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REPORT BY THE U.S.

General Accounting Office

Assessment Of Bilateral Telecommunications Agreements With Japan

GAO reviewed implementation of the U.S.-Japan Agreement on NTT Procurement and the Understanding on Japan's Interconnect Market, both of which became effective January 1, 1981. Through these agreements, Japan opened to foreign competition its domestic telecommunications market.

Although sales of U.S.-made equipment to NTT, Japan's government-run telecommunications corporation, have not met U.S. Government expectations, American business still believes it can use the Agreement to penetrate the NTT market. U.S. firms generally favor extending the Agreement beyond its December 31, 1983 termination date.

Although obtaining NTT approval to sell and install interconnect equipment in Japan can be time consuming and expensive, American suppliers believe NTT is acting in good faith in implementing the Interconnect Market Understanding and see future sales potential in Japan.



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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

NATIONAL SECURITY AND
INTERNATIONAL AFFAIRS DIVISION

B-206455

The Honorable William E. Brock
U.S. Trade Representative

The Honorable Malcolm Baldrige
The Secretary of Commerce

Subject: Assessment of Bilateral Telecommunications
Agreements with Japan (GAO/NSIAD-84-2)

We reviewed the implementation of the U.S.-Japan Agreement on NTT Procurement and the Understanding on Japan's Interconnect Market, both of which became effective January 1, 1981. Given the significance of these bilateral agreements to U.S.-Japan trade relations and the fact that the NTT Agreement expires at the end of 1983 and is subject to renegotiation, we are bringing to your attention the information we have obtained concerning progress in implementing these agreements.

Through these agreements, Japan committed to open its domestic telecommunications market, which is among the world's largest, to foreign competition. The NTT Agreement covers procurement by Nippon Telegraph and Telephone Public Corporation, a government-run corporation responsible for developing and operating Japan's domestic telecommunications system. NTT annually procures approximately \$3 billion in telecommunications equipment and related products. The Interconnect Understanding formally gives U.S. firms access to Japan's domestic interconnect market (i.e., purchases of terminal equipment by NTT's customers for connection into the telecommunications system). Sales in this interconnect market total about \$1 billion annually.

As discussed in appendix I, sales generated by the NTT Agreement have not met U.S. Government expectations. This Agreement commits NTT to treat bids from U.S. firms equally with bids from domestic Japanese firms in making purchases subject to the Agreement and establishes sets of nondiscriminatory procurement procedures, or "tracks," NTT must follow in conducting these procurements. Since the U.S. telecommunications industry

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is among the world's most competitive, especially in very high-technology equipment, the U.S. Government expected American suppliers to make major sales of high-technology equipment during the 3-year life of the Agreement. These sales have not materialized. During the 12-month period ending March 1983, U.S. firms sold to NTT only about \$38 million worth of equipment, representing only about 1 percent of NTT's total purchases. Moreover, many of the U.S. sales were of equipment at the low end of the technology scale.

According to almost all American business officials we interviewed, the low level of sales to NTT does not necessarily signify that the Agreement cannot succeed. The U.S. Government may have overestimated what could be accomplished in a 3-year period. We were told by industry representatives that a firm entering a foreign telecommunications market for the first time generally needs at least 3 years before making major sales; it needs time to study the new telecommunications system and learn how to deal with the new customer, often a government agency. Likewise, the customer needs time to assess the new supplier and its products. NTT uses protracted procurement procedures, especially for high-technology equipment, through which it assesses the dependability of the supplier and its products.

Moreover, both NTT and American firms have experienced false starts and delays in using the Agreement, further lengthening the time U.S. firms needed to enter the NTT market. NTT is divided in its support of the Agreement. In addition, NTT officials acknowledged that NTT had significant difficulties using the Agreement's procurement procedures. It needed 18 months to fully develop or modify its product specifications and to implement other actions to comply with the Agreement. In the meantime, it used generally discriminatory pre-Agreement procedures to purchase products for which it did not have specifications. NTT officials also acknowledged that the specifications used in some covered procurements were so detailed with respect to the design of the needed equipment that only Japanese products could realistically qualify.

American firms have also experienced start-up problems and have been slow to perform the groundwork necessary to penetrate the NTT market. Many important U.S. telecommunications firms, particularly medium-sized firms, have made no attempt to sell to NTT. They are generally waiting for the large multinational firms to penetrate the market before making the substantial investment necessary to sell to NTT. There was also a misunderstanding on the part of some U.S. firms that the Agreement provided for an assured market. They attempted at first to sell products embodying less than current technology to NTT with the expectation that pressure associated with the Agreement would

facilitate sales. Finally, those firms that have made serious attempts to penetrate the NTT market needed time to weigh the costs and benefits of such a major investment and to take the steps necessary for a successful sales effort. As a consequence, many U.S. telecommunications firms did not begin to seriously attempt to enter the NTT market until a year or more after the Agreement became effective.

Most of the American business officials we interviewed agreed that the Government would be premature to judge the NTT Agreement as a failure, and they recommended renewal of the Agreement. These officials had seen progress in their efforts to sell to NTT and were generally optimistic that, given enough time and the continuation of Japanese cooperation, they can successfully penetrate the market. They were particularly interested in maintaining access to the market since NTT is about to embark on a \$120-billion effort to upgrade its telecommunications system between now and the end of the century. According to most of the business officials we interviewed, allowing the Agreement to terminate would have no economic benefit. However, they emphasized that, should the Agreement be renewed, U.S. firms will continue to need U.S. Government representations to NTT in support of their sales efforts.

As discussed in appendix II, U.S. firms appear to have made substantial efforts to take advantage of the Interconnect Market Understanding. This Understanding does not commit NTT to buy from U.S. firms. Instead, NTT reviews U.S.-made interconnect equipment and, if the equipment is found acceptable, approves it for purchase by NTT customers. As of April 1983, NTT has approved all requests to sell or install American-made interconnect equipment in Japan. Although obtaining NTT approval can be expensive and time consuming, the American suppliers we contacted believe that NTT is acting in good faith and see future sales opportunities in Japan's interconnect market.

The Office of the U.S. Trade Representative and Department of Commerce reviewed this report and the Commerce Department provided comments. Commerce stated that, overall, this report presents a balanced and generally accurate picture of NTT and U.S. business community activity under the NTT Agreement and Interconnect Market Understanding. In commenting on the former, Commerce emphasized that access to NTT procurement is important to the international competitiveness of the U.S. telecommunications industry. Commerce added, however, that "The Administration remains seriously concerned over the low level of sales to date by U.S. firms to NTT. . ." and described the factors that will be considered in assessing whether it is in the United States interest to renew the Agreement. With regard to the Interconnect Market Understanding, Commerce pointed out that

"the Japanese still have a number of non-tariff barriers associated with the interconnect market in areas not covered by the Agreement" and added that "These practices . . . may be addressed in a new multilateral agreement for interconnect equipment currently under negotiation."

We are sending copies of this report to appropriate congressional committees; the Director, Office of Management and Budget; and other interested parties.

for 
Frank C. Conahan
Director

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	<u>ABBREVIATIONS</u>	
INS	Information Network System	
NTT	Nippon Telegraph and Telephone Public Corporation	
OUSTR	Office of the U.S. Trade Representative	
PBX	private branch exchange	

MORE TIME NEEDED TO REALIZE
TRADE VALUE OF NTT AGREEMENT

Although sales generated by the NTT Agreement have not met U.S. Government expectations, American business still believes it can use the Agreement to penetrate the NTT procurement market. This Agreement obligates the Japanese Government to open to U.S. and other foreign competition procurement by Nippon Telegraph and Telephone Public Corporation (NTT), a government-run corporation responsible for developing and operating Japan's domestic telecommunications system. The U.S. Government expected that U.S. suppliers would make major sales of high-technology telecommunications equipment to NTT during the Agreement's 3-year life. However, U.S. firms have sold little to NTT. American industry officials we spoke with told us that the government overestimated what the Agreement could accomplish in a 3-year period and they believe that, given enough time and the continuation of Japanese cooperation, they can successfully penetrate the NTT market. They, therefore, generally favor extending the Agreement.

BACKGROUND

The NTT Agreement evolved from negotiations leading to the international Agreement on Government Procurement.¹ As part of these negotiations, each government submitted a list of its agencies that would be covered by this Agreement and whose procurements would be open to foreign competition. Japan's list included many of its central government agencies, but not NTT. The United States considered the Japanese offer unsatisfactory because the level of procurements was not commensurate to the U.S. offer. U.S. negotiators viewed NTT as the only entity with sufficient purchasing power to make Japan's offer acceptable.

When pressed to open NTT's procurement, Japan at first resisted. Eventually, Japan offered NTT's procurement of non-telecommunications items, such as paper and telephone poles, claiming that the Agreement on Government Procurement procedures were not sufficiently flexible to purchase high-technology telecommunications equipment. Because this offer excluded high-technology products, which U.S. firms sell very competitively,

¹The Agreement on Government Procurement is one of six non-tariff barrier codes resulting from the Tokyo Round of the Multilateral Trade Negotiations (MTN). The signatory governments agree not to discriminate against or among the products and suppliers of other signatories in making covered procurements and, toward this end, the Agreement establishes procurement procedures.

U.S. negotiators pressed for full access to NTT's telecommunications purchases.

After continued intensive negotiations, the United States and Japan concluded a separate bilateral Agreement on NTT Procurement which became effective January 1, 1981, for 3 years. Under the NTT Agreement, Japan and the United States committed themselves to maintain open telecommunications markets which provide competitive opportunities for foreign as well as domestic suppliers.² Since the U.S. telecommunications market was already relatively open, the NTT Agreement only validated current U.S. policies and practices. The private sector firms that comprise the U.S. telecommunications market generally adhere to nondiscriminatory procurement policies. The openness of the U.S. market is demonstrated by the level of Japanese telecommunications exports to the United States, which in 1980, the year before the Agreement was implemented, totaled approximately \$162 million. This amount more than doubled to about \$332 million during the 11-month period ending February 1983.

In contrast, Japan agreed to formally open a market which had largely been closed to foreign suppliers. This required significant changes in NTT's procurement policy and practices. Traditionally, NTT made nearly all procurements from its "family" of 200 domestic suppliers. Further, NTT made approximately half of these procurements and virtually all purchases of main-line telecommunications equipment from only four suppliers--Nippon Electric Corporation (NEC), Oki, Fujitsu, and Hitachi. Thus, it could generally conduct procurements informally, without written procedures. Consequently, to open its purchases to foreign competition, NTT had to develop new nondiscriminatory procedures.

The NTT Agreement has a 3-year lifespan. According to one U.S. negotiator, the Japanese negotiators were concerned that the Japanese legislature would disapprove the Agreement because of heavy opposition from several Japanese telecommunications firms. To avoid this, Japanese negotiators treated the Agreement as an "order in council," which is similar to a U.S. Government executive agreement in that it need not be approved by the legislature. However, orders in council can last no longer than 3 years. The U.S. negotiators preferred that the Agreement have a limited timeframe since it would provide an opportunity for the United States and Japan to review implementation of the Agreement and determine whether continuation is warranted. By

²Japan implemented the Agreement on a most-favored-nation (MFN) basis, effectively allowing firms from all countries that are signatories to the General Agreement on Tariffs and Trade (GATT) to participate in covered NTT procurements.

the end of 1983, the United States and Japan are to review the Agreement and decide whether or not it should be continued for another 3 years.

OBJECTIVES, SCOPE, AND METHODOLOGY

The objectives of our review were to obtain information on the results of the NTT Agreement so far and to assess the potential relative benefits of continued U.S. participation in the Agreement. We assessed the Agreement as a mechanism for increasing U.S. exports of telecommunications equipment to Japan and obtained information on NTT's compliance with the Agreement and U.S. firms' efforts to take advantage of the Agreement.

We discussed the Agreement with U.S. Government officials in Washington, D.C., and in Japan. We interviewed Department of Commerce officials at Commerce headquarters and at the American Embassy in Japan. We also discussed the Agreement with officials of the Office of the U.S. Trade Representative (OUSTR) in Washington and State Department officials at the American Embassy. In addition, we reviewed pertinent files at the Commerce Department, OUSTR, and the American Embassy.

We talked with officials of U.S. firms that have attempted to sell to NTT, including headquarters managers, and company representatives in Japan and Washington. Specifically, we interviewed:

- Domestic and overseas representatives of AT&T International, ITT Asia Pacific, Inc., Motorola Inc., and IBM Corporation.
- Overseas representatives of National Cash Register Japan, Ltd. (NCR Japan, Ltd.), Paradyne Japan Corporation, Rolm International Japan, Ltd., and Andrew Corporation.
- Domestic representatives of GTE Corporation and TeleSciences International.

In addition, we met with representatives of the Electronic Industries Association (EIA) and the Communication Workers of America (CWA).

We held discussions with officials of NTT's headquarters office in Japan and NTT's New York office and with Japanese Government officials from the Ministry of Foreign Affairs and Ministry of Posts and Telecommunications.

Our review was performed in accordance with generally accepted Government auditing standards.

SALES UNDER NTT AGREEMENT HAVE
NOT MET GOVERNMENT EXPECTATIONS

U.S. Government expectations concerning the trade value of the NTT Agreement have not been met. The U.S. Government expected that, because U.S. firms are highly competitive in the telecommunications industry, they would be able to make major sales to NTT during the Agreement's 3-year life. However, U.S. firms' sales to NTT have been limited.

The NTT Agreement was expected to open to U.S. competition one of the world's largest telecommunications markets. NTT spends about \$3 billion annually on telecommunications equipment and related products. Since U.S. manufacturers make high-quality products and are highly competitive with foreign suppliers in the American telecommunications market, the U.S. Government expected them not only to sell in Japan but to sell equipment at the high end of the technology scale.

However, U.S. firms' sales to NTT have been limited. In Japanese fiscal year 1981 (April 1, 1981 to March 31, 1982), the first full fiscal year following the Agreement's implementation, American suppliers sold only about \$15.2 million worth of items to NTT, accounting for about 0.5 percent of NTT procurement. This amount was only one-tenth of 1 percent higher than the U.S. share for the prior fiscal year. In fiscal year 1982, the U.S. share was only about \$38 million, representing about 1 percent of NTT procurement. Moreover, although U.S. sales to NTT have included some high-technology items, such as echo cancelers and private branch exchanges (PBXs), nearly half of the sales were low-technology products, such as magnetic tape.

INSUFFICIENT TIME HAS PASSED
TO SEE MEANINGFUL RESULTS

According to almost all U.S. industry officials we interviewed, the government may have overestimated what could be accomplished during a 3-year period. Industry officials stated that it would take at least 3 years to see significant levels of major sales to NTT. Moreover, both NTT and U.S. firms have experienced delays in fully utilizing the Agreement, lengthening the time needed for U.S. firms to penetrate the NTT market. NTT had problems implementing the Agreement and some U.S. suppliers made inadequate efforts or were slow to take advantage of the Agreement.

At least 3 years needed to enter
a major foreign telecommunications market

According to American industry officials, successfully penetrating a major foreign telecommunications market generally

takes at least 3 years. The supplier needs time to study the new telecommunications system and to learn how to deal with the new customer, often a government agency. The customer needs time to assess the new supplier and its products. NTT uses protracted procurement procedures, especially for high-technology equipment, through which it assesses the dependability of new suppliers and their products.

A supplier needs time to learn about a new telecommunications network, what products the network needs, and the new customer's business practices. Officials of two American firms that had been attempting to sell to NTT before initiation of the Agreement told us that it had taken their companies about 3 years to determine exactly what NTT needs and how best to meet these needs. Similarly, learning a new customer's business practices can also be difficult. For example, NTT's standard contract requires a company to accept unlimited liability for all damage caused by a product's malfunction. This made American suppliers wary even though NTT assured them that it would invoke the clause only under extreme circumstances. U.S. firms needed time to develop an acceptable way to deal with this and other provisions of NTT's standard contract which differed from accepted Western legal contracting practices.

Similarly, a customer needs time to assure itself of the supplier's dependability. Worldwide, the telecommunications industry is generally conservative. The world's major networks use equipment from only a few suppliers who have demonstrated over decades that they can provide dependable, high-quality products. Telecommunications monopolies have to be sure they are purchasing reliable products since these products are used in their telecommunications networks for 20 to 30 years.

To open its procurement market to foreign competition and still assure the high quality of its telecommunications system, NTT developed detailed procurement procedures using several tracks under which a supplier must meet strict management and technical requirements.

--Track I for items not used for mainline communications.³ These include such standard items as paper, pencils, utility vehicles, and telephone poles as well as off-the-shelf, high-technology products, such as data terminal, PBX, and facsimile equipment.

--Track II for mainline telecommunications equipment available in the marketplace and which can be used as is or modified to meet NTT's requirements.

³All track I procurements are also subject to the international Agreement on Government Procurement.

--Track III for telecommunications equipment unavailable in a suitable form in the marketplace and which, in NTT's opinion, requires development specifically for or in cooperation with NTT.

In addition, NTT can use "track II-A" and "track III-A" to make follow-on purchases of any product purchased previously under track II or track III, respectively.

These tracks involve time-consuming procedures and requirements. An American industry official told us that it took his firm 10 months to sell its PBXs under track I. According to NTT officials, track II and III procurements can take from 1 to 2 years. At the time of our visit to Japan, one American firm had devoted about 1-1/2 years to winning a track III contract which had not yet been awarded. Track II-A and III-A procedures can also be time consuming.

Track I procedures require a prospective supplier to undergo a time-consuming screening, or "prequalification," process. A supplier must submit an application and several documents, including a resume, summary of company standing, description of manufacturing facilities, financial statements, and business records. NTT examines these documents, conducts any plant inspections needed and obtains any samples required. To successfully prequalify, a supplier must satisfy conditions regarding capitalization, creditworthiness, production, and quality.

Track II and III procedures are even more detailed and time consuming. The documentation submitted by the supplier in both these tracks is scrutinized at all levels of the NTT decisionmaking process to assess a firm's technical capabilities, the technical merit of its proposed products, and its financial resources and credit standing. Further, NTT conducts a rigid and exacting inspection of sample products for conformity with electrical, noise level, and durability standards and analyzes internal working parts. Lastly, NTT inspects the firm's manufacturing plant(s) to evaluate its quality standards and production capabilities.

In addition, track III procurements have steps which further lengthen the procurement process. NTT examines such things as the organization of the research and development facility, the time required to produce the end product, testing procedures, and patent rights. After NTT conducts feasibility studies on track III proposals, it designates the qualified suppliers and carefully selects its development and production partners. During joint development, NTT and the partner firm(s) hold technical discussions and produce and test the prototype equipment.

Tracks II-A and III-A are generally less time consuming than tracks II and III. When making a follow-on purchase from the firm that supplied the original equipment, NTT does not reinspect the company or its products. When making such a purchase from a firm that did not supply the original equipment, NTT does assess the supplier's reliability and inspect its manufacturing facilities and equipment. However, since tracks II-A and III-A are used to procure products that have already been developed, these procedures do not include major modification or joint development of the equipment being purchased, thus, according to U.S. business officials, reducing the time necessary to make the sale.

Tracks II, II-A, III, and III-A are of most importance to U.S. suppliers in the telecommunications area. These tracks generally cover the high-technology equipment that U.S. firms sell competitively, such as switching, carrier transmission and radio equipment, and on-line computers. Telecommunications equipment purchased through these tracks account for about half of NTT's annual \$3 billion procurement budget.

NTT experienced major start-up problems

NTT's difficulties in implementing the Agreement lengthened the time it would normally have taken U.S. firms to penetrate Japan's telecommunications market. Although NTT appears to have complied with the Agreement, it experienced major start-up and transition problems which hindered U.S. firms from participating in NTT procurements.

NTT has initiated several measures, some of which were not required, to promote the Agreement's implementation. During 1981, it sponsored seminars in the United States and Japan and published English-language materials on such matters as procurement procedures, supplier documentation, and general product specifications. Beginning September 1982, NTT distributed a quarterly newsletter on procurement to foreign firms. During the first 2 years of the Agreement, it also simplified application documents, established more generalized requirements, and allowed longer bidding periods.

Yet, NTT is divided in its support of the Agreement. Although NTT's president has committed himself to opening NTT procurement to foreign competition, other NTT officials reportedly still favor traditional procurement practices. According to some U.S. Government and supplier representatives, many mid-level managers and engineers responsible for procurement want to continue purchasing from the "family" of Japanese suppliers. According to some U.S. Government and business officials, NTT may need several more years to fully reverse its conservative philosophy of doing things as they were done in the past.

According to NTT officials, NTT also needed about 18 months to revamp its procurement system, including preparing instructions, modifying specifications, and qualifying new manufacturers. It was not until 6 months after the Agreement went into effect that NTT published track II and III procurement procedures. Further, developing usable product specifications for track I was particularly burdensome because the old specifications were very detailed and written in terms of design rather than performance. NTT also had difficulty developing specifications for track II and III procurements. Under the old procurement system, NTT worked with its family of suppliers to informally finalize specifications for products which were modified or jointly developed with NTT.

During the 18-month period in which it developed new specifications, NTT had to purchase many products required to satisfy business demands. Consequently, it purchased items according to the old procedures. In addition, NTT had difficulty writing new specifications which were oriented more toward performance and sufficiently flexible to attract American suppliers; it was not able to completely eliminate unnecessary detail and design orientation. Final specifications were often more rigid than necessary and sometimes appeared to American suppliers as little more than descriptions of existing Japanese products.

U.S. firms slow to take advantage of the NTT Agreement

The initial lack of action on the part of American suppliers to take advantage of the Agreement also lengthened the time needed to penetrate the NTT procurement market. American firms were divided in their support of the Agreement and their interest in NTT's business. Some companies were skeptical about NTT's intention to comply and did not consider taking advantage of the Agreement. Others made inadequate attempts to sell. Those who did make a serious effort needed time to begin taking the steps necessary to sell to NTT.

The American business community was divided in its support of the Agreement. Although some suppliers felt that the Agreement would be instrumental in opening NTT's procurement market, others believed that NTT had no intention of fully complying with the Agreement or that the Agreement was too complicated to be instrumental in opening Japan's telecommunication market. Some companies were split internally in their support, with the overseas sales divisions generally favoring the Agreement and the domestic sales divisions preferring legislation to restrict Japanese firms' access to the American telecommunications market. As a result, some firms did not even consider taking advantage of the Agreement. In addition, many suppliers, especially medium-sized firms, have taken a "wait and see" attitude,

looking for a major U.S. sale as evidence of NTT's sincerity and intent to comply with the Agreement.

Some of the American firms which have tried to sell to NTT made a poor showing, expecting that pressure associated with the Agreement would facilitate sales. Some submitted proposals for products of lower technical quality or at a higher price than those already available in Japan. Other proposals, because of insufficient market research, were for products which were technically incompatible with NTT's system. Worse yet, some firms tried to circumvent NTT's procurement procedures and brought up political considerations in selling to NTT, hoping to capitalize on the perceived U.S. political pressure on NTT to purchase American-made equipment. This approach alienated NTT officials and led them to question the firms' sincerity in meeting NTT's technical needs.

Those firms that have seriously attempted to penetrate the NTT market generally needed time to decide to do so and to take the steps necessary to sell to NTT. Firms were apprehensive about the highly competitive telecommunications market in Japan; they not only had to break the monopoly held by the family of suppliers but also had to compete with other Japanese telecommunications firms whose products were often competitive in terms of quality and price. Further, adhering to NTT's procurement procedures is an expensive and risky undertaking; it is difficult for firms to justify spending the money necessary when little or no profit may be gained.

A U.S. firm must incur the high costs of maintaining an in-country presence, translating documents, and possibly modifying its products to make a sale to NTT. It must establish a relationship through an in-country representative to learn of NTT's future needs and adequately prepare to meet them. One American supplier representative told us that it costs about \$400,000 a year to maintain a one-person office in Japan. Another large expense to American suppliers is the cost of translating product specifications, user manuals, and numerous other documents into Japanese. An American firm estimated that it would cost \$100,000 to translate its product proposal into Japanese. A supplier will also incur substantial expenses if it needs to modify or jointly develop a product to meet NTT's technical requirements. Participation in a track III procurement can require an especially high investment--as much as \$10 million.

Yet, there is no guarantee that the supplier will realize a sale or profit. A number of U.S. business representatives told us that their companies had invested as many as 3 years and substantial financial resources to sell equipment to NTT and had

made little, if any, profit. Even a firm selected to develop a product under track III, by far the most expensive of the five tracks, is given no assurance that NTT will purchase the resulting equipment in sufficient quantity or at a sufficient price for the firm to realize a profit. An additional risk with track III is that the company must share proprietary information and trade secrets with NTT in the joint development effort. While U.S. firms have been able to make acceptable arrangements with NTT for the safeguarding of such information, they still fear that competitors may be able to gain access not provided for in the arrangements.

With the expenses and risks involved, some American suppliers are reluctant to enter the NTT market. One American firm's representative said that his company was very reluctant to compete since it might not realize reasonable profits for 10 years. The firm's decision was made particularly difficult because it could invest its limited resources in other markets which were easier to penetrate. Given limited resources, firms seriously debated whether to take a chance on NTT or to invest their resources where there may be a greater chance for immediate payoff. Those firms which established offices in Japan and made serious attempts to sell to NTT sometimes devoted fewer resources than desirable to successfully sell to NTT. For example, one management official argued that three to five people were necessary in Japan. However, other management officials were concerned about the risks, and only one business representative was finally sent.

After a firm is established in Japan, it still must perform necessary market research before submitting a bid. Time is spent learning the telecommunications system and meeting NTT officials. Although presales efforts were time consuming, they were necessary for the company to determine what products would best meet NTT's needs.

AMERICAN SUPPLIERS GENERALLY
FAVOR EXTENDING THE NTT AGREEMENT

By the end of 1983, the NTT Agreement will terminate unless the United States and Japan negotiate its extension. Many American suppliers believe that the Agreement should be extended. They see potential for future business in Japan's telecommunications market, especially since NTT is embarking on a massive program to modernize its telecommunication system. On the other hand, they see no economic benefit from terminating the Agreement.

Many American suppliers are optimistic for the Agreement's future success. According to several American business officials, NTT has made progress in opening its procurement to foreign competition. For example, it has given American suppliers

the flexibility to use track III-A to submit bids that would normally have been submitted through track III, which U.S. companies consider to be more risky than track III-A. Track III procedures are generally more time consuming and expensive than track III-A procedures and require that the firm share a greater amount of proprietary information with NTT. In addition, NTT allowed suppliers to prequalify anytime, whereas other Japanese Government agencies wanted to restrict the prequalification period to the first quarter of each fiscal year.

NTT's latest measure to improve U.S. firms' access to the procurement market is its "eight-point program" which became effective March 1983. Under this program, NTT modified its procurement procedures to permit U.S. firms to submit applications in English and to NTT's New York office, extend application deadlines, create more flexible product requirements, expand order quantities, and revise contract provisions to conform to international standards.

Optimistic that NTT will buy major items from them, a number of U.S. companies have submitted major proposals to NTT. One U.S. company submitted a product proposal on its digital switching system, which, if accepted, could represent a sale of between \$80 million and \$100 million of a high-technology, state-of-the-art item. At the time of our visit to Japan in April 1983, NTT was also considering product proposals from three other American firms.

U.S. firms also support extending the Agreement because they want the opportunity to participate in NTT's planned Information Network System (INS) effort, a \$120-billion program to design and install a nationwide digitalized and integrated telecommunications system. INS, which was in the prototype stage during mid-1983, is planned to be fully operational by the end of the century and will revolutionize the transmission, storage, and processing of information. The development of INS should create many new opportunities for American firms to sell digital telecommunications equipment, satellite communications equipment, cellular telephones, PBXs, transmission equipment, fiber optics, and computers.

NTT officials also stated their desire to see the Agreement continued. According to the Director of its International Procurement Department, NTT would like to continue an open and fair procurement system because it results in the purchase of products of high quality at the best price. Officials from Japan's Ministry of Foreign Affairs and Ministry of Posts and Telecommunications also recognized that the Agreement's 3-year life is too short to expect major sales of high-technology equipment to NTT, and they support the Agreement's extension.

On the other hand, the business officials we interviewed believe that allowing the Agreement to terminate would hold no economic benefit. In addition to losing access to the NTT procurement market, American suppliers may lose access to Japanese technology as well. NTT generates new technology by participating in the research and development of new products in conjunction with telecommunications companies. In the past, only Japanese firms could participate in these joint ventures. However, U.S. firms now have the capability to perform joint development with NTT through participating in NTT procurements.

Business officials emphasize, however, that they need the U.S. Government to support their efforts to penetrate the NTT market. During the first 2 years of the Agreement, high-level U.S. Government officials have met with the NTT president on several occasions to reemphasize the importance the government places on the success of this Agreement. The government has also conducted and participated in seminars in the United States and Japan through which U.S. firms can better learn how to sell to NTT. Business officials we spoke with believe that the U.S. Government must continue to demonstrate its interest to ensure that NTT continues cooperating with U.S. sales efforts.

AGENCY COMMENTS

The Department of Commerce commented that:

"Overall, the report on the NTT Agreement is balanced and presents a generally accurate description of NTT's difficulty in radically revising its procurement system in a short period of time and the difficulties U.S. firms have experienced in penetrating the NTT market." (See app. III.)

Commerce elaborated on why access to NTT procurement is important to the international competitiveness of the U.S. telecommunications industry, pointing out that:

- "Penetrating the NTT market will not only deny traditional Japanese telecommunications suppliers a guaranteed market, but will make U.S. suppliers more competitive in third country markets.
- NTT is a generator of important technology for Japanese firms in the computer and semiconductor as well as the telecommunications industries.
- Japan's telecommunications market is the second largest in the world. NTT procurement represents about 40% of Japan's telecommunications market."

Commerce added, however, that "the administration remains seriously concerned over the low level of sales to date by U.S. firms to NTT" and described several factors that will be considered in assessing whether it is in the United States interest to renew the Agreement. These include

- NTT decisions on pending contracts;
- an evaluation of U.S. industry views on the utility of the Agreement for gaining market access;
- whether NTT is taking the necessary actions to provide U.S. firms the opportunity to significantly increase sales, especially for high technology equipment; and
- whether NTT not only allows but encourages U.S. firms to participate actively in NTT's research and development process.

With regard to the latter, it added that "Progress in this regard will demonstrate, to a large degree, NTT's willingness and intention to allow U.S. firms the opportunity to supply telecommunications products at the higher end of the technological spectrum."

IMPLEMENTATION OF INTERCONNECT
MARKET UNDERSTANDING: POTENTIAL OPPORTUNITIES
FOR U.S. FIRMS IN JAPAN'S MARKET

American firms have made substantial efforts to take advantage of the Understanding on Japan's Interconnect Market. Through this Understanding, NTT established a mechanism through which foreign firms can obtain approval to sell products in Japan's interconnect market. As of April 1983, NTT had approved all requests to sell or install American-made interconnect equipment in Japan. Although obtaining NTT approval can be expensive and time consuming, the American suppliers we contacted believe that NTT is acting in good faith to implement the Understanding and see future sales opportunities in the interconnect market.

BACKGROUND

The Interconnect Market Understanding, which evolved from negotiations leading to the U.S.-Japan Agreement on NTT Procurement, opened to U.S. competition Japan's interconnect market, which annually totals about \$1 billion in sales. This Understanding was concluded separately from the NTT Agreement and, unlike the NTT Agreement, has no termination date.

The interconnect market generally consists of terminal equipment connecting customers to a telecommunications system. However, NTT's definition of interconnect equipment has traditionally been narrower than the U.S. definition. For instance, NTT does not include primary instruments (i.e., the first telephone in a household or business) as part of the interconnect market.

In Japan, customers may purchase interconnect equipment directly from suppliers and connect it to the telecommunications network. Before a product can be connected, however, NTT must inspect and approve it for compliance with technical requirements. NTT uses two types of approval: product-type approval and individual document approval. For product-type approval, NTT inspects a certain type of equipment and, if it is found acceptable, approves it for purchase by its customers. For individual document approval, NTT approves a customer's connection of a particular type of equipment to the domestic telecommunications network. NTT requires individual approval for all equipment, including equipment that has already received type-approval, before it can be connected to the system. However, a product that has already been type-approved will receive individual document approval much more readily than one that has not.

Through the Interconnect Market Understanding, the Japanese Government established a mechanism through which U.S. and other foreign firms can obtain NTT approval to sell products in Japan's interconnect market. To do this, NTT revised its rules and regulations, effective January 1, 1981. Further, NTT agreed to accept test data from foreign firms and laboratories to fulfill type-approval requirements and to generally inspect the customer's installation of equipment within 2 weeks of the date inspection is requested.

OBJECTIVES, SCOPE, AND METHODOLOGY

We reviewed the Interconnect Market Understanding in conjunction with our review of the NTT Agreement to obtain information on the extent to which the Understanding facilitated U.S. firms' access to Japan's interconnect market. We assessed the Understanding as a mechanism for increasing U.S. exports of interconnect equipment to Japan and obtained information on NTT's compliance with the Understanding and on U.S. firms' efforts to take advantage of the Understanding. Our methodology for this review segment was the same as for the segment on the NTT Agreement. (See p. 3 of app. I.)

PRODUCTS OF SEVERAL U.S. FIRMS APPROVED FOR INTERCONNECT MARKET

As of April 1983, NTT had approved all requests to sell or install U.S.-made interconnect equipment in Japan. These approvals involved 147 different type products of 40 U.S. firms. Five U.S. firms had been granted type-approval to sell 11 types of equipment, including headsets, telephone sets, PBX equipment, and acoustic couplers. NTT also granted individual document approval allowing customers to install 136 types of U.S.-made equipment.

U.S. FIRMS SEE FUTURE SALES POTENTIAL

The American suppliers we contacted were generally optimistic about their future participation in Japan's interconnect market. Although obtaining NTT approval can be an expensive and time-consuming process, they generally believed that NTT was acting in good faith to implement the Understanding and believed that their interconnect business will increase with the growth of the market.

The firms we contacted which had received type-approval had encountered high costs and a complicated, time-consuming NTT approval process. For example, one company had spent about \$550,000 and 7 months to obtain NTT type-approval for its PBX equipment; it had to modify the equipment to meet NTT's technical requirements and translate all the technical manuals into Japanese.

However, NTT has taken steps to facilitate U.S. firms' use of the Interconnect Market Understanding. In 1981, NTT presented seminars in the United States which provided guidance to American firms on NTT's procedures and technical requirements for type-approval. NTT simplified its type-approval procedures in March 1983 and is proposing to broaden the interconnect market by expanding its definition of interconnect equipment.

The American suppliers we contacted see good potential for future sales of U.S.-made equipment in Japan's interconnect market. An official of one U.S. firm told us that market prospects are promising and that his firm's sales may reach \$10 million by 1984, representing about 3 to 4 percent of a significant product segment of Japan's interconnect market. American suppliers are particularly interested in the interconnect business generated by NTT's Information Network System effort, through which it plans to develop a nationwide digitalized and integrated telecommunications system by the end of the century. (See p. 11 of app. I.)

AGENCY COMMENTS

The Department of Commerce commented that:

"The report on the Interconnect Agreement is also balanced and presents an accurate description of the operation and results of the Agreement." (See app. III.)

Commerce noted, however, that the Japanese still have a number of non-tariff barriers associated with the interconnect market in areas not covered by the Agreement and stated that these practices may be addressed in a new multilateral agreement currently under negotiation.



UNITED STATES DEPARTMENT OF COMMERCE
The Inspector General
Washington, DC 20230

September 30, 1983

Mr. J. Dexter Peach
Associate Director, Resources, Community
and Economic Development Division
U. S. General Accounting Office
Washington, D. C. 20548

Dear Mr. Peach:

This is in reply to GAO's letter of September 14, 1983, requesting comments on the draft report entitled "Assessment of Bilateral Telecommunications Agreements with Japan."

We have reviewed the enclosed comments of the Under Secretary for International Trade and believe they are responsive to the matters discussed in the report.

Sincerely,

A handwritten signature in cursive script, appearing to read "S. M. Funk".

Sherman M. Funk
Inspector General

Enclosure



UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary for International Trade
Washington, D.C. 20230

SEP 28 1983

Mr. J. Dexter Peach, Director
Resources, Community, and Economic
Development Division
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Peach:

Secretary Baldrige has asked me to thank you for the opportunity to review and comment on your draft report on "Assessment of Bilateral Telecommunications Agreements with Japan."

Overall, we found the report to be balanced and accurate and we hope our written comments will further improve the final report.

We look forward to reviewing the final report when it is available.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lionel H. Olmer".

Lionel H. Olmer

Enclosure



COMMENTS ON GAO REPORT ON THE BILATERAL TELECOMMUNICATIONS
AGREEMENTS WITH JAPAN

Overall, the report on the NTT Agreement is balanced and presents a generally accurate description of NTT's difficulty in radically revising its procurement system in a short period of time and the difficulties U.S. firms have experienced in penetrating the NTT market. We would like to comment on and offer a fuller discussion of two particular issues covered in the report: the decision on renewal of the Agreement and the reasons why access to NTT is important to U.S. interests.

As you note in your report, the decision as to whether to renew the NTT Agreement is preceded by over two years of a low level of sales to NTT by U.S. firms. We do not disagree with your observation that the NTT Agreement has the potential to fulfill its objective of providing U.S. firms access to the Japanese telecommunications market. However, at this time we cannot be certain that this potential will be realized. The Administration remains seriously concerned over the low level of sales to date by U.S. firms to NTT, especially in light of the large, open U.S. market for Japanese telecommunications suppliers.

The decision as to whether it is in the U.S. interest to renew the NTT Agreement involves the consideration and balancing of a number of important factors. Some of the key concerns are: NTT decisions on pending contracts, an evaluation of U.S. industry views on the utility of the Agreement for gaining market access, and the judgment by the U.S. government as to whether NTT is taking the necessary actions to provide U.S. firms the opportunity to significantly increase sales, especially of high technology equipment. An additional factor, as important as realizing significant sales in the short term, is whether NTT not only allows but encourages U.S. firms to participate actively in NTT's research and development process. Progress in this regard will demonstrate, to a large degree, NTT's willingness and intention to allow U.S. firms the opportunity to supply telecommunications products at the higher end of the technological spectrum.

With regard to our second concern, we note that the GAO report contains little analysis of why access to NTT is important to U.S. interests. Access to NTT procurement is essential for a number of reasons, and GAO may wish to note the following:

- (1) NTT serves an important role in Japan's industrial policy by providing a protected market for Japanese produced equipment. There is evidence of cross-subsidization between NTT and its "Family" of supplier families. Penetrating the NTT market will not only deny traditional Japanese telecommunications suppliers a guaranteed market, but will make U.S. suppliers more competitive in third country markets.

(2) NTT is a generator of important technology for Japanese firms in the computer and semiconductor as well as the telecommunications industries.

(3) Japan's telecommunications market is the second largest in the world. NTT procurement represents about 40% of Japan's telecommunications market.

The report on the Interconnect Agreement is also balanced and presents an accurate description of the operation and results of the Agreement. It is important to note, however, that the Japanese still have a number of non-tariff barriers associated with the interconnect market in areas not covered by the Agreement. These non-tariff barriers include, among other things, individual inspections, factory inspections, and separate type approval procedures for NTT procurement and interconnect approval even though NTT is the authority for both procedures. These practices do not fall under the U.S.-Japan Interconnect Agreement and may be addressed in a new multilateral agreement for interconnect equipment currently under negotiation.

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