Reform of Japanese Telecommunications Law: Panacea or Placebo

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I. INTRODUCTION

The Japanese government controlled the country's telecommunications system from 1869, when the Ministry of Technology inaugurated telegraph service between Tokyo and Yokohama, until quite recently.1 The government's monopoly, operated since 1952 by the Nippon Telegraph and Telephone Public Corporation ("NTT"), ended on April 1, 1985, when Japan's new telecommunications laws became effective.2 The new laws—the Telecommunications Business Law3 and the Nippon Telegraph and Telephone Corporation Act4—open the Japanese telecommunications market to private enterprise and transform NTT into a private company.

1 Ohashi, The Effects of Telecommunications Deregulation, 1982-83 Harv. U. Program on U.S.-Japan Rel.: Ann. Rev. 85, 90. See also Ito, Recent Trends in Telecommunications Regulation and Markets in Japan, 25 Jurimetrics J. 70, 72 (1984). The Ministry of Technology started the telegraph service as a business run by the government. Id. at 72. The Ministry of Communications, formed in 1885 to take over the telegraph business and the mails, began the Japanese public telephone system as a government monopoly in 1890. Id. In 1949, the government split the Ministry of Communications into the Ministry of Postal Services—to handle mail services—and the Ministry of Telecommunications—to operate Japan's public telegraph and telephone systems until 1952. Id. at 73. For a detailed overview of the development of Japanese telecommunications prior to 1952, see J. Hills, Deregulating Telecoms: Competition and Control in the United States, Japan and Britain 102-03 (1986).


4 Nippon Telegraph and Telephone Corporation Act, Law No. —, 1984 [hereinafter NTT Act]. A third law, the Omnibus Act, concerning transitional provisions and enforcement of the two primary laws, also took effect on April 1, 1985. Its provisions fall outside the scope of this Comment.
Japan's move toward a private telecommunications market is significant for two reasons. First, the new laws opened up attractive business opportunities for private companies because of the expected growth of Japan's telecommunications market. Japan boasts the world's second largest telecommunications system and market.\(^5\) For example, in 1983, NTT accommodated nearly 42.5 million telephone service subscriptions.\(^6\) In fiscal 1984, NTT collected revenues of $19 billion, making it twice the size of British Telecom, but only half as large as AT&T.\(^7\) NTT's own telecommunications equipment purchases accounted for 46% of Japan's $4.3 billion telecommunications equipment market in the same period.\(^8\) Furthermore, Japan's market will continue to grow. The Keidanren, the Federation of Economic Organizations, estimates that this market could reach $20 billion per annum by 1988.\(^9\) In fact, Japan's interconnect market\(^10\) may increase by 30% annually.\(^11\) The new laws, therefore, have opened a lucrative market to private enterprise.

The second benefit of Japan's new telecommunications laws is that they may help reduce the growing telecommunications trade imbalance between Japan and the United States,\(^12\) and thereby ease trade tensions.

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\(^6\) *Nippon, A CHARTERED SURVEY OF JAPAN 266* (I. Yano ed. 1985).

\(^7\) *Japanese Telecoms, THE ECONOMIST, Mar. 30, 1985*, at 80.

\(^8\) *Id.* at 81. Purchases by private companies for in-house networks represented another 9% of Japan's 1984 telecommunications equipment market; the remaining 45% represented the interconnect market. *Id.* For a description of the interconnect market, see infra note 10.


\(^11\) Foster, supra note 9, at 9.

\(^12\) The degree to which United States sales in the Japanese telecommunications market will affect the telecommunications trade imbalance will depend on the growth rate of Japan's telecommunications imports, not the market share held by United States companies. Telecommunications products made in the United States already accounted for 90% of Japan's telecommunications imports in 1985. *NTT's Procurement from Abroad to Mark Time*, *Japan Econ. J.*, Mar. 15, 1986, at 19, col. 5 [hereinafter *Mark Time*].
between the two countries. United States trade officials and Congress believe that the growing trade imbalance in telecommunications equipment between Japan and the United States\(^{13}\) contributes significantly to the overall trade imbalance between the two countries.\(^{14}\) They have focused on Japan's efforts to open its telecommunications market as a symbol of Japan's commitment to remedy the trade imbalance.\(^{15}\)

This Comment outlines the development of Japanese telecommunications law as it shifted the market from a government monopoly to private enterprise. This Comment first describes Japan's former policy goals for telecommunications and the effects of its older telecommunications laws.\(^{16}\) Next, this Comment describes Japan's new telecommunications laws and the policy interests that shaped them.\(^{17}\) This Comment also analyzes whether the impact of the new laws actually furthers their intended policy objectives.\(^{18}\) The Comment concludes that Japan's new telecommunications laws do promote several of Japan's current policy

\(\begin{align*}
14 & \text{In 1975, Japan's trade surplus with the United States totaled only $1.86 billion. Note, Japanese Telecommunications, supra note 10, at 97 n.15. By 1986, that figure had grown to $58.6 billion. 1986 Deficit Hits Record $153 Billion Even Though December Figures Show Improvement, 4 Int'l Trade Rep. (BNA) 125 (1987).} \\
15 & \text{See Oversight on Government Procurement Code and Related Agreements: Hearing Before the Subcomm. on International Trade of the Senate Comm. on Finance, 97th Cong., 2nd Sess. 7 (statement by Senator Danforth)[hereinafter Procurement Code Hearing]. Commerce Under Secretary Lionel H. Olmer has characterized Japan's continuing reluctance to open its telecommunications market to foreign competition and products as the watershed issue in trade relations between Japan and the United States.Collision Course: Can the U.S. Avert a Trade War with Japan?, Bus. Wk., Apr. 8, 1985, at 51. Indeed, when Congress initially perceived that Japan's new laws left intact trade barriers to Japan's telecommunications market, three senators introduced protectionist trade bills in retaliation against Japan. See S. 728, 99th Cong., 1st Sess. (1985)(Senator Chaffee's bill to ban imports of Japanese telecommunications equipment pending equal access to Japan's market); S. 770, 99th Cong., 1st Sess. (1985)(Senator Heinz's bill to impose a 20% across the board tariff on all Japanese imports); S. 942, 99th Cong., 1st Sess. (1985)(Senator Danforth's bill to require reciprocity in market access). In response to Congress' retaliatory trade bills, the chief editor of the Japan Economic Review complained that Members of Congress use Japan as a scapegoat for the United States trade deficit. Usami, Hysterical Congressional Attacks on Japan Bringing Much Harm to Japan-U.S. Friendship, Mutual Trust, Japan Econ. Rev., May 15, 1985, at 2, col. 1. The editor noted that 29.8% of the 1984 United States trade deficit was attributable to Japan. Id.} \\
16 & \text{Congressional concern and reaction stemmed from the disparity between the United States trade deficit with Japan and its deficit with other major trading partners. In 1984, the trade deficit with Japan reached $37 billion, up from $19.6 billion in 1983, while trade deficits with Canada and Europe totaled only $20 billion and $17 billion respectively. Mansfield, The U.S.-Japan Relationship, J. Am. Chamber Com. Japan, June 1985, at 73.} \\
17 & \text{See infra notes 20-61 and accompanying text.} \\
18 & \text{See infra notes 62-199 and accompanying text.} 
\end{align*}\)
objectives, but represent only part of a long-term remedy for correcting the telecommunications trade imbalance between Japan and the United States.

II. DEVELOPMENT AND EFFECTS OF JAPANESE TELECOMMUNICATIONS LAW

The new Japanese telecommunications laws mark the most recent step in Japan's development from a government controlled telecommunications system to a private one. Japan's former telecommunications laws prescribed strict government control. For example, the Diet enacted the Nippon Telegraph and Telephone Public Corporation Law ("PCL")\textsuperscript{19} in 1952 to create NTT, a government-owned corporation with a monopoly over domestic telecommunications.\textsuperscript{20}

By 1981, Japan had introduced foreign competition into its telecommunications system. On December 19, 1980, Japan and the United States entered into a three-year telecommunications trade agreement ("Procurement Agreement")\textsuperscript{21} and simultaneously issued a joint statement ("Interconnect Agreement"). Under the Procurement Agreement, NTT permitted foreign suppliers, for the first time, to bid on NTT procurement contracts. Although it left unaffected the NTT monopoly, the Procurement Agreement required NTT to accept bids from and to award contracts to foreign suppliers on a competitive basis with Japanese suppliers.\textsuperscript{22} At the same time, the Interconnect Agreement eased regulatory restrictions on Japan's interconnect market.

The most recent step toward creating a competitive telecommunications market occurred on December 20, 1984, when the Diet passed Japan's new telecommunications laws. Under the new laws, the Japanese government retained regulatory control over the telecommunications sys-

\textsuperscript{19} Nippon denshin denwa kōsho (Nippon Telegraph and Telephone Public Corporation Law), Law No. 250, 1952 [hereinafter PCL].


\textsuperscript{22} See infra notes 62-77 and accompanying text.
system. The laws ended NTT’s monopoly, however, so that private domestic and foreign companies now have competitive access to Japan’s telecommunications equipment and services markets.23

A. The Monopoly Era: Policy Objectives, the Law, and its Effects

The Diet had several policy objectives when it created NTT. The primary objective was to establish nationwide telephone service24 because it promoted the public welfare.25 The Diet reasoned that a government monopoly, rather than a series of private telecommunications companies, better ensured that telecommunications service would reach the most remote parts of Japan.26 Moreover, a monopoly would be better able to charge uniformly low local rates.27 Since constructing a telecommunications network required a large initial capital investment, the Diet presumed that the lack of competition would protect the large capital investment better than a competitive market.28 A government monopoly presumably assured efficiency by providing economies of scale,29 preventing duplicative investment,30 and developing uniform equipment and transmitting standards.31 Finally, the government desired to cultivate domestic industry.32

The government implemented these objectives through the PCL and the Public Telecommunications Law of 1953 (the “1953 Law”).33 Under

23 See infra notes 159-99 and accompanying text.
24 Varner, Telecommunications Enters a New Age, J. AM. CHAMBER COM. JAPAN, Mar. 1985, at 31. World War II destroyed Japan’s telephone system. In March 1951, the number of telephones installed in Osaka only added up to 59% of the number of installed telephones in Osaka in 1940. Japan’s Transportation and Communications, 14 FAR E. ECON. REV. 238, 239 (1953). Among Japan’s major cities that suffered war damage, only Fukuoka had rebuilt to its prewar standing by March 1951, operating at 104% of its 1940 capacity. Id. Consequently, Japan wanted to restore and develop its telephone system.
25 PCL art. 1.
26 See Shinto, supra note 20, at 380. Private companies would have concentrated their telecommunications networks in the most populated areas which generate the most business.
27 The Diet evidenced this policy concern by enacting legislation that kept local rates at ¥7 per telephone call from 1952 to 1972. J. Hills, supra note 1, at 105. The telecommunications monopoly could meet the governmental restrictions on local rates by cross-subsidizing revenues from operations all across the country. In contrast, smaller private carriers, especially those serving low-volume, rural areas, would be less suited to cross-subsidize revenues.
29 Shinto, supra note 20, at 380.
30 Burgess, Japan’s Telephone Divestiture is Enticing American Suppliers, Washington Post, Dec. 3, 1984, at 21, col. 2.
31 Shinto, supra note 20, at 380.
33 Kōshu denki tsūshinhō (Public Telecommunications Law), Law No. 97, 1953 [hereinafter 1953 Law].
the PCL, the Diet created NTT and provided for exclusive government financing. The PCL allowed only NTT to engage in the business of public telecommunications service and other business necessary to achieve NTT’s purposes. The Ministry of Posts and Telecommunications (the “Ministry”), the Cabinet, and ultimately the Diet had to approve NTT’s annual budget and business plan. Finally, to encourage growth among domestic equipment manufacturers, the PCL prohibited NTT from purchasing telecommunications equipment from foreign companies and from manufacturing equipment on its own.

Under the 1953 Law, the Diet expanded NTT control to include the telecommunications equipment market. For example, regulations required consumers to purchase from NTT their first telephone for each telephone line. After purchasing the “standard telephone set” from NTT, the consumer could purchase and install retail equipment called customer provided equipment (“CPE”). Furthermore, the Ministry delegated sole authority to NTT to set technical standards and to conduct testing and certification of both CPE and equipment purchased by NTT for its own use or for leasing or resale. NTT also adopted installation standards. The 1953 Law even required NTT to inspect and approve the phone jack connection before NTT turned on the telephone.

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34 PCL art. 1.
35 Id. art. 5.
36 Id. art. 3(1). NTT had to receive approval from the Ministry before it could invest in any business closely related to public telecommunications. Id. art. 41(7), 75. The PCL conditioned NTT’s tangential ventures on the Ministry’s consent so as to protect companies in closely related businesses from NTT competition. The Ministry limited NTT’s tangential business to automobile, ship, aircraft, and airport telephone service, pocket pager service, and technological research. Doing Business With Japan, supra note 2, at 380.
37 PCL art. 41. The government retained plenary control over personnel. The NTT board of directors consisted of seven members: five directors plus NTT’s president and vice president. Id. art. 11(1). The cabinet, with the consent of both houses of the Diet, appointed and could remove board members. Id. art. 12(1), 15. The cabinet, moreover, with the consent of the board, appointed and could remove the president and vice president. Id. art. 21(1), 24(1). Furthermore, management had no control over employee compensation which was fixed at levels commensurate with other “national public service personnel,” such as employees of Japan National Railways. Id. art. 30(2); H. Tanaka, The Japanese Legal System 806 (1976).

In contrast, the government retained much less control over KDD. Like NTT, KDD could conduct business incidental to its primary international service only after obtaining the Ministry’s consent. PCL art. 2. The Ministry, not the cabinet or the Diet, had appointment and removal power over KDD directors. The Ministry also had final authority regarding amendments to KDD’s charter, disposal of profits, liquidation, and KDD’s annual business plan. Id. art. 4.

38 See Seventeen Countries, supra note 20, at 157.
39 Id. at 151.
41 Seventeen Countries, supra note 20, at 154.
42 Telecommunications Standards, supra note 20, at 2-3.
By revising the 1953 Law in 1971 and again in 1982, the Diet opened data communication and value added network ("VAN") services to the private market. The 1971 revision permitted private companies to connect computers to NTT circuits in order to provide in-house data communication services. Before the revision, only NTT could offer domestic data communication services. By October 1982, the Diet permitted private companies to offer commercial VAN services over public telecommunications lines. Previously, the 1953 Law disallowed private companies to lease public telecommunications lines from NTT for transmitting VAN services sold to the public.

The PCL and the 1953 Law successfully implemented several of the Diet's objectives. In March 1978, NTT completed a nationwide telecommunications system, thereby eliminating the backlog of telephone service orders. In March 1979, the NTT system offered direct dialing service.

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43 1953 Law, art. 105(3)(4).
44 VANs transmit data from one computer to another via telephone lines. They enhance the value of existing telephone lines by encoding and decoding signals so that incompatible computers may communicate. Gregory, VANs in Japan: The Birth of an Industry, TELEPHONY, June 18, 1984, at 79. Examples of VANs include electronic approval of credit card purchases, electronic money transfers between banks, and computerized inventory systems that send information from retail outlets to a central management office. Japanese Telecom, supra note 7, at 81.
45 The 1971 revision of the 1953 Law fueled the power struggle between the Ministry and the Ministry of International Trade and Industry ("MITI"). See generally J. Hills, supra note 1, at 108-09 (describing conflict between the Ministry and MITI). Formerly, the Ministry had jurisdiction over telecommunications whereas MITI regulated the computer and data processing industries. Hatano, The New Media Nebula, 31 JAPAN Q. 384, 388 (1984). The distinction between telecommunications and computers faded, however, as the two were integrated into one system. Id. Neither the Ministry nor MITI wanted to lose any regulatory power due to the 1971 revision. Ultimately, the Diet granted the Ministry regulatory jurisdiction over data communication and VANs under Japan's new telecommunications laws. Varner, supra note 24, at 31.
46 SEVENTEEN COUNTRIES, supra note 20, at 149.
47 Hatano, supra note 45, at 384-85. As early as the mid-1970s, MITI advocated further deregulation of data communication in order to encourage private companies to offer new information services. Komiya & Renaud, supra note 32, at 163. MITI believed that the NTT monopoly was delaying the marriage of telecommunications and computers, a field labeled "compunications." Id. MITI reasoned that if NTT hampered the development of Japan's communications, then Japanese electronics companies would be handicapped in foreign markets. Id. The Telecommunications Advisory Council ("Advisory Council"), a Ministry appointed advisory body, subsequently shared MITI's views. Consequently, in August 1981, the Advisory Council published, "A Vision of Telecommunications Policy in the 1980's," which advocated deregulating data communication services and VANs. Ito, supra note 1 at 74-75.
48 Hatano, supra note 45, at 384.
49 Sawada, supra note 9, at 85. In the latter half of the 1960s, NTT installed an average of three million telephones per year. Ohashi, supra note 1, at 90. By March 1981, NTT serviced more than 39 million telephone line subscriptions. SEVENTEEN COUNTRIES, supra note 20, at 138. Japan had 56.3 million telephones by March 1981, which worked out to 47.9 telephones for every 100 persons. Id.
nationwide.\textsuperscript{50} By subsidizing local rates with expensive installation charges and long-distance revenue, NTT fulfilled the statutory mandate to charge uniformly low rates for local calls.\textsuperscript{51}

The two laws were less successful at creating efficiency. NTT experienced limited success in operating an efficient telecommunications system; nonetheless, NTT did generate profits. NTT earned $1.3 billion in 1983,\textsuperscript{52} up 3.9\% from 1982,\textsuperscript{53} and $1.5 billion in 1984.\textsuperscript{54} Nevertheless, NTT operated less efficiently than British Telecom and AT&T. For example, in 1983, NTT profits represented a return of only 8.4\% while British Telecom mustered a 14.4\% return and AT&T a 13\% return.\textsuperscript{55} Moreover, by March 1985, the size of the NTT work force rivaled that of AT&T—310,000 versus 390,000—but NTT generated only half as many sales as AT&T.\textsuperscript{56}

The two former laws did succeed in cultivating Japan’s domestic telecommunications equipment industry. While NTT spread its business among 200 to 300 Japanese companies, it purchased half of its telecommunications equipment from only four companies.\textsuperscript{57} These four major companies, along with seventeen smaller manufacturers from the “Denden family,” produced about 80\% of Japan’s telecommunications equipment.\textsuperscript{58} In addition to satisfying most of its equipment needs with Denden family products, NTT helped develop Denden family suppliers in two other ways. First, these companies benefited from NTT’s practice of cooperating on research and development projects.\textsuperscript{59} Second, many NTT executives joined these companies as directors after retiring from NTT.\textsuperscript{60} Finally, private companies offering data communication and VAN services flourished as a result of the 1971 and 1982 revisions to the

\textsuperscript{50} Sawada, \textit{supra} note 9, at 85.
\textsuperscript{51} J. Hills, \textit{supra} note 1, at 101, 105. The connection fee was about $400 in 1984. \textit{Id.} at 105. Long-distance rates sometimes cost 40 times more than local rates. \textit{Japanese Telecoms, supra} note 7, at 80.
\textsuperscript{52} Burgess, \textit{supra} note 30, at 21, col. 2.
\textsuperscript{54} Neff, \textit{Learning to Compete: Two Telephone Monopolies Take the Plunge into the Real World}, Int’l Mgmt., Apr. 1985, at 32.
\textsuperscript{55} \textit{Japanese Telecoms, supra} note 7, at 80-81.
\textsuperscript{56} \textit{Id.} at 81. During 1984, NTT generated $65,500 in revenue for every employee while the Bell operating companies produced $120,000 per employee. \textit{The Shinto Shake-up}, \textit{THE ECONOMIST}, Nov. 23, 1985, at 17-18 [hereinafter \textit{Shinto Shake-up}]. British Telecom produced only $40,000 per employee in 1984. \textit{Id.} at 18.
\textsuperscript{57} Note, \textit{Japanese Telecommunications, supra} note 10, at 113. The four companies were Oki Electric, Fujitsu, NEC Corporation, and Hitachi. \textit{Id.}
\textsuperscript{58} \textit{Id.}
\textsuperscript{59} \textit{Id.}
\textsuperscript{60} \textit{Id.}
B. Buying From Abroad

In an exchange of diplomatic letters dated December 19, 1980, Japan and the United States entered into the Procurement and Interconnect Agreements which became effective January 1, 1981. Under the Procurement Agreement, the two governments agreed to conform their purchases of telecommunications equipment to standards outlined in the GATT Government Procurement Code (the “Code”). The Procurement Agreement committed NTT to buy telecommunications equipment based on a competitive basis and without discriminating against United States manufacturers. Along with the Procurement Agreement, the

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61 IBM Japan, Ltd., and General Electric were the first companies to offer private data communication services after the Diet revised the 1953 Law in 1971. International Trade Issues in Telecommunications and Related Industries: Hearing Before the Subcomm. on Telecommunications, Consumer Protection, and Finance of the House Comm. on Energy and Commerce, 98th Cong., 1st Sess. 37 (1983 statement by Harry L. Freeman, Senior Vice President, American Express Co.) [hereinafter Freeman Statement]. IBM Japan, Ltd., began its CALL/370 service in early 1972. Id. General Electric, in a joint venture with Dentsu, Japan’s largest advertising firm, began its Mark III service in early 1972 as well. Id. IBM Japan, Ltd., and General Electric enjoyed a combined market share of 50% in the early 1980s. Id.

Information services grew quickly. In December 1979, 83 business, operating 122 systems, offered data communication services. Seventeen Countries, supra note 20, at 150. By July 1984, 39 companies had received Ministry permission to operate VAN systems. Id. Companies operating VAN services included Japan Information Services (an affiliate of Sumitomo Bank), Intec (a data processing firm), and Japan’s seven largest trucking companies. Hatano, supra note 45, at 385-86. The growth of Japan’s information services has exceeded that of Europe and North America. According to the Organization of Economic Cooperation and Development (“OECD”), Japan’s information services grew by 25% annually between 1960 and 1977, compared to 19% in West Germany, 16% in Canada, 12% in France and the United States, and 11% in Great Britain. Freeman Statement, supra, at 37.

62 Procurement in Telecommunications Agreement, supra note 21, at 1.


64 The Government Procurement Code requires signatory countries to conduct government procurement so that all companies, domestic and foreign, are treated equally. Agreement on Govern-
two countries issued the Interconnect Agreement which reduced trade barriers to Japan's interconnect market. The Procurement and Interconnect Agreements, therefore, constituted a step by Japan toward an internationally open telecommunications market.

1. The Procurement and Interconnect Agreements

Japan entered into the Procurement Agreement in order "to achieve an open, transparent, and competitive telecommunications market" by providing "non-discriminatory competitive opportunities to both domestic and foreign manufacturers." Accordingly, the Procurement Agreement included uniform procedural rules for making bids on NTT procurement contracts. Under the procedural rules, NTT purchased its equipment needs according to three tracks. NTT used Track I to purchase "non-public telecommunications equipment," such as office equipment, telephone pole erection vehicles, off-line computers, and smaller telecommunications products. Track I procedures required a prospective supplier to pre-qualify before submitting a bid. To pre-qualify, a prospective supplier had to submit an application which included a company resume, financial statements, business records, and product samples. NTT then reviewed the application to ensure that the

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6 Procurement in Telecommunications Agreement, supra note 21, at 2 (letter of Dr. Saburo Okita).
66 Id. at 5-19. The procedural rules were important to foreign suppliers because they offered a ready vehicle into Japan's telecommunications market. NTT Procurement Hearing, supra note 5, at 27 (Olmer Statement). Procedural rules provide "a formal process for procurement from foreign firms where none existed before." Id.
67 Implementation, supra note 63, at 82 (statement by John Morgan, Communications Workers of America, AFL-CIO). Other products subject to Track I bidding procedures include polyethylene coated steel pipes, oscilloscopes, magnetic tapes, microwave frequency counters, paper products, PBXs, data terminal equipment, modems, facsimiles, and storage batteries. Id. at 82. Track I products are commercially available and need not be standardized. Yoshimine, Settlement Finally Reached for NTT Procurement Issue, BUS. JAPAN, Mar. 1981, at 75.
68 Note, Japanese Telecommunications, supra note 10, at 119. NTT uses the pre-qualification process to screen out unreliable companies. Note, United States-Japan Trade Developments Under the MTN Agreement on Government Procurement, 5 FORDHAM INT'L L.J. 139, 172 (1981)[hereinafter Note, MTN Agreement]. The United States also screens prospective bidders to prevent unreliable companies from tendering bids on government procurement. Id. at 157 n.96. United States contracting officers must adhere to criteria outlined in procurement regulations when determining a supplier's reliability. In Japan, however, the ministries determine their own criteria for screening. Id.
69 Note, Japanese Telecommunications, supra note 10, at 119.
supplier met capitalization, creditworthiness, production, and quality requirements.\textsuperscript{70}

Tracks II and III covered procurement of "public telecommunications equipment," such as carriers' transmission equipment, electronic switchboards, on-line computers, radio units, cable, car phones, and telex terminals.\textsuperscript{71} Track II procedures applied to purchases of standard telecommunications equipment or equipment which only required modification to meet NTT standards.\textsuperscript{72} NTT followed Track III procedures to solicit bids on public telecommunications equipment still in the experimental stages.\textsuperscript{73} Tracks II and III consolidated the pre-qualification and bidding into one step.\textsuperscript{74} Along with its bid, a prospective supplier had to submit an application with supporting documents.\textsuperscript{75} NTT then examined the supplier's background, manufacturing facilities, and sample products so as to assess the company's reliability\textsuperscript{76} and to ensure its ability to meet NTT standards for quality control.\textsuperscript{77}

Along with the Procurement Agreement, Japan and the United States issued the Interconnect Agreement.\textsuperscript{78} This agreement further opened Japan's interconnect market to United States equipment suppliers.\textsuperscript{79} Under this agreement, Japan promised to make "type approval
available for all classes of [CPE],” to grant or deny type approval within two months in most cases, and to base type approval on domestic or foreign test data. To receive type approval, however, all CPE had to conform to NTT technical standards. Japan also promised to complete required CPE installation inspections within two weeks of the inspection request.

2. The Effect of the Agreements

The Procurement Agreement opened up Japan’s telecommunications equipment market to many foreign suppliers. By December 1982, ninety-one foreign companies, including forty-three from the United States, pre-qualified under Track I to bid on forty-eight products, including magnetic tape and high-speed modems. By May 1983, thirty-three foreign companies had bid successfully on twenty-eight products under Track I. Under the terms of the Interconnect Agreement, five United States companies succeeded in obtaining type approval to sell

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80 Procurement in Telecommunications Agreement, supra note 21, at 24. Previously, NTT required individual approval—approval of each CPE terminal sold—rather that type approval. SEVENTEEN COUNTRIES, supra note 20, at 153. Type approval, however, permits the supplier to sell the same CPE product without reinspection so long as the design remains unchanged. Telecommunications Standards, supra note 20, at 10. Type approval is valid for five years. Fees range from $425 for a facsimile with acoustic couplings to $2,000 for a PBX. Id. at 12-13.

81 Procurement in Telecommunications Agreement, supra note 21, at 25. Since companies normally negotiate equipment design and specifications prior to submitting test data, the type approval process takes several months. Telecommunications Standards, supra note 20, at 12.

82 Procurement in Telecommunications Agreement, supra note 21, at 25. Although NTT accepted test data generated by the United States suppliers and reputable testing laboratories, in practice NTT usually required duplicative testing by its labs. Telecommunications Standards, supra note 20, at 12.

83 SEVENTEEN COUNTRIES, supra note 20, at 153.

84 Procurement in Telecommunications Agreement, supra note 21, at 25. After the customer hires an NTT-licensed installation engineer to hook up the CPE terminal, NTT also inspects the installation. Telecommunications Standards, supra note 20, at 14. This inspection bears no charge. Id. Once NTT inspects and approves the connection, the line is turned on. Id.

85 Procurement Code Hearing, supra note 15, at 47 (statement by William E. Brock, United States Trade Representative (“USTR”)).

86 SEVENTEEN COUNTRIES, supra note 20, at 151.

87 Id. Motorola was one of the successful bidders from the United States. In May 1982, Motorola won a procurement contract valued at $8 million from NTT to deliver 45,000 pocket pagers. Procurement Code Hearing, supra note 15, at 48 (Brock Statement). Motorola’s success was atypical, however. Out of 117 contracts for which NTT solicited bids, only 11 United States companies won contracts. Id. at 62 (Olmer Statement).
eleven types of CPE by April 1983.\textsuperscript{88}

Despite the apparent success of United States companies in penetrating Japan's telecommunications market, United States sales were meager compared to NTT's $3 billion annual procurement budget.\textsuperscript{89} United States sales totaled $15.2 million and $40 million respectively in 1981 and 1982, the first two years of the Procurement Agreement.\textsuperscript{90} Furthermore, the items sold were relatively low-technology products.\textsuperscript{91} These sales, therefore, did nothing to remedy the trade imbalance between Japan and the United States in telecommunications equipment.\textsuperscript{92}

United States trade officials provided several reasons for the unexpectedly low sales to NTT. First, NTT's mature working relationships with Denden family companies made many United States manufacturers skeptical about NTT's interest in procuring foreign-made equipment.\textsuperscript{93} As a result, these manufacturers were unwilling to invest sales efforts on NTT.\textsuperscript{94} Other United States manufacturers stressed the poor political prospects of not buying United States products rather than emphasizing the quality of their products.\textsuperscript{95} United States manufacturers also failed to bid on a large number of NTT procurement announcements.\textsuperscript{96} In addition, NTT offered few bidding opportunities under Tracks II and III for high-priced, high-technology items, such as central switching and

\textsuperscript{88} Note, Japanese Telecommunications, supra note 10, at 121-22. For example, NTT had granted type approval to Paradyne for high speed modems, ITT for telephones, Plantronix for light weight headsets, and ROLM for digital PBXs. Procurement Code Hearing, supra note 15, at 66 (Olmer Statement).

\textsuperscript{89} NTT Procurement Hearing, supra note 5, at 6-7 (Brock Statement).

\textsuperscript{90} Id. at 7.

\textsuperscript{91} Id.


Robert B. Wood, a spokesman for the International Brotherhood of Electrical Workers, testified before the Trade Policy Staff Committee in Washington, D.C., that the trade figures "do not reflect reciprocal trade access," a policy goal under the Procurement Agreement. Id. Wood noted further that "the benefits envisioned during the NTT negotiations have not materialized in the employment area, but rather have deteriorated." Id.

\textsuperscript{93} NTT Procurement Hearing, supra note 5, at 8 (Brock Statement).

\textsuperscript{94} Id.

\textsuperscript{95} Id.

\textsuperscript{96} Procurement Code Hearing, supra note 15, at 47 (Brock Statement).
transmission equipment.\textsuperscript{97} Finally, onerous pre-qualification and approval procedures,\textsuperscript{98} rigid purchasing specifications, short bid deadlines, and purchases in lots too small to attract United States companies also contributed to the low level of purchases.\textsuperscript{99}

As a result of the perceived failure of the agreement, the United States Trade Representative, William E. Brock, III, met in February 1983 with Dr. Hisashi Shinto, president of NTT.\textsuperscript{100} Thereafter, NTT made some procedural changes to accommodate United States manufacturers, such as more flexible purchasing specifications and longer bid deadlines.\textsuperscript{101} NTT also aggregated purchases into commercially attractive quantities\textsuperscript{102} and started accepting bids in English and at its New York office.\textsuperscript{103}

Although United States sales to NTT increased dramatically during 1983—rising to approximately $142 million—they still disappointed United States expectations.\textsuperscript{104} While NTT did purchase some high-technology products, no purchases involved major network components, such as central switching equipment.\textsuperscript{105} Even at a level of $142 million, sales by United States manufacturers to NTT were insignificant compared to its $3 billion annual procurement budget.\textsuperscript{106}

\textsuperscript{97} Id. at 63 (Olmer Statement).

\textsuperscript{98} Note, Japanese Telecommunications, supra note 10, at 122. Initially, C. Itoh & Co., one of Japan's major trading companies, reacted enthusiastically to NTT's open procurement policy. C. Itoh spent more than one year reviewing European and United States products to import and sell to NTT under Track I. C. Itoh later scrapped the project. Pre-qualification applications required excessively detailed information, such as lists of products manufactured in each of the supplier's factories. Furthermore, the applications requested confidential information about the supplier's production costs. Rather than irritate foreign customers by requesting this detailed and confidential information for pre-qualification applications, C. Itoh decided against pursuing NTT's procurement contracts. Yoshimine, supra note 67, at 77.

\textsuperscript{99} NTT Procurement Hearing, supra note 5, at 7-8 (Brock Statement); Procurement Code Hearing, supra note 15, at 63 (Olmer Statement).

\textsuperscript{100} Id.

\textsuperscript{101} Id.

\textsuperscript{102} Id.

\textsuperscript{103} Id.

\textsuperscript{104} Id. at 9. The $142 million figure was three times greater than the 1982 figure of $40 million and was nine times greater than the $15 million figure given in 1981. See supra note 90 and accompanying text.

\textsuperscript{105} NTT Procurement Hearing, supra note 5, at 3, 9 (Brock Statement). Sales of major network components necessitate a long-term business relationship with the supplier and thereby enhance the potential for future sales. Id.

\textsuperscript{106} Note, Japanese Telecommunications, supra note 10, at 122-23. Under the Procurement Agreement, the telecommunications trade imbalance continued to grow. Between 1980 and 1984, overall telecommunications imports to the United States increased 166% while exports grew only 40%. Schwartz, House Units Approve Bill to Open Foreign Telecom Markets, ELECTRONIC NEWS, Nov. 18, 1985, at 59, col. 5. During the same four year period, telecommunications imports from
3. Renewal of the Procurement Agreement

On January 30, 1984, Japanese and United States officials signed a three-year extension ("Second Procurement Agreement") of the original Procurement Agreement. The Second Procurement Agreement contained some modifications, including a termination option, available at any time, and a provision for an annual joint review in order to monitor the agreement's effectiveness at generating United States sales in Japan. Under the Second Procurement Agreement, Japan agreed to consider more seriously United States companies bidding for Track III research and development contracts. It also agreed to set reasonable technical specifications and not to insist on joint development projects when United States companies could meet NTT's needs with products already available. Japan even consented to a clause whereby the agreement's terms would remain binding on NTT even if the Diet transformed NTT into a private corporation.

Japan rose almost 250% while United States telecommunications exports to Japan grew only 125%.

107 NTT Procurement Hearing, supra note 5, at 11 (Brock Statement). At least three reasons led the United States to renew the Procurement Agreement. First, it created new business opportunities by providing equal access to NTT's procurement—40% of Japan's entire telecommunications market. Note, Japanese Telecommunications, supra note 10, at 124. Second, access to NTT procurement under Tracks II and III gave United States telecommunications manufacturers exposure to NTT's research and development which were at the forefront of the industry. NTT Procurement Hearing, supra note 5, at 27 (Olmer Statement). Third, the Procurement Agreement promoted two United States policy goals: 1) open international markets in telecommunications; and 2) a reduced trade deficit. NTT Procurement Hearing, supra note 5, at 27 (Olmer Statement).

108 NTT Procurement Hearing, supra note 5, at 11 (Brock Statement).

109 Under the Procurement Agreement, United States telecommunications manufacturers experienced little success in bidding on Track III research and development contracts. NTT Procurement Hearing, supra note 5, at 19 (Brock Statement). Winning Track III procurement contracts was important to United States companies because once a company developed a telecommunications product for NTT under Track III, it stood a better chance of bidding successfully on the subsequent Track II production contract. Id. at 19-20. Consequently, more Track III contracts secured by United States companies would mean more Track II sales to NTT. Id. at 35 (Olmer Statement).

110 In addition to setting reasonable technical specifications, NTT reduced the amount of technical documentation necessary for type approval. For example, in 1982, when ROLM first applied for type approval for its digital PBX system, NTT required 2,000 pages of documentation in Japanese. Sease, U.S. Firms Assert Japanese Aren't Giving Them Fair Access to Big Telecommunications Market, Wall St. J., Mar. 20, 1985, at 32, col. 3. When ROLM filed another type approval in 1984, the application only required 100 pages of documentation in English. Id. Therefore, under the Second Procurement Agreement, NTT eliminated part of the onerous approval procedures which discouraged United States companies from bidding on NTT procurement contracts. See supra note 98 and accompanying text.

111 NTT Procurement Hearing, supra note 5, at 10-11 (Brock Statement).

While the terms of the Second Procurement Agreement improved access to NTT procurement for United States suppliers, NTT purchased less equipment from United States companies in 1984 ($130 million) than in 1983 ($142 million). This decline occurred despite three encouraging trends. First, by the end of 1984, NTT planned to purchase equipment and materials totaling ¥560 trillion, up 16% from 1983. Second, NTT's New York office received a "sizeable increase" in inquiries by United States companies. Third, NTT sponsored seminars for United States companies concerning NTT teletex communication systems and NTT research in fiber optics. Therefore, the Second Procurement Agreement, like the first agreement, failed to reduce Japan's trade surplus with the United States in telecommunications equipment by failing to increase United States sales to NTT.

C. The Switch to Private Telecommunications

1. Political Factors

The political climate during the early 1980s encouraged the Diet to end NTT's telecommunications monopoly. In July 1982, the Second Ad Hoc Committee on Administrative Reform (the "Committee") recommended converting NTT into a private company to improve its efficiency. In a report submitted to the Prime Minister, the Committee recommended breaking up NTT into private regional carriers with monopolies over local exchange service. For long-distance service, the Committee recommended a competitive market open to all private telecommunications carriers.

The Ministry and the Liberal Democratic Party (the "LDP") origi-
nally opposed the Committee’s recommendation to turn NTT into a private company. The Ministry changed its views, however, after conducting its own studies which indicated that competition should be introduced into Japan’s telecommunications industry. By September 1983, the LDP agreed with the Ministry, concluding that the Diet should enact new telecommunications laws which would create a competitive market.

In addition to these political trends, Dr. Hisashi Shinto influenced the Diet’s decision to transform NTT into a private company. Dr. Shinto had been NTT’s president since 1980. As a vocal proponent of making Japan’s telecommunications market private, Dr. Shinto believed that preserving the NTT monopoly wasted national resources and impeded the potential of Japan’s telecommunications industry. He supported the Procurement Agreement because it made available new technology and products from the United States.

Two other political forces contributed to the Diet’s decision to enact the new telecommunications laws. First, the growth of the VAN market and the potential elimination of the standard telephone requirement made Japanese equipment manufacturers recognize that they no longer depended solely on sales to the NTT monopoly. Selling directly to VAN companies and consumers in a private market offered promising

121 DOING BUSINESS WITH JAPAN, supra note 2, at 367.
123 DOING BUSINESS WITH JAPAN, supra note 2.
124 See J. HILLS, supra note 1, at 113.
125 Fuchs, supra note 92, at 137. Dr. Shinto, the first NTT president from the private sector, succeeded Tokuji Akikusa, a proponent of NTT’s monopoly. Yoshimine, supra note 67, at 76. Akikusa resigned from NTT in protest of the Procurement Agreement. Japanese Telecoms, supra note 7, at 81.

By appointing an outsider like Dr. Shinto, the cabinet installed a leader who favored competition over a government monopoly. Fuchs, supra note 92, at 137. Before joining NTT, Dr. Shinto was an engineer for Ishikawajima Harima Heavy Industries (“IHI”), a shipbuilding company. Chipello, NTT President Is Playing a Prime Role In Japan’s New Information Society, Asian Wall St. J., Dec. 10, 1984, at 3, col. 4. Shinto served as IHI’s president from 1972 to 1979, id. at 25, col. 1, and, interestingly, assumed that role from Toshio Doko, former chairman of the Keidanren and head of the Second Ad Hoc Committee on Administrative Reform—the committee which recommended making NTT private. Id. at 3, cols. 3-4.

126 In an interview from August 1983, Dr. Shinto remarked:

We have seen how disastrous it is to maintain a government monopoly which leads to inflexibility and heavy financial losses. ... [T]here should not be these huge government enterprises enjoying a monopoly, but rather... there should be healthy competition to benefit society as a whole through better service and lower prices.

Murray, supra note 122, at 52.

127 Fuchs, supra note 92, at 137.
129 J. HILLS, supra note 1, at 138.
prospects for more sales and higher profits.\textsuperscript{130} Second, the railroads and utility companies wanted to sell the spare capacity of their own private telecommunications systems.\textsuperscript{131} Consequently, political pressure came from powerful companies as well as from political organizations to convert the NTT monopoly into a private telecommunications system.\textsuperscript{132}

2. Practical Considerations

Several practical considerations encouraged the Diet to enact the new telecommunications laws. For example, once NTT established nationwide telephone service in 1978, the annual demand for new telephone lines decreased dramatically.\textsuperscript{133} As services such as installation charges, basic fees, and dialing charges accounted for 90\% of NTT’s revenues, NTT’s income decreased as well.\textsuperscript{134} At the same time, operating costs increased.\textsuperscript{135} This trend required either raising telephone rates to meet increasing operation costs or altering NTT’s structure so that it operated more efficiently.\textsuperscript{136}

Another practical consideration was that technological innovations had dated three considerations which had shaped the PCL and the 1953 Law. First, the Diet gave NIT a monopoly over telecommunications to protect the government’s large capital investment from competition.\textsuperscript{137} New technology, however, such as microwave transmission, optical fiber cable, and satellites, made such large capital investments unnecessary.\textsuperscript{138} Consequently, smaller investments for constructing new circuits required less protection from competition. Second, the Diet originally created a monopoly to provide economies of scale.\textsuperscript{139} Yet satellites and fiber optics produced these economies of scale in service areas smaller than a national telecommunications network.\textsuperscript{134} Finally, while uniform standards were necessary in 1952 to allow all portions of the network to communicate, modern interface technology connected incompatible systems so

\begin{thebibliography}{99}
\bibitem{130} Id.
\bibitem{131} Id.
\bibitem{132} Id. at 139.
\bibitem{133} Id. at 104. During the late 1960s and early 1970s, NTT installed about three million new telephone lines each year. \textit{Seventeen Countries}, \textit{supra} note 20, at 155. After 1978, however, the demand for new telephone lines decreased to 1.2 million requests per year. \textit{Id}.
\bibitem{135} \textit{Seventeen Countries}, \textit{supra} note 20, at 155.
\bibitem{136} Ohashi, \textit{supra} note 1, at 91.
\bibitem{137} See \textit{supra} note 28 and accompanying text.
\bibitem{138} Burgess, \textit{supra} note 30, at 21, col. 2.
\bibitem{139} See \textit{supra} note 27 and accompanying text.
\bibitem{140} \textit{Doing Business With Japan}, \textit{supra} note 2, at 368.
\end{thebibliography}
that they could converse.141

3. *Policy Factors*

Once NTT had established nationwide telephone service,142 three new policy concerns led the Diet to enact the new telecommunications laws. First, simple telephone and telegraph service no longer satisfied sophisticated consumer demands.143 As the exclusive supplier of all telecommunications services, NTT limited its services and regulated the equipment available to consumers.144 If a consumer wanted an additional service or advanced CPE that NTT disallowed, then the consumer had to do without the additional service and advanced CPE.145 Consequently, the Diet designed the new laws to introduce competition into Japan's market so as to encourage carriers and equipment manufacturers to offer consumers a wider selection of services and equipment.146

Second, the Diet concluded that competition would increase the efficiency of Japan's telecommunications system.147 The NTT monopoly had promised efficiency because it prevented duplicative investment and provided economies of scale.148 In the 1980s, however, a competitive market could outperform a monopoly and still protect against duplicative investment while creating economies of scale. For example, government regulation to curb excessive competition would discourage duplicative investment149 and networks utilizing satellites and fiber optics would create economies of scale in small service areas.150 Consequently, the Diet enacted the new telecommunications laws to encourage greater

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141 Sawada, *supra* note 9, at 85. The accelerating pace of technological innovation in telecommunications also outpaced Japan's regulatory distinctions. For example, MITI formerly regulated the computer industry while the Ministry regulated telecommunications. When the Diet amended the 1953 Law to permit private companies to connect computers to telecommunications circuits, MITI and MPT regulations overlapped. New rules redefining each ministry's jurisdiction were needed. Fuchs, *supra* note 92, at 127; see also *supra* note 45.

142 See *supra* note 49 and accompanying text.

143 Shinto, *supra* note 20, at 380.

144 See J. Hills, *supra* note 1, at 139.


146 Murray, *supra* note 122, at 520.

147 *New Business Law, supra* note 145, at 14, col. 2.


149 To avoid duplicative investment and competition, the TBL grants MPT discretion over the number of companies permitted to compete in different market segments. See *infra* note 206 and accompanying text.

150 See *supra* note 140 and accompanying text.
Third, to reduce Japan's trade surplus and avoid protectionist sanctions against Japanese exports, the Diet felt compelled to open up Japan's telecommunications market to foreign competitors. Although the Procurement Agreement permitted NTT to purchase equipment from foreign manufacturers, Japan's continuing trade surplus in telecommunications equipment elicited foreign demands, particularly from the United States, for greater market access and fair competition. Therefore, the Diet also drafted the new laws to give foreign companies increased access to Japan's telecommunications market.

D. The Private Telecommunications Laws

Japan's private telecommunications laws took effect April 1, 1985. The Telecommunications Business Law (the "TBL") established a "regulated competitive" market for Japanese telecommunications. The Nippon Telegraph and Telephone Corporation Act (the "NTT Act") ended NTT's monopoly and transformed it into a private corporation with private management.

151 See supra notes 117-28 and accompanying text.
152 See supra notes 70-77 and accompanying text.
153 By 1984, Japan had a ¥294.9 billion telecommunications trade surplus with the United States and a ¥532 billion telecommunications trade surplus internationally. DOING BUSINESS WITH JAPAN, supra note 2, at 385.
154 Fuchs, supra note 92, at 125. Japan's telecommunications trade surplus with the United States even provoked United States threats to abrogate the Second Procurement Agreement. On March 13, 1985, while the Ministry was drafting ordinances to implement the TBL, United States Deputy Trade Representative Michael Smith warned that the United States might cancel the Second Procurement Agreement unless Japan made major concessions. These concessions included limiting technical regulations to those necessary to protect the network (the same standard employed under Part 68 of FCC regulations), eliminating discrimination between foreign and domestic suppliers, and simplifying procedures for registration and equipment approval. DOING BUSINESS WITH JAPAN, supra note 2, at 385-86. Cancelling the agreement would have permitted the United States to impose restrictions on imports of Japanese telecommunications products, which were worth ¥322.359 billion in 1984. Id. at 385.
155 Foster, supra note 9, at 9. In contrast to the Diet's desire to create a competitive telecommunications market, Japan had other interests that required continued government regulation. For example, Japanese consumers had to be assured of dependable service since telecommunications service is indispensable to daily life. EMBASSY OF JAPAN, REFORM OF JAPAN'S TELECOMMUNICATIONS LEGISLATION 1, 3-4 (Dec. 20, 1984)[hereinafter EMBASSY REPORT]; cf. Sawada, supra note 9, at 89 (telecommunications grouped with electricity, gas, and transportation as public welfare industries subject to regulatory supervision). Furthermore, the rapid growth of telecommunications sparked concern about national security, personal privacy, the pace and extent to which telecommunications would internationalize Japan, and the impact on national economics and social cohesion. Fuchs, supra note 92, at 126. Finally, Japan had an interest in directing the development of telecommunications instead of letting the market dictate where private companies would invest. See TBL art. 1.
1. The Telecommunications Business Law of 1984

The TBL establishes a comprehensive plan for Japanese telecommunications: it describes its purpose, classifies telecommunications carriers, sets forth the terms under which they will be authorized to operate, and outlines the administrative procedures for having telecommunications equipment approved. According to Article 1 of the TBL, the purpose of the law is to promote the public welfare by securing dependable telecommunications service, protecting users' interests, and ensuring "the sound development of telecommunications."\textsuperscript{156} To promote the public welfare, Article 3 prohibits censorship, Article 4 guarantees the secrecy of communications, Article 7 prohibits carriers from unfairly discriminating in providing telecommunications service, and Article 8 requires carriers to give priority to emergency communications.\textsuperscript{157}

The TBL classifies carriers into two categories: Type I and Type II.\textsuperscript{158} Type I carriers provide basic telephone and other services by operating their own circuit facilities;\textsuperscript{159} Type II carriers lease Type I carriers' circuits.\textsuperscript{160} The TBL further subdivides Type II carriers as Special and General.\textsuperscript{161} Special Type II carriers operate at a capacity of 500 or more standard telephone lines and provide services to which anyone may subscribe.\textsuperscript{162} A Type II carrier that offers international telecommunications service always qualifies as a Special Type II carrier.\textsuperscript{163} General Type II carriers operate on less than 500 standard telephone lines\textsuperscript{164} and normally service small groups, such as lines between a manufacturer and a wholesaler, between a parent corporation and a subsidiary, or among chain stores.\textsuperscript{165}

The TBL and Ministry ordinances regulate the entry and management of Type I carriers. The Ministry must approve and license a Type I carrier before it may begin operations.\textsuperscript{166} The Ministry grants a license to establish a Type I carrier if the applicant will create no excess circuit

\textsuperscript{156} TBL art. 1.
\textsuperscript{157} Id. arts. 3-4, 7-8. Many articles of the TBL, such as 19, 28, and 37-39, also mention public interest as a paramount concern.
\textsuperscript{158} Id. art. 6(1).
\textsuperscript{159} Id. art. 6(2); see also New Business Law, supra note 145, at 14, col. 2. Telecommunications circuit facilities include transmission lines, switchboards, and other devices used to transmit telephonic messages and information between end terminals, such as telephones, facsimiles, and PBXs.
\textsuperscript{160} TBL art. 6(3); see also New Business Law, supra note 145, at 14, col. 2.
\textsuperscript{161} TBL art. 21(1).
\textsuperscript{162} Id. art. 21(3); DOING BUSINESS WITH JAPAN, supra note 2, at 389-90.
\textsuperscript{163} TBL art. 21(3); DOING BUSINESS WITH JAPAN, supra note 2, at 389.
\textsuperscript{164} TBL art. 21(2); DOING BUSINESS WITH JAPAN, supra note 2, at 372.
\textsuperscript{165} DOING BUSINESS WITH JAPAN, supra note 2, at 372.
\textsuperscript{166} TBL art. 9(1).
facilities in its service area, obtain adequate financial backing and technical capacity, submit a feasible business plan, and further "the sound development of telecommunications." The Ministry automatically will deny Type I status if the applicant is a foreign government, a foreign corporation, a Japanese corporation one-third or more of whose officers are foreign or whose share of foreign capital exceeds one-third, or is not a Japanese citizen. Before a Type I carrier may suspend or discontinue service, it must receive Ministry approval. The Ministry also must approve a Type I carrier's rates. Finally, a Type I carrier must receive Ministry permission to interconnect with other Type I carriers and to subcontract any of its business activities.

Similarly, the TBL and Ministry ordinances regulate the entry and management of Type II carriers. As long as a Type II carrier uses circuits leased from Type I carriers, the TBL permits Type II carriers to offer any type of telecommunications service, except for telegraph service. The TBL places no limits on foreign ownership of Type II carriers. Furthermore, it exempts Type II carriers' rates from Ministry regulation although a Special Type II carrier must submit to the Ministry a copy of its rate schedule before putting them into effect.

A Special Type II carrier must register with the Ministry while a General Type II carrier need only notify the Ministry of its intent to operate. In order to register with the Ministry, a Special Type II carrier must submit its name and address, a description of its services, a map

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167 Id. art. 10.
168 Id. art. 11(iv)-(vii). The restriction on foreign capital guarantees that foreign interests will have no more than a one-third interest in voting rights. The purpose of the foreign investment restriction is to prevent foreign control over Japanese telecommunications. DOING BUSINESS WITH JAPAN, supra note 2, at 382-83. In the United States, Congress limits foreign ownership of a telecommunications carrier to one-fifth of the capital stock. 47 U.S.C. § 310(b)(3) (1982).
169 TBL art. 18(1). The Ministry prevents excessive and overlapping service. Id. art. 10(i)-(ii); see infra note 206 and accompanying text. Therefore, if a Type I carrier discontinues service, its service area will have limited telephone service. DOING BUSINESS WITH JAPAN, supra note 2, at 370. As a result, the Ministry must consider the public interest before permitting a Type I carrier to discontinue service. Id.
170 TBL art. 31(1).
171 Id. arts. 38(1), 15(1). A Type I carrier hooks up with other Type I carriers in order to provide service to areas beyond its own service area. Shinto, supra note 20, at 381.
172 Fuchs, supra note 92, at 135.
173 DOING BUSINESS WITH JAPAN, supra note 2, at 370, 384. The Ministry's original draft of the TBL placed a 50% foreign ownership limit on Special Type II carriers. Without this limit, the Ministry feared that United States companies would saturate the market and stunt the growth of domestically owned Special Type II carriers. Id. at 384.
174 Shinto, supra note 20, at 382.
175 TBL art. 31(5)(6).
176 Id. art. 24(1).
177 Id. art. 22(1). The TBL requires a Special Type II carrier to register because the public
of its circuit facilities, and a business plan. After registering, a Special Type II carrier may commence business within twenty days. In contrast, a General Type II carrier must simply notify the Ministry by submitting its name and address and a description of its services.

The TBL authorizes the Ministry to select a designated approval agency ("DAA") to inspect all telecommunications equipment and certify that it meets Ministry standards. The Ministry designated the Japan Approvals Agency for Telecommunications Equipment ("JATE"), an independent examination company, as Japan's sole DAA. JATE must certify all CPE before it is connected to a carrier's circuits. JATE certifies both domestic and foreign CPE based on the

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178 TBL art. 24(2)(3). A corporate annual report or a statement from a financial institution is sufficient to verify the financial credibility of a Special Type II carrier. DOING BUSINESS WITH JAPAN, supra note 2, at 375. Approval of a Special Type II carrier's registration is automatic if its operations comply with published Ministry ordinances. New Business Law, supra note 145, at 14, col. 3.

179 DOING BUSINESS WITH JAPAN, supra note 2, at 388-89. When the Ministry discovers a problem in a registration, the Ministry must notify the Special Type II carrier within 15 days of the submittal date. Id. at 389. If the Ministry rejects a registration, it must notify the Special Type II carrier within 30 days and include written reasons for rejection. Id.

180 TBL art. 22(1). The Ministry immediately accepts all General Type II carrier notifications; no approval is necessary.

181 TBL art. 68(1); see also Joint Report on Sectoral Discussions, Jan. 10, 1986, United States-Japan (Attachment I (A)(4)), reprinted in Japan, U.S. Conclude MOSS Trade Talks, Japan Econ. J., Jan. 25, 1986, at 4, cols. 4-5.[hereinafter MOSS Talks]. Once the NTT Act converted NTT into a private corporation, fair competition dictated that the Ministry delegate inspection and certification authority to a neutral party. TELECOMMUNICATIONS STANDARDS, supra note 20, § 2 at 5.

182 Under the TBL, the Ministry lowered technical standards for telecommunications equipment to the level necessary to prevent harm to a network. D. ABelson, MARKET-ORIENTED SECTOR-SELECTIVE (M.O.S.S.) TELECOMMUNICATIONS TALKS: FINAL REPORT 8 (1986) (draft); see also Davis, supra note 13, at 10, col. 1 (new Ministry technical standards parallel FCC standards); cf. 47 C.F.R. § 68.1 (1985)(FCC standards for telecommunications equipment set at level to protect telephone network from harm). Formerly, the Ministry adhered to a policy that telecommunications equipment standards should protect Japanese consumers from inferior products. Japan Phone Rules Argues, N.Y. Times, Apr. 16, 1985, at D23, col. 4. For example, one former Ministry regulation required all telephones to make the same buzzing noise to indicate that the telephone on the other end was ringing. Browning, U.S. Welcomes Japan's Actions On Phone Gear, Wall St. J., Apr. 22, 1985, at 33, col. 1. Another former regulation set standards for how clearly CPE transmitted voices. See Chira, Japan Takes New Step Toward放宽 Telephone Curb, N.Y. Times, Apr. 20, 1985, at A35, col. 5.

183 M. Foster, Japanese Telecommunications Terminal Equipment Certification and Procedures 6 (May 1985)[hereinafter Equipment Certification].

The TBL requires Type I carriers to inspect all connections between Type I carrier's circuits and CPE$^{188}$ before a consumer may use the CPE. The inspection assures that the connection meets Ministry installation standards for interface compatibility.$^{187}$ The Ministry defers to the interface compatibility standards set by the Telecommunications Advisory Council,$^{188}$ which is composed in part of Japanese citizens employed by subsidiaries of foreign companies.$^{189}$

2. **The Nippon Telegraph and Telephone Corporation Act of 1984**

Under the NTT Act, NTT became a joint stock company ("Private NTT") organized to operate a domestic telecommunications business.$^{190}$ Although both the Japanese government and private investors now own private NTT stock, the NTT Act requires the government to retain ownership of at least one-third of Private NTT's voting shares.$^{191}$ In addi-

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$^{185}$ Id. JATE's acceptance of a manufacturer's test data saves foreign suppliers the expense and time delay which result from sending samples for inspection. INFORMATION & TELECOMMUNICATION TECHNOLOGIES GROUP, JAPAN LIBERALIZES TELECOMMUNICATIONS: SLOWLY BUT SURELY, Special Report No. 3, 3 (Apr. 1985). If JATE initially refuses to certify telecommunications equipment, the supplier may resubmit its application and a sample for retesting by JATE. Certification Plan, supra note 183, at 782. For a comparison of NTT's former type approval fees to JATE's approval fees, see TELECOMMUNICATIONS STANDARDS, supra note 20, at 10, 12 and Equipment Certification, supra note 183, at 6, 21.

$^{186}$ TBL art. 51(1).

$^{187}$ Id.

$^{188}$ Id. art. 94(v).


$^{190}$ EMBASSY REPORT, supra note 155, at 11. The NTT Act and the TBL left KDD's international telecommunications services unchanged. During the summer of 1986, however, the Ministry ended KDD's monopoly over international VAN services in Japan in response to growing demands from Japanese financial institutions and trading companies. International VAN Service to Be Deregulated, Japan Econ. J., Apr. 5, 1986, at 1, col. 4. The Ministry move to deregulate international VAN services resembled the decontrol of domestic VAN services in October 1982. See supra notes 47-48 and accompanying text.

$^{191}$ EMBASSY REPORT, supra note 155, at 11. Until October 1986, the Japanese government owned all of Private NTT's 15.6 million shares. See Gov't Will Offer 200,000 NTT Shares for Auction, Japan Econ. J., July 5, 1986, at 4, col. 1. Japan's Finance Ministry auctioned off 200,000 Private NTT shares to institutional investors during October 1986 to help determine a competitive selling price for later issues. See Gov't Takes NTT Bids from Large Investors, Japan Econ. J., Oct. 11, 1986, at 3, col. 3. Based on these bids, the Finance Ministry offered another 1.65 million Private NTT shares to individual investors during November 1986 at ¥1,197 million per share. See Government Sets NTT Stock Price at ¥1,197,000, Japan Econ. J., Nov. 8, 1986, at 2, col. 3. During the next four years, the Finance Ministry plans to sell 10.4 million Private NTT shares—two-thirds of the 15.6 million shares outstanding. Id.

The price of Private NTT shares has risen dramatically in trading since it was listed on the Tokyo Stock Exchange on February 9, 1987. Investors who purchased Private NTT shares for
tion, the NTT Act prohibits foreign ownership of Private NTT shares with one exception: if foreign capital constitutes less than one-half of a Japanese corporation's capital, the Japanese corporation may invest in Private NTT shares.\(^1\)

The NTT Act grants the Ministry regulatory power over Private NTT. Subject to Ministry approval, Private NTT may pursue business incidental to domestic telecommunications service, such as weather forecasting, time information, sales of CPE, and other business activities necessary to Private NTT's purpose.\(^2\) The Ministry also retains power to authorize Private NTT's annual business plan, appoint and dismiss directors and auditors, change the articles of incorporation, and dispose of profits.\(^3\)

As a result of the NTT Act, consumers no longer must purchase a standard telephone set from NTT.\(^4\) Instead, they may purchase CPE from Private NTT or its competitors.\(^5\) As with the PCL, the NTT Act prohibits Private NTT from manufacturing its own equipment,\(^6\) thereby forcing Private NTT to continue purchasing all equipment under the terms of the Second Procurement Agreement.\(^7\)

E. The Effect of the New Telecommunications Laws

The Diet enacted Japan's new telecommunications laws to promote the public welfare. The public welfare depended on the successful implementation of four policy objectives: 1) dependable, 2) diverse, and 3) inexpensive telecommunications services and equipment, and 4) improved foreign trade relations. Continued regulatory supervision by the

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\(^1\) ¥1.197 million in 1986 were able to sell at ¥1.6 million on February 10, 1987, the shares' second day of trading. See NTT Shares Scorch Skysward, Japan Econ. J., Mar. 7, 1987, at 24, col. 2. Between February 16 and 24, 1987, the price rose from ¥1.79 million to ¥2.67 million. Id. At these prices, Private NTT's current market value is twice the size of IBM's current market value. See NTT Shares Fetch ¥1.7 Mil. in Tokyo Stock Exchange Trading, Japan Econ. J., Feb. 21, 1987, at 3, col. 1.

\(^2\) DOING BUSINESS WITH JAPAN, supra note 2, at 381.

\(^3\) Id. at 378. The Ministry retained discretion to limit Private NTT's tangential business activities in order to protect companies in businesses related to communications from Private NTT competition. Id. at 379.

\(^4\) Note, Japanese Telecommunications, supra note 10, at 127.

\(^5\) EMBASSY REPORT, supra note 155, at 12. Despite continuing Ministry regulation, the NTT Act gave Private NTT's management discretion over employee compensation. Formerly, an NTT employee's compensation was fixed at levels equal to other "national public service personnel." See supra note 37. Under the NTT Act, however, an employee's pay depends on Private NTT's returns and management discretion. Neff, supra note 54, at 39.


\(^7\) See Neff, supra note 54, at 34.

\(^8\) Id. at 39.

\(^9\) Doe, supra note 134, at 132; see also supra note 112 and accompanying text.
Ministry assured dependable service and equipment. Competition, on the other hand, promised to diversify Japanese telecommunications, reduce prices, and placate foreign trade relations.

1. Governmental Regulation

The TBL delegates extensive regulatory authority to the Ministry.\textsuperscript{200} The Ministry exercises broad regulatory oversight over Private NTT\textsuperscript{201} and Type I carriers,\textsuperscript{202} but exercises less regulatory control over Special Type II carriers and even less over General Type II carriers.\textsuperscript{203} Type II carriers serve smaller markets than Type I carriers and have less impact on the public welfare; consequently, the Ministry exercises less regulatory control over them.\textsuperscript{204} The Ministry's regulatory power shapes not only the conditions under which carriers may operate, but also the standards for and installation of telecommunications equipment.\textsuperscript{205} By endowing the Ministry with comprehensive regulatory oversight, the Diet evidenced its continuing interest in ensuring dependable telecommunications service and equipment in order to benefit the public welfare.

The Ministry already has exercised its power to safeguard against an oversupply of satellite telecommunications services. Although it had licensed five new Type I carriers, the Ministry refused to license a sixth Type I applicant, Satellite Japan, in January 1986. The Ministry had licensed Japan Communications and Space Communications in June 1985; to license Satellite Japan would have created an oversupply of satellite services and jeopardized the viability of all three satellite carriers.\textsuperscript{206} The Ministry's decision to reject Satellite Japan's license application, therefore, evidenced a willingness to exercise regulatory power to guarantee dependable telecommunications service.\textsuperscript{207}

\textsuperscript{200} Foster, supra note 9, at 9.

\textsuperscript{201} See supra notes 193-95 and accompanying text.

\textsuperscript{202} See supra notes 166-71 and accompanying text.

\textsuperscript{203} See supra notes 172-81 and accompanying text.

\textsuperscript{204} See supra note 178.

\textsuperscript{205} See supra notes 181-85 and accompanying text.

\textsuperscript{206} Sony-led Satellite Japan Fails to Get License from MPT, Japan Econ. J., Feb. 1, 1986, at 17, col. 3 [hereinafter Satellite Japan]. The TBL directs the Ministry to reject license applications submitted by potential Type I carriers when the Type I carrier's services will create an excess of telecommunications circuit facilities. TBL art. 10(ii).

When Satellite Japan submitted its application, the Ministry estimated that the demand for satellite service would require 29.8 transponders in 1988, 52.7 in 1990, 76.1 in 1995, and 87.5 in 2000. Satellite Japan, supra at 17. By adding Satellite Japan's 72 transponder capacity, the three companies' combined capacity would have totalled 206 transponders. \textit{Id.} Consequently, the three companies' combined capacity would have exceeded demand in 1988 by 176 transponders.

\textsuperscript{207} Cf. JNR Affiliate to Set Up Paging Service with Japan, U.S. Firms, Japan Econ. J., Oct. 11,
2. Competition in the Private Market

Despite the Ministry's regulatory control, the phrase "regulated competitive market" best describes the character of Japan's restructured telecommunications market. As evidence of the developing competitiveness of this restructured market, the Ministry had approved and licensed five new Type I carriers by November 1985. Each of these carriers plans to begin service using their own circuits in the autumn of 1987. Initially, each will concentrate on telecommunications between Tokyo and Osaka, the industrial corridor which traditionally generated 40% of NTT's revenues. Japan Teleway will lay optical fiber cable along Japan's freeways, whereas Japan Telecom will lay optical fiber cable along bullet train lines. Second NTT, another new Type I competitor, will construct a microwave transmission network and hopes to undercut Private NTT's long-distance rates by 20% to 30%. Finally, the two other new Type I carriers—Japan Communications and Space Communications—will establish satellite networks.

In addition to the five new Type I carriers, new Type II carriers have entered Japan's telecommunications market. Between April and November 1985, 170 companies notified the Ministry of their intent to establish General Type II carriers. By November 1985, eight companies had applied to the Ministry for Special Type II status. The entry of these 178 new Type II carriers, plus the five new Type I carriers, should create much competition among carriers.

Since the new telecommunications laws became effective, many United States companies have introduced foreign competition to Japan's
market by doing business with Private NTT's competitors. For example, Digital Switch Corporation received a $10-$20 million order for tandem switches from Second NTT.\footnote{Robertson, \textit{IBM, NTT in Japan Value-Added Net Venture}, Electronic News, Sept. 30, 1985, at 8, col. 5.} In January 1986, AT&T reached an agreement with Tokyo-based Ricoh Company and Toshiba Corporation for marketing AT&T data switching systems.\footnote{\textit{Increased Competition Looms for Japan's PBX Market}, Japan Econ. J., Apr. 12, 1986, at 14, cols. 1-3.} Japan Communications, one of the new Type I carriers, will use a satellite manufactured by Hughes Aerospace Company.\footnote{See \textit{Shinto Shake-up}, supra note 56, at 20.} In addition to these examples of equipment sales, six United States companies have entered VAN joint ventures with Japanese companies.\footnote{Robertson, \textit{supra} note 217, at 8, cols. 1-2.}

Private NTT, along with its competitors, has purchased equipment made in the United States and entered into a VAN joint venture with an IBM subsidiary. In January 1986, Private NTT contracted to purchase central switching systems from Northern Telecom.\footnote{\textit{NTT to Buy Northern Telecom Switching Gear}, Japan Econ. J., Jan. 4 & 11, 1986, at 16, col. 3.} The contract, expected to amount to ¥40 billion over a five-year period, represented the first sale to NTT or Private NTT of central switching equipment made in the United States.\footnote{\textit{Id.} Previously, NTT and Private NTT purchased central switching systems from four Denden family suppliers: NEC Corporation, Fujitsu, Hitachi, and Oki Electric. \textit{Id.}} The sale by Northern Telecom constituted part of Private NTT's total foreign procurement during 1985, 90% of which came from United States companies.\footnote{Mark Time, \textit{supra} note 12, at 19, col. 4.} Besides purchasing equipment imported from the United States, Private NTT began operating a VAN joint venture with IBM Japan, Ltd., in January 1986.\footnote{\textit{IBM on a Great Sales Offensive in Japan; Competitors Here Gird for Counterattack: IBM-NNT Ties Upsetting}, \textit{JAPAN ECON. REV.}, Nov. 15, 1985, at 11, cols. 1-2.} The joint venture, Nippon Information and Communication Corporation, uses IBM hardware in its network and provides on-line data processing of deposits, loans, and foreign exchange for Saitama Bank and Kyowa Bank.\footnote{\textit{NTT-IBM Venture Starts Operation}, Japan Econ. J., Jan. 25, 1986, at 13, col. 4 [hereinafter \textit{NTT-IBM Venture}].} The joint venture represents Private NTT's first venture at developing software for IBM hardware and offering on-line services for banks.\footnote{\textit{Id.}}

a. Diversifying telecommunications equipment and services

Competition in Japan's telecommunications market has prompted
numerous companies to introduce a variety of new equipment. For example, Omron Tateishi Electronics Company now markets phone call processing equipment made in the United States by OPCOM. Ricoh has introduced the Rifax Alpha-10, a high-speed facsimile machine. Marubeni Corporation now sells digital wireless telephones made in the United States. Finally, Fujitsu has developed several on-line banking machines, such as automatic tellers and deposit machines.

In addition to the new equipment, an influx of new services has entered Japan’s market. In September 1986, Nihon Keizan Shimbun, Inc., introduced Nikkei Telecom Japan News and Retrieval, an English language, on-line information service providing data and news concerning East Asian business. Japan Telecom now offers a paging service, and Recruit Company leases access to its database which contains information about jobs, travel, and used cars. The inflow of new equipment and services, as evidenced by these examples, indicates that the new laws have helped to achieve the Diet’s objective of diversifying Japanese telecommunications.

Private NTT also has diversified its business beyond primary telephone service in order to remain competitive. For example, it has developed an on-line banking system that simplifies operation of foreign exchange terminals. It is building a nationwide public facsimile service with sales outlets in neighborhood florist shops and liquor stores. Private NTT also plans to provide answering services for business and electronic mail services. In addition, NTT System Technology Company, a wholly-owned subsidiary, designs data communication systems and software. Pursuant to the more lenient investment restrictions

227 Recent Change and Future Prospect in Telecommunications Market, 1986 DIG. OF JAPANESE INDUS. & TECH. 16 [hereinafter Recent Change].
229 Ricoh to Sell Facsimile Produced by Toshiba, Japan Econ. J., Sept. 27, 1986, at 19, col. 5.
236 Doe, supra note 134, at 135.
238 Davis, NTT Diversifying into Many Fields with Establishment of Subsidiaries, Japan Econ. J.,
prescribed in the NTT Act, Private NTT has branched out into these other business ventures and enhanced its competitiveness while, at the same time, it has promoted the Diet’s goal for more diversified telecommunications products and services.

b. Reducing prices

Besides introducing a variety of telecommunications equipment and services, the competing companies have reduced equipment prices and lowered service rates. Equipment prices already have declined and should continue to decrease. Under the NTT Act, consumers no longer must purchase a standard telephone set from NTT. Instead, consumers will purchase CPE from the interconnect market. As a result, the interconnect market will expand, lowering CPE prices while encouraging telephone manufacturers to produce more modern, sophisticated telephones.

Rates for telecommunications services also have declined and should continue to decrease. Japan Teleway, Japan Telecom, and Second NTT already offer rates 20% lower than NTT’s rates. With competing carriers developing more services, the volume of Japan’s entire tele-

Mar. 15, 1986, at 19, col. 3. NTT System Technology Company is designing the Bank of Japan’s new on-line computer system using IBM hardware. Doe, supra note 134, at 135.

239 DOING BUSINESS WITH JAPAN, supra note 2, at 380.

240 Private NTT created 33 subsidiaries and affiliates by January 1986. NTT Sets Up 33 Subsidiaries, Japan Econ. J., Mar. 1, 1986, at 17, col. 3. It plans eventually to establish a large group of 500 to 700 subsidiaries and affiliates. Id. In addition to its new subsidiaries related to telecommunications, Private NTT branched out into new business fields. Private NTT has a 35% stake in INS Engineering Corporation, a company which sells computer-aided design software. Davis, supra note 238, at 19, col. 3. NTT Ad Company, of which Private NTT owns 75%, specializes in advertising. Id. at 19, col. 2. Private NTT also plans to create a wholly owned subsidiary called NTT Urban Development Company to develop Private NTT’s land holdings in major cities. NTT Will Start Urban Development Business, Japan Econ. J., Jan. 18, 1986, at 18, col. 3.

241 Recent Change, supra note 227, at 17. For example, NTT recently introduced a facsimile, the NTTFAX-20 model, priced at ¥128,000, undercutting the least expensive facsimile on the market by ¥20,000. NTT to Introduce Lowest-Priced Facsimile, Japan Econ. J., Mar. 14, 1987, at 17, col. 5.

242 JETRO, supra note 5, at 3. As an equal among the competitors in the telecommunications equipment market, Private NTT, which still may not manufacture its own telecommunications equipment, will concentrate its procurement on the domestic or foreign vendors who offer the most competitive prices. See Williamson, Communications Tokyo: One Year into the New Era, TELEPHONY, Feb. 24, 1986, at 57.

243 Japanese Telecoms, supra note 7, at 80. In April 1985, only 17% of Japan’s 63 million installed telephones had been purchased from the interconnect market. See Neff, supra note 54, at 34. That percentage will grow under the new telecommunications laws.

244 Three New Common Carriers Unveil Service Rate Structures, Japan Econ. J., July 12, 1986, at 12, cols. 4-5 [hereinafter Unveil Rates]. To remain competitive, Private NTT is contemplating a 10% rate cut for high-volume leased circuits. See NTT Likely to Cut Charges on Long-Distance Circuits, Japan Econ. J., Mar. 14, 1987, at 17, cols. 1-2.
communications market will increase.\textsuperscript{245} As a result, carriers should be able to charge less, yet reap the same amount of profit. In addition, competition should create more incentives for increased efficiency.\textsuperscript{246} Finally, NTT's competitors currently operate by using telecommunications circuits leased from NTT.\textsuperscript{247} By late 1987, they should reduce rates even further by operating their own circuits.\textsuperscript{248} With competition lowering the cost of equipment and services, the new laws have encouraged another of the Diet's policy goals.

c. Improving trade relations

In addition to diversifying and lowering prices for telecommunications, the new laws may help ameliorate trade relations between Japan and the United States. During 1985, the first year that Japan's market operated under the new laws, the telecommunications trade imbalance between Japan and the United States dropped to ¥276.4 billion, down from ¥295 billion in 1984, a 6.3\% decrease.\textsuperscript{249} This represented the first decrease in five years.\textsuperscript{250} During the first six months of 1986, Japan's trade surplus with the United States in telecommunications equipment continued to abate.\textsuperscript{251} The new telecommunications laws, therefore, may have helped bring about another of the Diet's objectives: to increase foreign access to Japan's telecommunications market so as to reduce Japan's telecommunications trade surplus and ameliorate foreign trade relations.\textsuperscript{252}

Although the telecommunications trade imbalance decreased during 1985 and the first six months of 1986, nothing indicates that the new laws caused the decrease.\textsuperscript{253} Numerous other factors, untouched by the TBL, affect the balance of trade. For example, Japanese governmental practices and regulations, such as administrative guidance and restrictions on imports, affect the balance of trade by hindering foreign access to Japa-

\textsuperscript{245} Sawada, supra note 9, at 87.  
\textsuperscript{246} Id.  
\textsuperscript{247} Unveil Rates, supra note 244, at 12, col. 4.  
\textsuperscript{249} Davis, supra note 13, at 10, col. 3.  
\textsuperscript{250} Id.  
\textsuperscript{251} See Recent Change, supra note 227, at 21. In 1985, Japan imported one unit of telecommunications equipment from the United States for every 10.3 units it exported to the United States. In the first six months of 1986, however, the ratio was only one to eight. Id.  
\textsuperscript{252} See supra notes 152-154 and accompanying text.  
\textsuperscript{253} Even Japanese analysts have attributed the 1985-1986 decrease not to the new laws, but to market conditions in the United States and the appreciated value of the yen. See Recent Change, supra note 227, at 17, 19.
nese markets. The value of the dollar also affects the balance of trade because a strong dollar makes goods from the United States more expensive than products manufactured outside the United States. In addition, Japanese cultural attitudes and practices contribute to the trade balance as do certain ethnocentric business practices by United States companies in Japan. Another problem is the two countries’ respective production-consumption ratios: Japan produces more than it consumes whereas the United States consumes more than it produces. These and other factors presumably contributed to the


257 For example, the Japanese historically have considered foreign goods suitable only for foreigners, not as an alternative to Japanese products. Wolfowitz, Protectionism and U.S.-Japan Trade, DEP’T ST. BULL., July 1985, at 51. See also, Chira, supra note 256, at C1, col. 3 (Japanese attitude that United States goods poorer quality than Japanese goods).

258 Cultural practices, such as reliance on traditional domestic supplier relationships and an informal “buy Japan” preference, hinder access to Japanese markets. See Abbott & Totman, supra note 254, at 129-34. For a cultural and historical explanation of Japanese barriers to foreign goods and culture, see id. at 129-44; S. COHEN, UNEASY PARTNERSHIP 48-52 (1985); Kristof, Japan Trade Barriers Called Mainly Cultural, N.Y. Times, Apr. 4, 1985, at A1, col. 4.

259 For example, trade and business officials from the United States often speak no Japanese. Collision Course, supra note 15, at 52. They also lobby ineffectively for United States interests in Japan. Id. Instructions for United States products sometimes are not written in Japanese. Wolfowitz, supra note 257, at 51. According to the Electronic Industries Association of Japan, Japanese manufacturers accommodate buyers whereas United States manufacturers fail to do so: Japanese manufacturers are eager to accommodate buyers’ needs based on mutual trust, while U.S. manufacturers are interested in their own need to close big sales and to deliver products according to the plans sanctioned by their contracts.

Japanese manufacturers provide extensive language training to personnel, prepare materials in the native language, and adjust their products according to specifications in the foreign market, while U.S. manufacturers present catalogues, specifications and contracts in English, and adhere to the U.S. approach.


260 Wolfowitz, supra note 257, at 51. One reason for Japan’s excess production over domestic consumption is that the Japanese have a high rate of savings. In Japan, net savings is 16%; net savings is only 2% in the United States. Id. Japanese gross private saving equals more than 30% of Japan’s GNP. The average of other OECD countries is about 50% lower than that figure. Id.

261 Niskanen, How We Can Cut the Trade Deficit, Chicago Trib., Dec. 9, 1986, § 1, at 23, col. 3.
1985-1986 decrease. Consequently, the new laws deserve only partial credit for the improved telecommunications trade imbalance.

Even if the 1985-1986 decrease is attributed solely to the new laws, a positive prognosis for trade relations based on their potential effect is premature for at least five reasons. First, Private NTT's Type I competitors have been in business too short a time to predict how much equipment they will purchase from United States suppliers. None of them even plan to offer full-scale services until autumn 1987. Second, competition may not force Private NTT to purchase more telecommunications equipment from foreign suppliers. Third, the demand for telecommunications equipment may be greatest for low-technology CPE which United States suppliers sell least competitively. Fourth, nothing indicates that joint ventures between Japanese and United States companies will encourage sales in Japan of United States telecommunications equipment. Fifth, the United States may expect faster decreases in the telecommunications trade imbalance than are possible.

The 1985-1986 decrease and the potential benefits of Japan's new laws did help mollify United States concern over the telecommunications trade imbalance. That result met Japan's immediate policy objective of avoiding United States trade sanctions. Unless Japan's trade surplus with the United States continues to decrease in this area, however, the new laws will do little to thwart United States trade sanctions or to encourage amenable long-term trade relations. United States trade officials

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The demand for telecommunications equipment in the United States will continue to outpace domestic production. Between 1985 and 1987, the United States telecommunications equipment market will grow from $21.2 billion to $27.3 billion, a 29% increase. Socolovsky, 'Communication Equipment Acquires a Foreign Accent,' ELECTRONIC BUS., Apr. 15, 1986, at 17. These figures, however, equal more than twice the projected growth in domestic production between 1985 and 1987. Id. Imported telecommunications equipment will fill the gap. Id.

262 See supra note 209 and accompanying text.

263 Between 1984 and 1985, the time period during which the new laws took effect, Private NTT's foreign procurement did increase by 5%. Mark Time, supra note 12, at 19, col. 4. The 5% increase, however, probably had little or no impact on the two countries' trade imbalance in telecommunications equipment for two reasons. The 5% increase improved the percentage of Private NTT procurement devoted to foreign companies only if domestic procurement during 1985 decreased or increased less than 5%; this figure alone fails to disclose whether either happened. In addition, with 90% of Private NTT procurement already going to United States suppliers, an annual 5% increase in Private NTT procurement would result in insignificant gains for United States suppliers. But cf. supra note 12.

264 See J. HILLS, supra note 1, at 114. Only Type I carriers purchase high technology equipment, such as central switching and transmission equipment, which they use to construct their networks. In contrast, Japan's entire consumer population purchases low technology equipment, such as facsimiles, telephones, and modems, because a consumer must install low technology equipment to use telecommunications services. The demand for low technology products, therefore, should always be greater than the demand for high technology products.
and Congress look to telecommunications trade as a crucial indicator of Japan's commitment to remedy the overall trade imbalance. Consequently, they probably will expect even greater reductions in the telecommunications trade imbalance before dismissing trade sanctions as an alternative.

Meanwhile, Japan and the United States should expect no marked improvement in the telecommunications trade imbalance until several factors affecting the balance of trade are present. Two are already in place. First, Japan has converted its monopolistic telecommunications system into a private market by enacting the TBL and the NTT Act. Second, the dollar has declined in value since September 1985. Other long-range factors, however, must fall into place before the two countries can expect any significant improvement. Hopefully, as United States manufacturers continue to supply the Japanese telecommunications market, Japanese consumers will become accustomed to buying equipment made in the United States. In addition, United States companies must

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265 See supra note 15 and accompanying text.

267 At least four business options are available to United States companies for penetrating Japan's telecommunications market. First, United States suppliers can continue to sell telecommunications equipment to Private NTT and its competitors. Several United States companies, such as Digital Switch Corporation, AT&T, Hughes Aerospace, and Northern Telecom, already have met with success in Japan's telecommunications equipment market. See supra notes 217-19, 221 and accompanying text. To meet the current demands of the Japanese market, United States companies may need to produce more competitive CPE rather than large-scale telecommunications switching systems. See supra note 265. Second, Japanese and United States telecommunications companies can pursue more joint ventures. Hayashi, *Haruo Yamaguchi: NTT's Procurement Man*, ELECTRONIC BUS., Feb. 1, 1986, at 46. But see Heimlich, supra note 254, at 23 (joint ventures could worsen the trade imbalance). For recommendations on establishing successful joint ventures with Japanese companies, see, e.g., McArthur, *Joint Ventures in Japan*, 20 U. BRIT. COLUM. L. REV. 71 (1986); Beem & Impert, *Establishing a Joint Venture*, E. ASIAN EXEC. REP., Jan. 1986, at 17; Tung, *Keys to Success in Joint Ventures in Japan*, E. ASIAN EXEC. REP., Nov. 1984, at 9. Third, United States companies can enter Japan's telecommunications services market as Type II carriers. Fourth, United States investors can invest in Japanese and United States telecommunications companies operating in Japan's market. See Special Report: The Report of the Advisory Group on Economic Structural Adjustment for International Harmony, BUS. JAPAN, May 1986, at 26; Wolfowitz, supra note 257, at 51.

By pursuing business options such as these, United States companies will establish a presence in Japan's telecommunications market which should produce long-term gains for the United States companies and long-term improvement in the balance of trade in telecommunications between Japan and the United States.

268 In the United States during the 1960s, Japanese goods carried the stigma of being poorly
learn to accommodate Japanese business practices. As Japan becomes more dependent on telecommunications, its market should expand. If its domestic market grows faster than domestic production, Japan will begin to absorb the products formerly exported. United States companies, on the other hand, must produce more telecommunications products in order to curb the need for exports created by an undersupply of domestic products. As these factors affect the balance of trade, it was naive to expect any significant short-term improvement in the telecommunications trade imbalance based solely on the effects of the new laws. Instead, the new laws represented only one step of the several needed to realize a long-term solution to the trade imbalance in telecommunications.

III. CONCLUSION

Japan's telecommunications laws are now limited to structuring a competitive telecommunications market. Between 1952 and April 1985, NTT held a monopoly over domestic telecommunications services and, until 1981, bought telecommunications equipment exclusively from Japanese suppliers. During those years, NTT accomplished Japan's primary telecommunications policy objectives: it completed a nationwide telecommunications system and cultivated the domestic industry.

In 1981, Japan opened NTT procurement contracts and the interconnect market to foreign telecommunications equipment suppliers pursuant to the Procurement and Interconnect Agreements. In practice, however, the agreements only gave foreign companies competitive access to Japan's interconnect market because NTT continued to award procurement contracts primarily to domestic suppliers. Consequently, the


270 See Niskanen, supra note 261, § 1, at 23, col. 4; see also U.S. Rips Japan Budget Policy, Chicago Trib., Mar. 10, 1987, § 3, at 8, col. 1 (increased domestic demand in Japan lessens Japanese trade surplus); but see Iida, supra note 14, at 253, 255 (expanded domestic demand in Japan insignificantly improves trade imbalance).
Procurement Agreement failed to mitigate Japan's growing trade surplus in telecommunications equipment.

Japan's new telecommunications laws, which became effective in April 1985, ended NTT's monopoly and established a regulated competitive market. Under the new laws, the Ministry regulates Japan's telecommunications market to assure dependable telecommunications services and equipment. The new laws have encouraged many private carriers to enter the market to compete with Private NTT. As a result, Private NTT and its competitors have introduced a greater variety of services and equipment to satisfy sophisticated consumer demands. The competition also has lowered prices for services and equipment. Since the new laws became effective, however, Japan's telecommunications trade surplus with the United States has not decreased enough to satisfy the United States. The new laws, therefore, promote several of Japan's current policy objectives, but represent only part of the remedy to the telecommunications trade imbalance between the two countries.

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