Federal Antitrust Laws and Related Statutes, *supra* note 66, ch. 1.

The principle that economic liberty depends on the preservation of a competitive industrial structure was the necessary corollary to the Founding Fathers' recognition that political liberty depends on the preservation of a competitive governmental structure: in the words of Thomas Jefferson, "it is not by the consolidation or concentration of powers, but by their distribution, that good government is effected." Thomas Jefferson, *Jefferson: Writings* 74 (Library of America ed. 1984); See Adams and Brock, *supra* note 66, at 26.

⁶⁸ 21 Cong. Rec. 2460 (1890).

⁶⁹ *Northern Pac. Ry. v. United States*, 356 U.S. 1, 4 (1957).

⁷⁰ 15 U.S.C. 1, 2.

poses stiff criminal penalties, but—in the case of entrenched monopolists—empowers the Department of Justice to obtain dissolution of the enterprise as well. In the immediate decades after the passage of the Sherman Act, Justice Department “trust-busters” used this important Sherman Act authority to rescue industry after industry from monopoly stranglehold, breaking apart entrenched monopolies in the oil,⁷¹ railroad,⁷² aluminum,⁷³ cast-iron pipe,⁷⁴ tobacco,⁷⁵ meat-packing,⁷⁶ and explosive⁷⁷ industries, among others.

The creation of the telephone monopoly—which would become the Nation’s largest monopoly—was already aggressively underway when Congress enacted the Sherman Act.⁷⁸ In 1877, a year after Alexander Graham Bell had patented his “talking machine,” the Bell Telephone Company began licensing his patents to “operating companies” to develop telephone systems in specific geographic areas.⁷⁹ In 1882, Bell Telephone designated Western Electric Company, in which it had purchased a majority interest, as the exclusive manufacturer of its patented telecommunications equipment.⁸⁰

Initially, Bell Telephone issued only temporary licenses, after which it could exercise its option to purchase the licensee’s assets.⁸¹ In 1881, Bell Telephone began issuing permanent licenses, in exchange for 35 percent of the licensee’s stock, representation on its board, and control over its borrowing practices.⁸² By 1894, Bell had acquired controlling interest in most of its licensees.⁸³

Even though in the early years Bell Telephone held only a minority interest in the operating companies, it controlled them through its control of the patents, the telephones (which Bell

⁷¹ *Standard Oil Co. of New Jersey v. United States*, 221 U.S. 1 (1911) (controlled 90–95 percent of U.S. refining capacity).

⁷² *Northern Securities Co. v. United States*, 193 U.S. 197 (1904); *United States v. Union Pac. R.R.*, 226 U.S. 61 (1912); *United States v. Reading Co.*, 253 U.S. 26 (1920); *United States v. Southern Pac. Co.*, 259 U.S. 214 (1922).

⁷³ *United States v. Aluminum Co. of America*, 148 F.2d 416 (2d Cir. 1945).

⁷⁴ *Addyston Pipe & Steel Co. v. United States*, 175 U.S. 211 (1899) (controlled 55 percent of cast-iron pipe manufacturing capacity in States west and south of New York, Pennsylvania, and Virginia).

⁷⁵ *United States v. American Tobacco Co.*, 221 U.S. 106 (1911) (controlled 90 percent of crop).

⁷⁶ *Swift & Co. v. United States*, 196 U.S. 375 (1905) (controlled 60 percent of market).

⁷⁷ *United States v. E.I. duPont de Nemours & Co.*, 188 F. 127 (D. Del. 1911) (controlled 64–74 percent of market in five types of explosives).

⁷⁸ For a history of the development of the Bell Telephone monopoly, see, e.g., Robert Bornholz and David S. Evans, *The Early History of Competition in the Telephone Industry*, in *Breaking Up Bell* 7–40 (D.S. Evans ed., 1983); Geoffrey M. Peters, *Is the Third Time the Charm? A Comparison of the Government’s Major Antitrust Settlements with AT&T This Century*, 15 *Seton Hall L. Rev.* 252 (1985).

⁷⁹ Bornholz and Evans, *supra* note 78, at 8. From the beginning, Mr. Bell ceded control of his invention to financiers. Boston lawyer Gardiner Hubbard and Salem leather merchant Thomas Sanders were Mr. Bell’s two original partners. G.L. Bradley assumed control with Mr. Sanders in 1878. The following year, Colonel William Forbes displaced Mr. Sanders and became president, with Theodore Vail as general manager. In 1907, a syndicate led by J.P. Morgan took control from Colonel Forbes and Mr. Bradley, and Mr. Vail replaced Frederick P. Fish as president. This was the last major shake-up in control of the Bell System until its reorganization in 1982–84 under the MFJ. *Id.* at 8–9, 11–12.

⁸⁰ *Decision to Divest: Major Documents in U.S. v. AT&T, 1974–1984*, at I-3 (Christopher H. Sterling, Jill F. Kasle & Katherine T. Glakas eds., 1986) [hereinafter *Decision to Divest*]. By 1925 Bell had acquired 100% ownership of Western Electric. *Id.*

⁸¹ *Report of the Federal Communications Commission on the Investigation of the Telephone Industry in the United States* 18 (1939) [hereinafter *1939 FCC Report*]; U.S. Department of Justice, *Plaintiff’s Third Statement of Contentions and Proof: United States v. Western Elec. Co.*, No. 74–1698 (January 10, 1980), at 1787 [hereinafter *1980 Justice Dept. Brief*].

⁸² *1939 FCC Report*, *supra* note 81, at 19; *1980 Justice Dept. Brief*, *supra* note 81, at 1787.

⁸³ *1939 FCC Report*, *supra* note 81, at 19; *1980 Justice Dept. Brief*, *supra* note 81, at 1787.

leased directly to consumers), and the long-distance lines (which connected the operating companies to each other).⁸⁴ The licensing contracts between Bell Telephone and the operating companies gave it additional leverage by permitting it to seize the property of an operating company that violated the contract.⁸⁵

In 1878 Bell Telephone was able to use a patent suit to drive its first potential competitor, Western Union, out of the telephone business.⁸⁶ The expiration of the original Bell patents in 1893 and 1894, however, led to the emergence of independent telephone companies and a corresponding lapse in Bell Telephone's control of the telephone market.⁸⁷ Many independents based themselves in rural areas, which Bell Telephone had shunned and would continue to shun in favor of the more lucrative large urban centers.⁸⁸ The independents also established competing service in areas where there was public dissatisfaction with Bell Telephone's service.⁸⁹

The Bell System responded to this competition aggressively. It orchestrated an intense campaign to undermine confidence in the independents on the part of the public, investors, and legislative bodies.⁹⁰ It refused to sell Western Electric equipment to the independents, and attempted to acquire control of alternative sources of equipment.⁹¹ And it isolated competing independents by refusing

⁸⁴ Bornholz and Evans, *supra* note 78, at 9-10.

⁸⁵ *Id.* at 10.

⁸⁶ See John Brooks, *Telephone: The First Hundred Years 69-72* (1976). In 1909 Bell Telephone acquired a controlling interest in Western Union, the Nation's largest telegraph company.

⁸⁷ *1980 Justice Brief*, *supra* note 81, at 1788-89; *Decision to Divest*, *supra* note 80, at 1-3. In 1907 the 6 million telephones in service were equally divided between Bell and the independents. *1939 FCC Report*, *supra* note 81, at 129-30.

⁸⁸ *1939 FCC Report*, *supra* note 81, at 129-30, 132-33. *1980 Justice Dept. Brief*, *supra* note 81, at 1788. In 1907, for example, independent telephone companies provided 75 percent of the available service in West Virginia and Indiana, 93 percent in South Dakota, 78 percent in North Dakota, 84 percent in Iowa, 80 percent in Kansas, 70 percent in Missouri, 69 percent in Nebraska, 67 percent in Minnesota, and 65 percent in Arkansas. Department of Commerce and Labor, Bureau of the Census, *Special Reports, Telephones: 1907*, at 23 (1910).

Extension of service to "rural America" never became a high priority for the Bell System. Because it was more costly to develop than urban service, the Bell System left rural service to the independent telephone companies, mutual telephone companies, and home-made, one-wire "farmer lines." *1980 Justice Dept. Brief*, *supra* note 81, at 1806-1810; *Special Reports, Telephones: 1907*, at 23-24; *Hearings Before the House Agriculture Subcomm.*, 81st Cong., 1st Sess. 156 (1949).

Even with all this independent and mutual activity and self-help effort, in 1945 less than one-third of America's farms had telephone service. In seven States—Alabama, Arkansas, Georgia, Louisiana, Mississippi, North Carolina, and South Carolina—less than 10 percent of farms had telephone service. In 1949, it was estimated that "from a third to a half of the farms with telephones are receiving inferior service because of inadequate and outmoded facilities." *1980 Justice Dept. Brief*, *supra* note 81, at 1808; H. Rep. No. 246, 81st Cong., 1st Sess. 2-4 (1949); *Hearings Before the House Agriculture Subcomm.*, *supra*, at 16-17.

To respond to the rural void left by the Bell System, Congress amended the Rural Electrification Act (REA) to authorize long-term, low-interest loans for telephone organizations to extend and improve rural service. In reporting the legislation, the House Agriculture Committee criticized the Bell System for "building lines where business is most profitable, establishing a rate structure on that profitable business, and then either refusing to extend lines into unprofitable areas or requiring the consumer to bear the expense . . . relegating farmers in the less profitable areas perpetually to a nontelephone hinterland." H. Rep. No. 246, 81st Cong., 1st Sess. 8 (1949).

As a result of this legislation, telephone service was extended to 400,000 new farms within 10 years. By 1979, 94 percent of American farms had telephone service. *1980 Justice Dept. Brief*, *supra* note 81, at 1809-10; REA Telephone Annual Statistical Rep. 18 (1960); Dept. of Agriculture, *Agricultural Prices* 29-30 (October 31, 1979).

⁸⁹ J. Stehman, *The Financial History of the American Telephone and Telegraph Company* 84-95 (1967 reprint); *1980 Justice Dept. Brief*, *supra* note 81, at 1788.

⁹⁰ *1939 FCC Report*, *supra* note 81, at 136; *1980 Justice Dept. Brief*, *supra* note 81, at 1790.

⁹¹ *1939 FCC Report*, *supra* note 81, at 137; *1980 Justice Dept. Brief*, *supra* note 81, at 1790-91.

to interconnect either its exchanges or its long distance lines with them, while selectively acquiring independents in strategic positions.⁹² Through these tactics, the Bell System aggressively reasserted control.

AT&T brazenly declared its monopolistic aims in its 1910 annual report:

This process of combination will continue until all telephone exchanges and lines will be merged either into one company owning and operating the whole system, or until a number of companies with territories determined by political, business, or geographical conditions, each performing all functions pertaining to local management and operation, will be closely associated under the control of one central organization exercising all the functions of centralized general administration.⁹³

By 1912 the Bell System again dominated the market.⁹⁴ By 1925, when it established Bell Telephone Laboratories to conduct its research and development, it was an entrenched nationwide monopoly.⁹⁵

B. Early attempts at regulation, the first Sherman Act enforcement action, and the Kingsbury commitment

In their initial efforts to regulate the telephone industry, Congress and the States⁹⁶ established the pattern of paying little heed to competition as an objective.⁹⁷ The Mann-Elkins Act of 1910, in which Congress gave the Interstate Commerce Commission regulatory authority over long distance telephone service, required only that rates be "just and reasonable."⁹⁸ State utility commissions,

⁹² 1939 FCC Report, *supra* note 81, at 136-37; 1980 Justice Dept. Brief, *supra* note 81, at 1791, 1798; Bornholz and Evans, *supra* note 78, at 13.

⁹³ Quoted in 1914 Att'y Gen. Ann. Rep. 13-14.

⁹⁴ Peters, *supra* note 78, at 253.

⁹⁵ Decision to Divest, *supra* note 80, at I-3. Across the country the Bell System owned 100 percent of 18 operating companies and had a majority interest in 3 others. Bornholz and Evans, *supra* note 78, at 10.

⁹⁶ By 1920 all but 3 states had established public utility commissions to regulate the practices and rates of telephone companies. Decision to Divest, *supra* note 80, at I-4.

⁹⁷ Bornholz and Evans, *supra* note 78, at 29-31. AT&T had persuaded the Congress and the States that the telephone industry would be most efficient without local competition—that it was a "natural monopoly."

⁹⁸ Pub. L. No. 218, 36 Stat. 539 (1910) (codified at 47 U.S.C. 601 (1934)). The Mann-Elkins Act was introduced to strengthen the ICC's regulatory authority over *railroads*. Extension of ICC authority to the telephone industry was accomplished abruptly by amendment on the House floor. Two of the chief sponsors of the act, Congressman Mann and Congressman Townsend, severely criticized the amendment as a hollow gesture. Congressman Mann stated:

I think with other Members of Congress that it is desirable to include telephone and telegraph companies under government regulation. No one has yet worked out a bill which will do that. I do not know how easy that may be or how difficult it may be. I worked on it for some time myself, and did not succeed in preparing a bill or provision of law which seemed to me to amount to anything . . .

The provision of the law under which we authorize the Interstate Commerce Commission to regulate charges expressly provides that we authorize them to regulate charges for the transportation of passengers or property. Now, how ridiculous it is to stick into the amendment something which has nothing to do with either passengers or property. It amounts to nothing. It is an advertisement only of our own incompetency . . .

45 Cong. Rec. 5533 (1910).

Mr. Townsend expressed similar concerns.

I do not think there is any difference of opinion on the part of gentlemen on this floor as to whether the corporations named ought to be regulated or not. It is a question as to

Continued

for their part, generally *precluded* competition by refusing to certify any telephone company which would duplicate service already available.⁹⁹

The isolated State efforts to check the consolidation of the Bell monopoly proved ineffectual. For example, when Massachusetts passed legislation during the 1890's prohibiting Bell Telephone from further expansion or acquisition in that State, Bell circumvented the prohibition by transferring control of its organization to what was until then a subsidiary, the American Telephone and Telegraph Company (AT&T).¹⁰⁰ AT&T then continued the expansion and acquisition efforts begun by Bell Telephone.¹⁰¹

In 1911 and 1912 several independent telephone companies complained about AT&T's acquisition practices to the Attorney General, who simply referred the complaints to the ICC for investigation.¹⁰² In 1913, however—after a change in Administration—the new Attorney General concluded that the Justice Department's intervention was necessary.¹⁰³ AT&T was refusing to interconnect its long distance lines with competing local independents, in order to coerce them into selling out to AT&T.¹⁰⁴ When ordered by State regulators to interconnect, AT&T retaliated by cutting its rates to predatory levels and providing substandard interconnection service.¹⁰⁵ AT&T had succeeded in acquiring a number of independent long distance companies through these tactics, including Northwestern Long Distance, an independent in the Pacific Northwest.¹⁰⁶

On July 24, 1913, the Department filed its first Sherman Act enforcement action against the Bell System, charging it with an unlawful combination to monopolize the transmission of telephone messages in the Pacific Northwest in violation of the Sherman Act.¹⁰⁷ On December 19, AT&T Vice President Nathan Kingsbury sent a letter to Attorney General J.C. McReynolds, which came to be known as the Kingsbury Commitment.¹⁰⁸ In the letter AT&T agreed to refrain from acquiring any additional competing telephone companies, to submit already pending acquisitions to the Department for approval, and to promptly provide interconnection to noncompeting telephone companies (but *not* necessarily to compet-

whether we do regulate them or not, and I do not believe the gentleman himself would have confidence in a proposition that he would submit thus hastily as being sufficient to cover the emergencies which he seeks to meet. Therefore, it seems to me we ought not to adopted an amendment here which practically accomplishes nothing, and the effect of which none of us understands.

45 Cong. Rec. 5534 (1910).

In the 24 years during which the ICC had jurisdiction over the telephone industry, only 24 long distance cases were brought before it and most of those were settled privately. The ICC never even established a separate office to carry out its regulatory responsibilities in telecommunications; those responsibilities were handled by scattered employees in the various offices engaged in railroad regulation. *Hearings on S. 6 Before the Senate Comm. on Interstate Commerce, 71st Cong., 2d Sess. (1934)*, at 1566-67 (statement of ICC Commissioner S. Eastman); *1980 Justice Dept. Brief, supra* note 81, at 1831; *Decision to divest, supra* note 80, at 1-5.

⁹⁹ See *Decision to Divest, supra* note 80, at 1-4.

¹⁰⁰ Bornholz and Evans, *supra* note 78, at 11.

¹⁰¹ *Id.*

¹⁰² Peters, *supra* note 78, at 253-54.

¹⁰³ *Id.* at 254.

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *United States v. AT&T* (D. Or. 1913) (suit terminated by consent decree Mar. 26, 1914).

¹⁰⁸ Letter from Nathan C. Kingsbury to Attorney General J.C. McReynolds (Dec. 19, 1913).

ing companies).¹⁰⁹ The Kingsbury Commitment was formalized in a March 26, 1914, consent decree in which AT&T also agreed to divest itself of Northwestern Long Distance, as well as an independent local telephone company in Spokane, Washington.¹¹⁰ The consent decree terminated the Sherman Act enforcement action, as well as the ICC investigations.¹¹¹

Within eight years, however, the Kingsbury Commitment and the 1914 consent decree had been completely nullified. Following the complaints of some speculators who had purchased independent telephone systems with the intention of selling them to AT&T, the Attorney General "clarified" that the Commitment did not prohibit the Bell System from consolidating local telephone systems, but only from refusing to interconnect long distance companies.¹¹² When the citizens of Spokane voted to consolidate their independent into the Bell System—as permitted under the consent decree—the presiding court modified the decree to accommodate their desire.¹¹³ A further modification in 1922 actually permitted AT&T to reacquire Northwestern.¹¹⁴ And during the First World War, when the Nation's telephone system was under the nominal authority of the U.S. Post Office, the Postmaster General actively promoted the integration and consolidation of competing systems.¹¹⁵ The Willis-Graham Act of 1921¹¹⁶ nullified the remainder of the Kingsbury Commitment and the 1914 consent decree by exempting Bell acquisitions of competing telephone companies from the antitrust laws, so long as the ICC approved, thus placing sole reliance on ICC regulation to rein in the Bell System's anti-competitive tendencies.¹¹⁷ The pattern of deferring to the regulatory process until a crisis demanded antitrust action was thus established, only to be repeated to the distress of competitors and ratepayers alike.

¹⁰⁹ *Id.*

¹¹⁰ *United States v. AT&T* (D. Or. 1914) (consent decree entered Mar. 26).

¹¹¹ Peters, *supra* note 78, at 255.

¹¹² 1914 Att'y Gen. Ann. Rep. 14; Peters, *supra* note 78, at 256.

¹¹³ *United States v. AT&T* (D. Or. 1914) (order of Sept. 7, modifying decree of March 26, 1914); Peters, *supra* note 78, at 255.

¹¹⁴ *United States v. AT&T* (D. Or. 1922) (order of Oct. 20, modifying decree of Mar. 26, 1914); Peters, *supra* note 78, at 255.

¹¹⁵ Actual control of the Bell System during this period remained with AT&T President Theodore Vail and Vice President U.N. Bethel. Mr. Bethel also served as chairman of the operating board overseeing all telephone and telegraph properties for the Post Office. N.C. Kingsbury, another AT&T vice president, was a member of the Committee handling telephone company consolidation matters pursuant to the Postmaster General's policy statement that consolidation should occur wherever it is "manifestly desired by the public." 1939 *FCC Report*, *supra* note 81, at 100; 1980 *Justice Dept. Brief*, *supra* note 81, at 1800-01.

¹¹⁶ Act of June 10, 1921, Pub. L. No. 15, Ch. 20, 42 Stat. 27 (1921) (amending Transportation Act of 1920, Pub. L. No. 152, Ch. 91 § 407, 41 Stat. 456, 482) (repealed 1934).

¹¹⁷ See Peters, *supra* note 78, at 257. The purpose of the Willis-Graham Act was described during the House debate as ensuring "that there will not be a universal monopoly existing all over the United States controlled by the Bell System, but there will be a unification of service in different localities, in some places the business being taken over by the Bell Co. and in others by the independent companies." 61 Cong. Rec. 1990 (1921) (statement of Rep. Barkley).

The Bell System, however, began aggressively acquiring independents immediately upon passage of the Willis-Graham Act. In response to expressions of alarm on the part of independents, in 1922 the Bell System sent the "Hall Memorandum" to the United States Independent Telephone Association. The Hall Memorandum assured the independents that AT&T would seek to acquire them only if such action was demanded for the convenience of the public, or for the protection of Bell property or general public telephone service. 1939 *FCC Report*, *supra* note 81, at 142; 1980 *Justice Dept. Brief*, *supra* note 81, at 1804.

C. Creation and early history of the Federal Communications Commission

On the ICC's regulatory watch, the Bell System continued to make acquisitions at a steady pace. The ICC rarely ever met an acquisition it could not find reason to approve; between 1921 and 1934 the ICC approved 272 of 275 acquisitions.¹¹⁸

Concerned about the growing size and power of AT&T, the House Committee on Interstate Commerce in 1931 commissioned Dr. Walter M. Splawn to investigate the structure and organization of the telephone industry.¹¹⁹ In his 1934 final report to Congress, Dr. Splawn recommended creation of a new Federal commission with expanded powers to regulate the telephone industry.¹²⁰ A report by the Interdepartmental Committee on Communications, chaired by Commerce Secretary Daniel C. Roper, had also called for new Federal legislation to strengthen regulatory effectiveness.¹²¹

One area of particular concern to Dr. Splawn was the elusiveness of the Bell System's holding company structure with respect to regulatory supervision. Dr. Splawn stated:

The holding company has been found as a result of this investigation to be as prolific of abuses in the field of communications as in other utilities already studied . . . American Telephone and Telegraph Company, which is both a holding and an operating company, is more powerful and skilled than any State government with which it has to deal. A bill regulating communications in interstate commerce will fall far short of being effective unless it first restrict the use of the holding company to what is absolutely essential and necessary and second unless the regulation is extended to the holding company in like manner as to the operating company.¹²²

In response to the Splawn and Roper reports, Congress enacted the Communications Act of 1934,¹²³ consolidating Federal regulatory authority over the interstate operations of telephone, telegraph, and radio companies into a new Federal Communications Commission. As originally introduced, section 215 of the Communications Act would have given the FCC broad regulatory authority over contracts and transactions among the AT&T parent holding company and its various Bell System subsidiaries.¹²⁴ It would also

¹¹⁸ Peters, *supra* note 78, at 258. During this period the Bell monopoly was a party to another antitrust consent decree. In the early 1920's AT&T ventured into broadcasting. Despite a cross-licensing agreement with its competitors, AT&T impeded their growth by refusing them access to the Bell telephone wires to link up distant stations. When AT&T later decided to withdraw from broadcasting, it entered into an agreement with the broadcasters under which it would stay out of broadcasting and they would stay out of the telephone business. This agreement not to compete was dissolved in 1932 by an antitrust consent decree. *United States v. Radio Corp. of America*, 1932-39 Trade Cas. (CCH) ¶ 55,015 (D. Del. 1932).

¹¹⁹ H.R. Res. No. 59, 72nd Cong., 1st Sess. (1931); Decision to Divest, *supra* note 80, at I-7.
¹²⁰ *Report on Communication Companies*, H.R. Rep. No. 1273, 73rd Cong., 2d Sess., pt. III, No. 1 at pp. IX-X (1934). [hereinafter *Splawn Report*].

¹²¹ *Study of Communications by an Interdepartmental Committee*, 73rd Cong., 2d Sess. (January 23, 1934); Decision to Divest *supra* note 80, at I-7.

¹²² *Splawn Report*, *supra* note 120, at pt. I, pp. XXX-XXXI.

¹²³ Act of June 19, 1934, 48 Stat. 1064 (1934) (codified at 47 U.S.C. 151-609 (1982)). The Act repealed the Willis-Graham Act of 1921.

¹²⁴ *Hearings on S. 2910 before Senate Interstate Commerce Comm.*, 73rd Cong., 2d Sess. 78-82 (1934) [hereinafter *1934 Hearings*]; *1980 Justice Dept. Brief*, *supra* note 81, at 1838.

have empowered the FCC to require competitive procurement bidding to supply the Bell System with equipment where it would be in the public interest to do so.¹²⁵

During the hearings on the legislation, AT&T President Walter Gifford attacked these provisions as "drastic."¹²⁶ The offending provisions were stricken from the legislation; but in their place, section 215 directed the new FCC to examine and report to Congress regarding contracts and transactions between parent telecommunications companies and their subsidiaries.¹²⁷ As Senator Dill, Chairman of the Committee on Interstate Commerce explained:

Mr. Gifford's strenuous opposition to some of the provisions of this bill has resulted in so much information being given me in the last few days as to what the subsidiaries are doing and as to the way the funds of the American Telephone & Telegraph Co. have been used that I am preparing a resolution to provide for an investigation of the American Telephone & Telegraph Co. . . . I am inclined to think that it will be a good thing for this country to have the full facts about this organization.¹²⁸

The FCC examination of parent-subsidiary transactions that was originally directed by section 215 of the Communications Act of 1934 was absorbed the following year into a broader investigation Congress directed the FCC to conduct into all aspects of the Bell System's operations.¹²⁹ Much of the resulting 1939 FCC report focused on the relationship between AT&T and its wholly-owned subsidiary Western Electric, which gave Western Electric the exclusive contract to supply telephone and telegraph equipment to the Bell System.¹³⁰ Although the Bell Company had maintained to FCC investigators that the purpose of this relationship was simply to assure a steady supply of equipment to the network, the report concluded that its actual purpose was to secure monopoly profits for Western Electric by forcing all Bell System companies to use only Western Electric equipment.¹³¹ Western Electric used creative accounting practices to artificially inflate the equipment's cost, the Commission contended, which resulted in higher operating company costs, and therefore higher rates charged to local telephone customers.¹³²

The Second World War intervened before any response to the FCC report could be considered. During the war the Bell System worked closely with the Defense Department, devoting its resources to meeting the Government's requirements.¹³³

¹²⁵ 1934 Hearings, *supra* note 124, at 78-82; 1980 Justice Dept. Brief, *supra* note 81, at 1838.

¹²⁶ 1934 Hearings, *supra* note 124, at 78-82; 1980 Justice Dept. Brief, *supra* note 81, at 1838.

¹²⁷ 78 Cong. Rec. 8824 (1934); 1980 Justice Dept. Brief, *supra* note 81, at 1839.

¹²⁸ 1934 Hearings, *supra* note 124, at 199; 1980 Justice Dept. Brief, *supra* note 81, at 1839.

¹²⁹ Pub. Res. 8, 74th Cong. (1935); see 1980 Justice Dept. Brief, *supra* note 81, at 1841.

¹³⁰ H.R. Doc. No. 340, 76th Cong., 1st Sess. (1939).

¹³¹ Peters, *supra* note 78, at 260-261.

¹³² *Id.*

¹³³ Brooks, *supra* note 86, at 208-231.

D. The second Sherman Act enforcement action and the 1956 consent decree

As general price levels rose after World War II, the Bell operating companies subjected State regulators to repeated requests for rate increases.¹³⁴ The regulators complained to the Attorney General that they could not obtain adequate information regarding Western Electric's costs to determine whether the prices it charged the operating companies were reasonable.¹³⁵ Because Western Electric was neither a common carrier nor a public utility, it did not fall within the jurisdiction of either the FCC or the State regulatory commissions.¹³⁶

After conducting an investigation and reviewing the FCC's 1939 report, the Department filed its second Sherman Act enforcement action against the Bell System in January 1949.¹³⁷ The complaint charged that Western Electric and AT&T had been engaged in a continuing conspiracy to monopolize and restrain trade in the manufacture, distribution, and sale of telephones and telephone equipment in violation of the Sherman Act.¹³⁸

According to the complaint, the Bell monopoly's control of the market for telephone equipment permitted it to control the plant investments and operating expenses from which regulators determine rates to be charged subscribers for telephone service. The absence of effective competition had thus enabled the Bell System to inflate the equipment's cost, undermining the ability of Federal and State regulatory bodies to determine just and reasonable rates.

Telephone rates are fixed upon the basis of a fair return on the investment in the telephone plant, and where such telephone plant is purchased from a single concern, it is obvious that the prices for such equipment are not determined by competition in a free market.¹³⁹

The Department asked the court to require that Western Electric be divested from the Bell System and divided into three competing units which would sell equipment by competitive bidding to AT&T and its local Bell operating company subsidiaries.¹⁴⁰ The Department also asked that Western Electric and Bell Laboratories be required to license their patents to competitors on a reasonable basis.¹⁴¹ In the words of the Justice Department's lead attorney in

¹³⁴ See National Ass'n of R.R. and Utils. Comm'rs, *Proceedings of the Fifty-Ninth Annual Convention*, 342, 349, 354 (1948); National Ass'n of R.R. and Utils. Comm'rs, *Proceedings of the Sixty-First Annual Convention*, 16 (1950); National Ass'n of R.R. and Utils. Comm'rs, *Proceedings of the Sixty-Second Annual Convention*, 45 (1951); Peters, *supra* note 78, at 259.

¹³⁵ Peters, *supra* note 78, at 260.

¹³⁶ National Ass'n of R.R. and Utils. Comm'rs, *Proceedings of the Sixtieth Annual Convention* 92-95 (1948); Peters, *supra* note 78, at 260.

¹³⁷ *United States v. Western Elec. Co.*, 1956 Trade Cas. (CCH) ¶ 68,246 (D.N.J. Jan. 24, 1956) (complaint filed Jan. 14, 1949), *reprinted in 1958 Hearings, infra* note 142, at 1719, *vacated and replaced*, 1982-2 Trade Cas. (CCH) ¶ 64,900 (D.D.C. Aug. 24, 1982).

¹³⁸ The alleged conspiracy between AT&T and Western Electric consisted of continuing agreements: (i) to acquire control of the market in the United States for substantially all telephones, telephone apparatus, and equipment through predatory patent policies, acquisitions of independent telephone companies, and agreements with telegraph companies that they would not engage in telephone service; and, (ii) to eliminate all substantial competition in the manufacture and sale of telephone equipment required by the Bell operating companies and the long lines department of AT&T. *Id.*

¹³⁹ *Id.*

¹⁴⁰ *Id.*; see also Peters, *supra* note 78, at 261.

¹⁴¹ *United States v. Western Elec. Co.*, 1956 Trade Cas. (CCH) ¶ 68,246, *reprinted in 1958 Hearings, infra* note 142, at 1719.

the case, the “basic purpose of the suit [was] to introduce some competition in the purchase [of telephone equipment] by the Bell operating companies and the long lines department of AT&T,”¹⁴² or, in the words of one industry analyst, “substitute the discipline of competition for the unattainable discipline of regulation.”¹⁴³

In 1956 the antitrust suit was settled by a consent decree¹⁴⁴ which contained virtually none of the relief originally sought in the Department’s complaint. The decree did not require that Western Electric be divested from the Bell System, much less that AT&T and its operating companies buy telephone equipment under competitive bidding.¹⁴⁵ The Department abandoned this structural relief on the premise that Western Electric’s sales to the Bell operating companies were subject to “indirect regulation.”¹⁴⁶

In keeping with this regulatory premise, the consent decree required Western Electric to maintain cost-accounting methods, consistent with generally accepted accounting principles, that would afford a valid basis for determining the cost to Western Electric of equipment sold to AT&T and the Bell operating companies.¹⁴⁷ But the Bell System, whose lawyers had suggested the use of the word “maintain” in the decree, concluded that the accounting system already in effect at Western Electric met this requirement, and hence that no change was necessary.¹⁴⁸

The decree also required that AT&T and the Bell operating companies confine themselves to the furnishing of basic common carrier communication services, and Western Electric to the manufacture and sale of equipment to the Bell System.¹⁴⁹ But this meant only that Western Electric had to stop making railroad signalling equipment and to spin off its sound recording and typesetting operations, and that AT&T and the Bell operating companies had to divest a handful of small private mobile communications leasing operations.¹⁵⁰

Finally, the Decree required Western Electric to grant an applicant a nonexclusive license for any existing Bell patent on a royalty-free basis and for any future Bell patents at a reasonable and nondiscriminatory royalty.¹⁵¹ But potential manufacturers complained that this requirement was also meaningless, because as long as Western Electric remained wholly owned within the Bell System, there was no market for telephone equipment made by independent suppliers.¹⁵²

Thus, unlike the agreement terminating the previous antitrust prosecution of the Bell monopoly, the 1956 consent decree had little

¹⁴² *The Consent Decree Program of the Department of Justice: Hearings Before the Antitrust Subcomm. of the House Comm. on the Judiciary*, 85th Cong., 2d Sess. 3613 (1958) (statement of Holmes Baldrige) [hereinafter *1958 Hearings*].

¹⁴³ F. Scherer, *Industrial Market Structure and Economic Performance* 518-42 (1970).

¹⁴⁴ *United States v. Western Elec. Co.*, 1956 Trade Cas. (CCH) ¶ 63,246 (D.N.J. Jan. 24, 1956) reprinted in *1958 Hearings*, supra note 142, at 1845; vacated and replaced, 1982-2 Trade Cas. (CCH) ¶ 64,900 (D.D.C. Aug. 24, 1982).

¹⁴⁵ *Id.*; *Report of the Antitrust Subcomm. of the House Comm. on the Judiciary*, 86th Cong., 1st Sess. 35-39 (1959) [hereinafter *1959 Report*].

¹⁴⁶ *1958 Hearings*, supra note 142, at 3691.

¹⁴⁷ *1959 Report*, supra note 145, at 357.

¹⁴⁸ *1958 Hearings*, supra note 142, at 2620.

¹⁴⁹ *1959 Report*, supra note 145, 355-356.

¹⁵⁰ *Id.* at 97-98.

¹⁵¹ *1958 Hearings*, supra note 142, at 4079 *et seq.*

¹⁵² *1959 Report*, supra note 145, at 108.

relevance to the original premise of the case: that the exclusive purchasing arrangement between Western Electric and the rest of the Bell monopoly was inherently anticompetitive and inflationary.¹⁵³ The disappointing and puzzling retreat of the Department from the original vigor of the case brought in 1949 proved not to be a unique turn of events: in the aftermath of victory in the 1982 consent Decree, the Department again appeared to play devil's advocate to itself, challenging the very thrust of the case.

E. House Judiciary Committee investigation of the 1956 consent decree

Because of the vast disparity between the relief the Justice Department originally sought in the 1949 case and the relief it actually obtained in the 1956 Consent Decree,¹⁵⁴ the House Committee on the Judiciary conducted an investigation to determine whether the "Department of Justice had given AT&T special and preferred treatment."¹⁵⁵

The Committee's investigation uncovered an elaborate campaign to undermine the case, orchestrated and executed by AT&T, in which AT&T enlisted the aid of top officials in the FCC, the Defense Department, and the Justice Department itself. The Committee findings were published in a 1959 report.¹⁵⁶

Although AT&T had made no headway in undermining the Justice Department's resolve during the Truman Administration,¹⁵⁷ the Committee learned, President Eisenhower's Attorney General Herbert Brownell quickly telegraphed a significant shift in the Department's position by announcing in March 1953 that he was personally reviewing the Department's pending antitrust cases to determine whether any should be dismissed.¹⁵⁸ At that invitation AT&T arranged a series of meetings with top Justice Department officials, leading to a June 1953 visit between T. Brooke Price, AT&T's vice president and general counsel, and General Brownell

¹⁵³ Peters, *supra* note 78, at 264.

¹⁵⁴ The Committee found that the consent decree was based on a "theoretically dubious, factually false, and legally irrelevant premise. . . ." *Report of the Antitrust Subcomm. of the House Comm. on the Judiciary*, 86th Cong., 1st Sess. 290 (1959).

¹⁵⁵ *Id.* at 39. The Committee's suspicions were heightened when the Justice Department refused to provide any documentation related to the negotiations and settlement, forcing the Committee to rely on documents obtained from AT&T, the Defense Department, and the FCC. The Committee was also disturbed to learn that the Department of Defense was furnishing AT&T copies of all documents it was furnishing the Committee, including internal interoffice memoranda. *See id.* at 39-45.

Chairman Brooks is the only current Member of the Judiciary Committee who was a Member of the Committee during this investigation.

¹⁵⁶ *Report of the Antitrust Subcomm. of the House Comm. on the Judiciary*, 86th Cong., 1st Sess. 290 (1959).

¹⁵⁷ In February 1952, lawyers representing AT&T met with Attorney General Howard McGrath to seek postponement of the case until after the Korean War on the basis that a trial would result in key personnel of Bell Laboratories being diverted from defense activity. In March, armed with a memo from AT&T counsel, Defense Secretary Robert Lovett wrote Attorney General McGrath advocating AT&T's position—without investigating whether Bell Laboratories personnel working on defense matters would actually be needed at trial. In April, the Attorney General denied the request on the ground that it would mean "a rather permanent abandonment of the Government's efforts to terminate acts by the defendants it believes are in violation of the antitrust laws and detrimental to the people of the country." *Id.* at 47-48. For the remainder of the Truman Administration, the Justice Department adhered to its refusal to suspend the case, despite persistent pressure from AT&T and the Defense Department. *Id.* at 45-51.

¹⁵⁸ *Hearings*, *supra* note 142, at 1946, 2017, 2165.

at the Greenbrier Resort Hotel in White Sulphur Springs, West Virginia.¹⁵⁹

During this visit General Brownell told Mr. Price “that a way ought to be found to get rid of the case.”¹⁶⁰ He said AT&T “could readily find practices that [it] might agree to have enjoined with no real injury to [its] business—that if AT&T “tried” it “certainly would find things of that sort that could be used as a basis for a consent decree.” He also told Mr. Price that “if a settlement was worked out, I could get the President’s approval in 5 minutes.”¹⁶¹

Shortly after the Greenbrier Resort rendezvous, Dr. M.J. Kelly, President of Bell Telephone Laboratories, who was fresh from a stint as a high-level unpaid Defense Department “consultant,”¹⁶² supplied Defense Secretary Charles Wilson with a “ghost written” letter to General Brownell urging, “in the interests of national defense,” settlement of the case without divestiture of Western Electric.¹⁶³ Secretary Wilson sent the letter over his own signature.¹⁶⁴

Over the next 2 1/2 years AT&T relentlessly pursued its objective. After General Brownell made clear to Mr. Price that he was not willing to dismiss the case outright, AT&T focused on achieving a painless settlement.¹⁶⁵

In late 1954 General Brownell assigned Edward Foote, a new Justice Department lawyer “lacking in antitrust experience,”¹⁶⁶ to take charge of the settlement negotiations and report directly to him.¹⁶⁷ Mr. Foote soon invited Mr. Price to his home for dinner and, during their after-dinner chat, confided that he lacked confidence in the antitrust complaint and believed it would be “silly to consider trying” the case.¹⁶⁸

¹⁵⁹ 1959 Report, *supra* note 145, at 52–53. AT&T’s first meeting with General Brownell, in April 1953, was arranged by his friend Bayard Pope, a director of New York Telephone, a Bell subsidiary. *Id.* at 52.

¹⁶⁰ *Id.* at 53.

¹⁶¹ *Id.* at 53. “In effect,” the Judiciary Committee found, “the Attorney General of the United States was proposing that as a basis for concluding the litigation the defendants should submit to a face-saving decree that would omit the basic relief requested by the Government’s complaint, namely, divorcement of Western Electric from the Bell System.” *Id.* at 55.

¹⁶² While Dr. Kelly was a consultant at the Defense Department, from January 9, 1953 through June 8, 1953, he continued to be paid as President of the Bell Telephone Laboratories. He used this position of public trust to actively lobby the Defense Department for assistance in obtaining dismissal of the antitrust suit. *See id.* at 59.

¹⁶³ *Id.* at 57.

¹⁶⁴ *Id.* at 56. The Defense Department soon provided additional reinforcements to AT&T. In November 1954 when Judge Stanley Barnes, head of the Antitrust Division, was continuing to press for divestiture of Western Electric as the only hope of fostering competition in equipment supply, Mr. Price visited the Defense Department’s new general counsel, Wilbur Brucker, to “familiarize” him with the case. Mr. Brucker promptly wrote Judge Barnes, advocating the Bell position. *Id.* at 64.

¹⁶⁵ *Id.* at 59–60.

¹⁶⁶ *Id.* at 65.

¹⁶⁷ *Id.*

¹⁶⁸ *Id.* at 66. The Committee found that Mr. Foote’s declaration—though at polar opposites with the considered judgments of the two Justice Department lawyers directing the case, who had been with the Antitrust Division 18 years and 13 years, respectively—had made a big impression on AT&T and had further undermined whatever was left of the Department’s negotiating leverage. *Id.* at 67.

Mr. Foote was extremely solicitous of AT&T’s perspective. For example, in August 1955, Mr. Foote called Horace Moulton, Mr. Price’s successor as AT&T’s general counsel, for input for a memorandum he was preparing for Judge Barnes on the various alternatives under discussion for settlement. Mr. Moulton helpfully supplied Mr. Foote with a series of memoranda, on paper with no letterhead or references to authorship by AT&T, which purported to set forth objectively the pros and cons regarding each alternative, with conclusions in favor of AT&T’s position. Mr. Foote met with General Brownell and Judge Barnes on August 25, informing Mr. Moulton the next day that he had advocated AT&T’s position. *Id.* at 69–71.

In May 1955, General Brownell told AT&T Executive Vice President H.S. Dumas that the case “ought to be disposed of as quickly as possible” and that he would see what he could do to make it occur.¹⁶⁹ Mr. Foote followed up with several summer sessions with AT&T lawyers to work on a possible consent decree.¹⁷⁰

During the fall of 1955, at the direction of General Brownell, Mr. Foote visited FCC Chairman George McConnaughy, accompanied by Judge Stanley Barnes, head of the Antitrust Division, to obtain the FCC’s views regarding the choice between regulation and divestiture.¹⁷¹ Mr. McConnaughy had formerly been counsel to Ohio Bell Telephone Company.¹⁷² Alerted by Mr. Foote, AT&T contacted every Commissioner well in advance of the visit.¹⁷³ The FCC soon approved a letter to General Brownell adopting AT&T’s point of view: “We are of the opinion that the powers encompassed within the existing regulatory framework can provide substantial safeguards against possible abuses in fixing the prices of Western [Electric] for equipment and services supplied to the telephone companies in the Bell System.”¹⁷⁴

With the FCC letter in hand, General Brownell met with Mr. Foote—apparently while Judge Barnes was out of town—and told him unequivocally to settle the case without divestiture of Western Electric or interference with its role as exclusive supplier to the Bell System.¹⁷⁵ Over the opposition of every Department lawyer involved in the litigation,¹⁷⁶ the Justice Department agreed to the painless settlement of which General Brownell had first hinted to AT&T at the Greenbrier Resort.¹⁷⁷

F. Antitrust consent decree reforms and the Tunney Act

The revelations from the hearings on the 1956 consent decree had a profound impact, not only on the House Judiciary Committee, but also on the entire Congress and—after a change in administration—the Executive Branch as well. The incoming Kennedy Administration moved quickly to address the Judiciary Committee’s concern that the Justice Department’s consent decree procedures were shrouded in a “twilight zone” of secrecy and unaccountability.¹⁷⁸

¹⁶⁹ *Id.* at 68. This meeting was also arranged by General Brownell’s friend Bayard Pope.

¹⁷⁰ *Id.* at 71.

¹⁷¹ 1958 Hearings, *supra* note 142, at 3686.

¹⁷² 1959 Report, *supra* note 145, at 72. The FCC had distinguished itself during this period by granting the Bell monopoly a \$65 million increase in long distance tariffs—the first general increase in the FCC’s history—without holding a hearing. *See id.* at 78.

¹⁷³ 1958 Hearings, *supra* note 142, at 2423.

¹⁷⁴ *See id.* at 3692. The Commissioners had deleted key language from the draft submitted by the FCC’s Common Carrier Bureau. The draft emphasized that regulation could be effective only if it were “properly and vigilantly administered,” which was “largely dependent upon the resources [he did not mention resolve] of the respective agencies.” The draft had deferred to the Justice Department on the central questions of whether a competitive market for telecommunications equipment was feasible and would be beneficial and whether Western Electric was inflating its prices. As indicated in a memorandum to the FCC from the Chief of the Common Carrier Bureau written six months after entry of the consent decree, adequate yardsticks by which to evaluate the reasonableness of Western Electric’s prices had not been developed. *Id.* at 3521, 3542.

¹⁷⁵ 1959 Report, *supra* note 145 at 83.

¹⁷⁶ *Id.* at 85. The two Department lawyers directing the litigation both refused to sign the consent decree, stating that they would rather see the case dismissed outright than settled without divestiture. *Id.* at 84–5, 90.

¹⁷⁷ *Id.* at 94.

¹⁷⁸ *Id.* at 15.

The Justice Department soon initiated a more vigorous antitrust enforcement policy under Attorney General Robert Kennedy, which included consent decree procedures designed to encourage full public and court review before a consent decree became final.¹⁷⁹ However, revelations of secret ex-officio political deals and other questionable practices regarding the negotiation of antitrust consent decrees resurfaced under the Nixon Administration, when a 1971 consent decree with the International Telephone & Telegraph Co. (ITT) was reported to have been tailored in ITT's favor as a quid pro quo for ITT's donation of \$400,000 to help underwrite the 1972 Republican national convention.¹⁸⁰ Renewed congressional concern led to enactment of the "Antitrust Protection and Procedures Act of 1974," commonly referred to as the Tunney Act,¹⁸¹ to "substitute sunlight for twilight."¹⁸²

The Tunney Act requires that a proposed antitrust consent decree be filed with the district court and published in the Federal Register at least sixty days before taking effect.¹⁸³ The proposed decree must be accompanied by a competitive impact statement, available to anyone upon request, explaining the antitrust problem which led to the Department's lawsuit and the reasons for the particular remedy chosen in the proposed decree.¹⁸⁴

The primary purpose of public participation is to assist the district court in making an "independent determination" as to whether the proposed consent decree is in the "public interest."¹⁸⁵ Although negotiation of a consent decree is an enforcement function of the Executive Branch, "actual entry of the proposed consent decree is an exercise of judicial power."¹⁸⁶ The Department's consent decree proposals were, therefore, to be subjected to close judicial scrutiny rather than a judicial "rubber stamping."¹⁸⁷ The Tunney Act requires the court to make a public interest determination before entering a decree, and gives the court broad authority to consider all public and private ramifications of the decree and to conduct whatever procedures the court deems appropriate to assist in that consideration.¹⁸⁸ The legislative history makes clear that Congress intended the court to play an active role, giving the court authority to condition entry of the decree on specific changes to

¹⁷⁹ In 1961 the Attorney General issued an order announcing that proposed consent judgments would be filed in court at least thirty days prior to entry, to afford persons who "may be affected by such judgment" opportunity to submit written comments to the Justice Department. The Department would reserve the right to "withdraw or withhold its consent to the proposed judgment if the comments, views or allegations submitted disclose facts or considerations which indicate that the proposed judgment is inappropriate, improper or inadequate." American Bar Association, *Antitrust Law Developments* 239 (1975).

¹⁸⁰ *The ITT Controversy Revisited*, Time, Aug. 13, 1973, at 18-19; Oppenheim et al., *Federal Antitrust Laws* Sec. 1, at 1036 & n.83 (4th ed. 1981).

"We don't know how the decree got entered, thanks to the operation of the shredding machine." *The Antitrust Procedures and Penalties Act: Hearings Before the Subcomm. on Antitrust and Monopoly of the Senate Comm. on the Judiciary*, 93d Cong., 1st Sess. 142 (1973) (testimony of Worth Rowley).

¹⁸¹ Pub. L. No. 93-528, 88 Stat. 1706 (1974) (codified at 15 U.S.C. 16(b)-(h)(1982)). See S. Rep. No. 93-298, 93rd Cong., 1st Sess. (1973) [hereinafter *1973 Senate Report*]; H. Rep. No. 93-6535 [hereinafter *1973 House Report*].

¹⁸² *1973 House Report*, supra note 181, at 6-7.

¹⁸³ Pub. L. No. 93-528, 88 Stat. 1706 (1974) (codified at 15 U.S.C. 16(b)(1982)).

¹⁸⁴ *Id.*

¹⁸⁵ *1973 Senate Report*, supra note 181, at 4.

¹⁸⁶ *1973 House Report*, supra note 181, at 8.

¹⁸⁷ *Id.*

¹⁸⁸ Pub. L. No. 93-528, 88 Stat. 1706 (1974) (codified at 15 U.S.C. 16(e)(1) (1982)).

it.¹⁸⁹ The court was also to play an active role in shaping the “appropriate judicial procedures” for “future modifications” to a consent decree.¹⁹⁰

To put an end to secret *ex parte* “lobbying contacts” outside normal litigation channels, the Tunney Act requires the defendant to disclose all written or oral communications on its behalf with any U.S. Government official, other than those made by its counsel of record with Justice Department lawyers.¹⁹¹ This disclosure includes any contact with another Federal agency, as well as any contact with the Justice Department by a representative of the defendant other than its counsel of record—even if its counsel of record is also present.¹⁹²

G. Technological and regulatory developments following the 1956 consent decree

The 1956 consent decree left the FCC once again in the front lines of policing the telecommunications industry. It also left AT&T as the largest, most powerful corporation in the world.¹⁹³ The next two decades were marked by a series of technological developments—innovations which the Bell System mightily resisted—accompanied by marginal efforts by the FCC to cope with the competitive challenges brought on by these developments.

The first competitive challenge was in the field of telecommunications equipment. Immediately prior to and following the consent decree, a number of small manufacturers of various types of telecommunications equipment tried valiantly to compete for business with AT&T’s subsidiary Western Electric.¹⁹⁴ AT&T responded to these threatened competitive incursions aggressively, by forbidding interconnection of competitors’ terminal equipment with the Bell System and threatening to terminate phone service to any customer who disobeyed.¹⁹⁵ Protracted but substantively ineffective FCC inquiries ensued, with AT&T arguing that to permit customers to attach non-Bell equipment to the network would degrade service and endanger telephone employees.¹⁹⁶

The first of these inquiries¹⁹⁷ concerned the Hush-a-Phone, a cup-like device that attached to a telephone to enable a more private conversation.¹⁹⁸ In 1948 the Hush-a-Phone Corporation challenged the Bell System’s policy prohibiting the attachment of non-Bell equipment; in 1955—more than four years after oral argument had concluded—the FCC ruled in favor of AT&T.¹⁹⁹ The United

¹⁸⁹ 1973 House Report, *supra* note 181.

¹⁹⁰ *Id.* at 9.

¹⁹¹ Pub. L. No. 93-528, 88 Stat. 1706 (1974) (codified at 15 U.S.C. 16(g) (1982)).

¹⁹² 1973 Senate Report, *supra* note 181, at 7.

¹⁹³ See Fortune Directory, Fortune Magazine, July 1957 supp., at 28.

¹⁹⁴ David S. Evans, *Introduction*, in *Breaking up Bell* (D.S. Evans ed., 1983).

¹⁹⁵ Brooks, *supra* note 86, at 298.

¹⁹⁶ *Id.*

¹⁹⁷ An earlier competitive challenge to AT&T, that came before the FCC immediately following World War II, concerned telephone recording devices developed for military use during the war and of interest to business customers after the war. AT&T was prohibiting the attachment of these devices to its network because they were not made by Western Electric. In *Use of Recording Devices*, 11 F.C.C. 1022 (1947), the FCC ordered AT&T to allow attachment of these devices since Western Electric was not satisfying demand for them. Deferring to AT&T’s professed need to protect the safety and integrity of its network, however, the FCC ruled that connection could only be made through a special apparatus “provided, maintained, and installed by AT&T.”

¹⁹⁸ *Hush-a-Phone Corp.*, 20 F.C.C. 391, 392 (1955), *rev’d*, 238 F.2d 266 (D.C. Cir. 1956).

¹⁹⁹ *Id.* at 394.

States Court of Appeals for the D.C. Circuit, however, reversed the FCC's decision as arbitrary because there was no evidence that use of the Hush-a-Phone would harm the network.²⁰⁰

AT&T's hostility toward "foreign" equipment persisted, however. In the mid-1960's Thomas F. Carter invented and marketed the "Carterfone," a device for interconnecting two-way radios with the telephone system, which involved some electrical connection to the Bell network.²⁰¹ AT&T informed Carterfone subscribers that use of the Carterfone was prohibited and would subject them to heavy penalties under AT&T's tariff provisions.²⁰² Rather than take his complaint to the FCC, Mr. Carter filed a private Federal antitrust suit.²⁰³ The court ordered the case removed to the FCC, but retained jurisdiction to revisit the matter after the FCC had made its ruling.²⁰⁴

Thus prompted by the court, the FCC ruled the Bell System's prohibitive tariffs unlawful—since they frustrated a customer's right to attach any equipment that did not harm the network—but failed to provide guidelines on interconnection, leaving the decision up to AT&T.²⁰⁵ AT&T's response was to allow unrestricted interconnection, but to require use of a special "protective connecting arrangement," available only through AT&T for a tidy fee.²⁰⁶ The complaints continued, eventually forcing the FCC to establish its *own* pre-testing and registration program for AT&T's "protective connection arrangement" policy.²⁰⁷

At the same time that the FCC was struggling to come to grips with the implications of competition in the telecommunications equipment market, it was also confronting new horizons for competition in long distance service as a result of technological developments. In the 1950's scientists discovered that microwaves (later, supplemented by satellites) could be used to transmit telephone conversations; compared to the traditional pole and copper wire, microwave networks could be created—and duplicated—with ease.²⁰⁸ Over the next two decades various enterprising companies attempted to extend this microwave technology ever further into the long distance market in competition with AT&T's Long Lines Division.²⁰⁹ The Bell System's reaction was characteristically hostile; the FCC's attempt to ascertain the competitive implications proved characteristically halting.

²⁰⁰ *Id.*

²⁰¹ *Carter v. AT&T*, 250 F. Supp. 188 (N.D. Tex.), *aff'd*, 365 F.2d. 486 (5th Cir. 1966), *cert. denied*, 385 U.S. 1008 (1967).

²⁰² *Id.*

²⁰³ *Id.* at 189.

²⁰⁴ *Id.* at 188.

²⁰⁵ *Carterfone*, 13 F.C.C. 2d 430, *aff'd on recon.*, 14 F.C.C. 2d 605 (1968); Decision to Divest, *supra* note 80, at I-10.

²⁰⁶ See *AT&T "Foreign Attachment" Tariff Revisions*, 15 F.C.C. 2d 605 (1968).

²⁰⁷ *Intrastate and Foreign Message Toll Telephone Service, First Report and Order*, 56 F.C.C. 2d 593 (1975), *modified on recon.*, 58 F.C.C. 2d 716 (1976), *Second Report and Order*, 58 F.C.C. 2d. 736 (1976), *aff'd sub nom. North Carolina Utilities Commission v. FCC*, 552 F.2d 1036 (4th Cir.), *cert. denied*, 434 U.S. 874 (1977). During the course of the Justice Department's 1974 Sherman Act enforcement action, AT&T was unable to prove any harm to the network resulting from elimination of the "protective connecting arrangement" requirement. See *MFJ Opinion*, *supra* note 1, 552 F. Supp. at 163.

²⁰⁸ Harold Greene, *The AT&T Litigation and Executive Policies Toward Judicial Action*, 24 *Land & Water L. Rev.* 229 (1989).

²⁰⁹ *Id.* at 229-230.