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REPORT FROM THE COMMISSION
ON

Electronics, Information and Communication industries: Marketing, Market Access and Distribution Practices in Japan and in the United States

EXISTING SOURCES

A number of studies, legal texts and other documents have been used in drawing up the present working document. These texts are listed below. They are quoted within the working document.

I. ANTI-COMPETITIVE PRACTICES

- Paper by the Confederation of Germany Industry on "Grievances of German Industry Towards the Japanese Government and Industry" (translation)
- "Japan's Protected Market : Significance, Extent, Outlook and Challenges for US Policy" - Study by the Congressional Research Service - July 9, 1990
- "The Distribution of Consumer Electronics in Japan" by BIS Strategic Decisions of August 12, 1991
- "Central Office Equipment Purchases" - a report prepared for The Office of the US Trade Representative Executive Office of the President by Northern Business Information (dated March 20, 1992)

II. PUBLIC PROCUREMENT

- "Market Access for European IT-Industry to the Japanese Market" by Eurobit (1992-1993)
- "The Japanese Telecommunications Procurement Market" by EGIS of August 1990
- Report on United States Trade and Investment Barriers (1993-1994) by Services of the Commission of the European Communities
- Market access problems in Japan. State of play (1994) by services of the Commission of the European Communities
- Global competitiveness of US advanced-technology industries: computers. Publication 2705, December 1993
- "Industrial Policy for the Telecommunications Equipment Industry" by ECTEL, December 1991

III. STATE AID

- Report on "Mandala Project on High Performance Computing and Communications"
- High Performance Computing and Communications: toward a National Information Infrastructure. 1994

IV DISCRIMINATORY PRACTICES

- Council Directive of 14 February 1973 on the Harmonization of the Laws of Member States Relating to Electrical Equipment Designed for Use Within Certain Voltage Limits

- United States-Japan Trade White Paper 1993 by the American Chamber in Japan (ACCI)

- Section on Japan from the 1994 US national Trade estimate report on foreign trade barriers

- Foreign Exchange and Foreign Trade Control law by Ministry of finance Japan, March 1980

- Barriers to European industry trading in the US satellite communications market by KPMG, January 1993

V STRUCTURAL IMPEDEMENTS

- Japanese competition Law by the Fair trade Commission of Japan, September 1991

- US Business Acces to certain foreign state-of-art technology, September 1991

FOREWORD

I. The new global economy in order to realize all its virtualities implies the setting up of a harmonized set of competition rules and the scrapping of all barriers impeding the access to third markets. This is particularly true for the information technology and communications industry which represents the core of the emergence of the information society and for the United States and Japan which represent the two biggest economic powers both in general terms and as far as the ITC industry is concerned.

Change is accelerating both in Japan and in the US. However, this change tends to take place within their respective markets rather than in their outside relations. The ensuing tendency of creating more competitive markets and industry creates an additional threat to the competitiveness of the Community industry. There is on the other hand a danger that the Community industry benefit comparatively less than its Japanese and US competitors from the global economy.

II. An open and fair world economy is an essential complement to the completion of the internal market in order to foster the competitiveness of the Community industry. In the Communication of the Commission [Sec (91) 565 final - April 3th, 1991] it was suggested in particular to sustain a competitive Community electronics and IT industry by improving the access to the markets of the main trading partners in electronics and IT and by the establishment of fair competition in international markets.

The Council Resolution of 18 November 1991 concerning electronics, information and communication technology has retained this approach by mandating the Commission to establish a Centralized Point of Information, charged with monitoring marketing, market access and distribution practices throughout the main industrial areas in the world in the domain of electronics, information and communication technology industry.

The Communication from the Commission on "The European Telecommunications Equipment Industry - the state of play, issues at stake and proposals for action" [Sec (92) 1049 Final - July 15th, 1992] represents a specific application of this approach since it is suggested that "the search for a level playing field" for the telecommunications industry on the world level, could be reached by the use of two means, combined or not :

- the elimination of those unsatisfactory access conditions which prevail in markets outside the Community;

- the setting of appropriate rules of competition at world level.

The Council's conclusions on the latter Communication has embodied this specific application of the global approach by stating in particular that "commercial policy and competition policy will be instrumental in the Community's efforts towards the objective of a level playing field; the Centralised Point of Information providing supporting information and analysis to this effect."

I. ANTI-COMPETITIVE PRACTICES

The Community's objective is the furtherance of truly equal conditions of competition of all economic operators, whatever their nationality, in all countries.

1. CONCERTED PRACTICES (JAPAN)

1.1 Dealer Networks

The small traditional retailers are not financially controlled by the manufacturers; however, manufacturers hold a certain power through large exclusive relationships: loans at low interest rates, help with accounting procedures, demonstrators at their disposal, the allocation of advertising and descriptive material, taking back of unsold goods, exchange of personal services, etc., in exchange for an unchanging loyalty to the manufacturer's name [3]. This empowers them to control the supply of goods and services and conversely impedes foreign suppliers from distributing their products. This is presently being challenged by the emergence of specialists and discounters.

Comments

A fair and open distribution system is essential in order to allow an unhindered flow of imports and the competitive determination of the condition of their sale. Lack of competition prevents European companies from selling in Japan: concerted practices are not sufficiently discouraged and they keep European companies out of the Japanese market.

1.2 Price levels

Japanese companies have been seen practicing higher retail prices in Japan than overseas, which reflects the lack of competition at the price level on the Japanese market [4] and has an effect on the possible dumping practices.

Japanese companies often practice prices lower than production prices overseas in order to eliminate competitors on a given market and to establish a monopoly [5]. The losses incurred are compensated by higher prices on the Japanese market. This price difference is made possible by a network of typical relations in Japan between manufacturing companies, banks, users (including the distribution system) in conjunction with restrictive behaviour on imports [6].

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3 "The Distribution of Consumer Electronics in Japan" by BIS Strategic Decisions, November 1991 - page 16.

4 "Worldwide Pricing Study for selected IT Products" - study prepared for DG XIII by Dataquest (June 1992).

5 CRS Report for Congress "Japan's Protected Market: Significance, Extent, Outlook and Challenges for U.S. Policy" - 9 July 1990.

6 Paper by the Confederation of German Industry on "Grievances of German Industry towards the Japanese Government and Industry".

The unusual degree to which Japanese multinational companies dominate trade flows into and out of Japan is a trade pattern often cited as an indication of market protection. Stated differently, Japanese corporate control over imports limits the channels for getting foreign goods into Japan that compete directly with Japanese goods.

Comments

The competition rules should be thoroughly implemented and enforced without any exception as to the economic sectors actually affected by the rulings of the Fair Trade Commission. The problem is that the FTC enforces the anti-trust law in areas in which international trade is not concerned and which therefore bear no interest for European exporters.

The investigation launched by the Fair Trade Commission against Matsushita (National Panasonic), Sony, Hitachi and Toshiba has opened a loophole in the system. The charge was actually not of fixing prices but of imposing trade conditions and it has opened the room to discount stores of consumer electronics to offer discounts of up to 50%. They have succeeded in doing this because:

- *they do not purchase the products directly from the manufacturers but from wholesalers and retailers who want to get rid of excessive inventories, i.e. something that the normal retailers cannot do because of their agreements with the manufacturers;*

- *they practice the five no i.e. no price showing, no explanations on the working of the products by the salesman, no to home delivery, no to exchange of products after sale, no to after sales service.*

Despite these limitations, the discount stores have got their turnover multiplied by five in the last five years. They have, however, clear limitations to their growth since they may offer only a limited sample of products since:

- *they can sell only what they get from their suppliers, and*

- *they have no access to manufacturers who, in order not to relinquish their control on the final prices, steadfastly refuse to sell directly to them.*

DAEI is a big discounter aiming at the lower end of the market, where volumes are huge and margins are thin i.e. refrigerators, rice cookers, television sets etc and has become a big catalyst for change in Japanese retailing.

DAEI was a pioneer in selling products under a private label at cut-rate prices. It has recently forged relationships with a number of manufacturers and big trading houses. By consolidating these mergers and thus acquiring

more purchasing power, they will be able to keep reducing their cost and to control their pricing.

In relevant rulings, although not directly affecting the ITT sector, discounters won a round in their battle with manufacturers when the Tokyo District Court ordered Shiseido Co to supply a retailer that puts the company's cosmetics on store shelves rather than dispensing them through sales personnel.

The Court ruled that the Shiseido demand for sales people "impeded mass sales by retailers without a proper reason and amounted to price fixing" The Court said that because of this "there is a possibility that it is violating the anti-monopoly law. In September 1993 the Fair trade Commission raided offices of the Shiseido units for alleged anti-trust practices involving another discount store. Following these raids the Court ordered Shiseido to resume supplying retailers, even if they sell by mail order and ignore the cosmestic's maker's quiet pressure never to undercut the suggested retail price.

A law bringing in financial penalties for anti-competitive practices was only passed in 1977; these penalties are calculated on a case by case basis. Since this date, none of the interventions of the Fair Trade Commission in the household electronics sector have resulted in financial sanctions[7]. These penalties apply in particular against private monopolisation or unreasonalbe restrainst of trade (see Annex 1)

2. LACK OF EFFECTIVE COMPETITION (JAPAN)

2.1. Dominant Position of NTT

NTT remains the dominant purchaser of equipment and provider of services, a situation likely to continue for some time. Since its creation in 1952, NTT has maintained a close relationship with selected suppliers, most notably Hitachi, NEC, Oki and Fujitsu. These four companies, account for more than 60% of the Japanese domestic production of Telecommunication equipment.

To date, it is difficult to enter the Japanese switch market without tendering into a research contract with NTT

It is also difficult to enter the non-NTT market for telecommunications equipment, because the new common carriers depend greatly on interconnection to the NTT network to provide service and therefore tend to procure most critical network equipment from Japanese suppliers most familiar with NTT's network.

The Ministry of Posts and Telecommunications (MPT) is considering a plan that would end NTT's local monopoly and see full voice and data competition via wireless.

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7 "The distribution of Consumer Electronics in Japan" by BIS Strategic Decisions -page 92

Under the plan, the MPT would award personal handy-phone service (PHS) licenses by the end of 1994 to NTT, long distance carrier DDI Corp and an embryonic consortium of common carriers, regional electric power utilities, railway companies and cable television operators.

Comments

a) Numerous specific regulations and complicated procedures limit a smooth business expansion for service providers.

The procedures to be registered as a special type II carrier [prerequisite for providing International Value Added Network Services (IVANS)], the cooperation with type I carriers (unavoidable due to the basic regulatory approach in Japan), the authorisation procedures for specific services, the introduction of new and innovative services, etc. are governed by numerous formal and informal regulations.

b) Lack of definition of services (basic, enhanced) in the context of business authorisation by regulatory instances.

The Japanese Telecommunications Business Law distinguishes carriers not by the type of services they provide, but according to whether they own a communication infrastructure or not. However, the provision of any service is subject to some form of authorisation (as a service, or through tariffs). The intrinsic difficulty therefore results from the lack of specific definition of services. This makes any long-term business planning difficult since each service case must be discussed individually with the regulatory authorities.

c) Lack of separation between regulatory authority and dominant carriers. Formally, the Ministry of Post and Telecommunications (MPT) is to be a neutral regulatory authority (authorisations of services and tariffs, etc.) In practice, MPT stabilises the current competition situation which establishes Kokusai Deushin Denwa (KDD) as a dominant player for the market of international services. Though the regulatory and supervising function of the administration would suggest a clear separation between MPT and KDD, the practice seems to be different. Typical examples are that MPT enquires with KDD for technical expertise needed when defining and applying regulations to foreign service providers who also have to negotiate with KDD as for the access of circuits, for tariffs (later formally approved by MPT), etc.. The relationship between MPT and KDD is also influenced by KDD as a reservoir for "retirement careers" for senior MPT staff. As for the few Japanese competitors of KDD, it is generally known that the degree of competition (e.g. tariff differences, foreign share to be allowed, etc.) is implicitly determined under the coordination of MPT.

As a result, European service providers are in practice obliged to negotiate with their main competitor (KDD) which often means the disclosure of business plans.

d) Restrictions resulting from bilateral IVANS agreement between Japan and Member States, usage of the US/Japan IVANS agreement as reference.

The Japanese authorities state that the IVANS agreements are needed to accommodate the differences in regulatory environments between Japan and third countries and have consequently concluded IVANS agreements with most of the European countries. However, these agreements appear to be insufficient to meet the concrete problems European service providers encounter in Japan and, in addition, increasingly limit their business opportunities because of their inflexibility with respect to the evolution of the services market (new services, evolving regulatory environments in third countries). Also, the fragmentation of agreements does not allow so far for a common European position and requests for improvements in the context of objective market access difficulties. There are reports that, in boundary cases and when negotiating with European type II carriers, the type I carriers try to enforce the US/Japan IVANS agreement stipulations as reference.

3. LACK OF EFFECTIVE COMPETITION (UNITED STATES)

The 1984 Modified Final Judgment (MFJ) divested AT&T of its regional/local activities which are now performed by the Regional Bell Operating Companies (RBOCs). AT&T retained the right to offer long-distance telecommunications services, although in competition with other carriers. The RBOCs enjoy exclusive rights to provide local/regional telecommunications services and are not subject to effective competition in these markets.

3.1. AT&T Dominant Position

AT&T's remains the largest US long-distance carrier providing over 60% of U.S. long distance services. Its strong position as network operator combined with its size as an equipment manufacturer gives it a major structural advantage over many foreign firms. This vertical integration gives AT&T experience in operating and maintaining a telecommunications network in addition to designing and manufacturing equipment. Because no other manufacturers of comparable size operate networks, this is a competitive advantage. Vertical integration also entails the possibility of cross-subsidization, which has a number of negative effects including lack of long-term competitiveness for those companies which are competitors in the subsidized activity, in this case telecommunications equipment manufacturing. Thus, in order to prevent such cross-subsidization, it is necessary to ensure that the network operator is under effective competitive pressure (see Annex 2).

3.2. RBOC Exclusive Rights

Under current law, the RBOCs are prohibited from having vertical links with respect of the production of telecommunications equipment. They enjoy monopolies on provision of basic services in their areas of operation, and they are subject to regulation in a number of different ways. The FCC must authorise the construction of new lines (S.214 of the 1934 Communications Act). It also

regulates tariffs through price caps. Intrastate communications are regulated by the local State Public Utility Commissions (PUCs) whose administration of price-setting involves them in all aspects of RBOCs' operation, indeed, it is estimated that as much as 70% of RBOC revenue is regulated by PUCs rather than by the FCC. This means that irrespective of ownership, public or private, the major telephone companies in the US are subject to a major degree of federal and local government control. These companies are therefore not free to act on the basis of purely commercial criteria.

The RBOCs purchase approximately 80% of all telecommunications network equipment sold in the United States. Their historical relationship with AT&T and their large installed base of AT&T products have made it difficult for suppliers other than AT&T to break into the U.S. market for extensions and upgradings. Moreover, despite their exclusive rights, the RBOCs are not subject to open procurement disciplines. The result is that AT&T and Northern Telecom supply most of the switching requirements of the RBOCs.

3.3. Two Switching Markets

There are two separate switching markets in the US:

The first one is the market for the extension and the upgrading of the installed base: according to a NBI study (NBI 1991 Central Office Market Analysis), this market will grow from 61% of the total US switching market in 1991 to 65% in 1995; it is the lucrative part of the business, because of the "unbundled" sales of "feature software" for the enhancement of the existing network.

The second market is the market for new installations: it is mainly a "hardware" market and is characterized by fierce price competition. While the incumbents (AT&T and NORTHERN) can afford a price war in the new installations market because they benefit from the resources derived from the feature software market for extension and upgrading, the situation is obviously very difficult for the new suppliers as they do not have revenues from an installed base and the SW sales associated with new installations are much smaller than the SW sales for the upgrading of the installed base:

Proportion of HW and SW in the US switching markets
(Source: NBI 1991 Central Office Market Analysis)

		1991	1995
Markets of new installations	HW	90%	88%
	SW	10%	12%
Market of installed base	HW	52%	37%
	SW	48%	63%

The AT&T situation in its internal market and the extraordinary benefits deriving from it, lead to pricing so low in the only market accessible to new players (the market of new installations) that it prevents or discourages competition.

Thus, the AT&T divestiture has not resulted in a substantial opening of the telecommunications network equipment market to third-country suppliers, other than Northern Telecom, a U.S. subsidiary of Bell Canada Enterprises.

Comments

More than at any time in the last 20 years, there is a consensus in private industry and in Congress that the time is ripe for a major revision of communication law. The essence of that consensus is to relax barriers and permit much greater competition between the local telephone, cable and long-distance companies, while protecting consumers as old regulations are abandoned in favor of market place competition. A Bill is before Congress (see Annex 3).

However, despite the large array of initiatives intended to reap benefits from the new opportunities, no significant European involvement can be detected (see Annex 4). The EU is pursuing negotiations with the US in order to achieve an agreement on telecommunication procurement. These negotiations involve also competition aspects. (See also chapter II-4)

II. PUBLIC PROCUREMENT

The Community's objective in public procurement is to ensure comparable and effective access for Community undertakings to the markets of third countries

1. PROCUREMENT IN THE FIELD OF INFORMATION TECHNOLOGY INDUSTRY (JAPAN)

The signature by Japan of the government procurement agreement in April 1994 should improve the situation described below. A careful assessment of its consequences will be required.

1.1. Time for the Preparation of an Offer

The awards of public contracts has not yet been sufficiently opened. In particular, according to the industry, the time given for the appropriate preparation of an offer is not long enough [8].

Comments

The deadlines for tenders are too short for careful study of the documentation and preparation of the bid. The same problem presented itself in the Community and was effectively addressed. Eurobit has actually asked for equal access to pre-bid information for foreign and domestic suppliers (see Annex 5).

1.2. Single Tendering

The award of contracts by negotiated procedure without prior call for competition in the case of improvement or replacement of existing installations, known as "zuii" contracts [9] gives advantages to former Japanese companies.

Comments

Eurobit has actually asked for reduction of single tendering and the new procurement procedures recently published in the framework of the US/Japan agreement seems to go in that way. The problem existed also within the Community and has been effectively tackled (see Annex 5).

1.3. Technical Specifications

The technical specifications to be adhered to in the preparation of offers are prepared by study groups made up of representatives from former suppliers [10].

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8 Paper by the Confederation of Germany Industry on "Grievances of German Industry Towards the Japanese Government and Industry" 1992

9 "Market Access for European IT-Industry to the Japanese Market" by Eurobit.

10 "Market Access for European IT-Industry to the Japanese Market" by Eurobit.

Comments

Eurobit has asked for neutral and non-discriminatory formation of technical specifications and for equal opportunities to participate in the specification-formulation study groups. The problem existed also within the Community and has been effectively tackled (see Annex 5).

2. PROCUREMENT IN THE FIELD OF INFORMATION TECHNOLOGY INDUSTRY (UNITED STATES)

Under the Buy American Act of 3 March 1933, as amended and the ad hoc Buy American provisions included in the annual authorisation/appropriation legislation, federal governmental procuring entities are allowed to reject foreign bids. Complementary Buy American legislation is also implemented at state level. Buy American provisions may be waived in particular in order to allow the US to respect its international commitments (e.g. GATT Code, free trade agreement, MOU).

Buy America restrictions may take several forms. Some straightforwardly prohibit public sector bodies from purchasing goods from foreign suppliers. Others establish local content requirements ranging from 50% to 65%, while others still extend preferential terms to domestic suppliers, the price preference ranging anywhere from 5% to 50%.

The Defense Appropriation and Authorization acts for the 1994 fiscal year contain a Buy America provision in the IT field for supercomputers and multibeam sonar mapping systems and supporting software[11].

Comments

US Computer manufacturers believe that the "Buy American Act" discourages sourcing decisions that allow US computer hardware manufacturers to remain competitive globally. In the increasingly price sensitive market, a number of successful companies have found it necessary to out-source components that they cannot manufacture competitively themselves. Thus, domestic content legislation, which hinders the ability of computer firms to obtain the highest quality components at the best possible global prices, impedes the global competitiveness of certain US computer manufacturers.

Accordingly US industry recommended that there be a single rule of origin for government procurement purposes, that of substantial transformation which involved a shift in tariff classification. They have also urged the United States Trade representative (USTR) to support the use of substantial

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11 "Report on United States barriers to trade and investment" (1994 by services of the European Commission, page 31

transformation as a uniform rule of origin in the General Agreement on Tariffs and Trade (GATT)[12].

Existence of bilateral or multilateral agreements

A further EC/US agreement on procurement was reached in the aftermath of the conclusions of the GATT negotiation in April 1994. This increases the number of entities covered under the new GATT government Procurement Agreement, to enter into force in January Ist 1996. Under this agreement, access has been extended for the first time for EU suppliers to contracts at sub-federal level in 39 States, including five of the biggest - California, New-York, Texas, Florida and Illinois - plus seven cities - Boston, Chicago, Dallas, Detroit, Indianapolis, Nashville and San Antonio. This agreement does not cover telecommunications equipment procurement for which specific bilateral negotiations were undertaken in parallel to the revision of the GATT Code on procurement (see below "procurement of telecom equipment - United States).

3. PROCUREMENT OF TELECOMMUNICATIONS EQUIPMENT (JAPAN)

Access to Nippon Telephone and Telegraph's (NTT's) procurement is governed by a bilateral US/Japan agreement reached at the end of 1994. This deal also covers all NTT subsidiaries (e.g. DoCoMo). The agreement gives erga omnes treatment to EU firms, although no binding agreement exists. However, the review mechanisms provided for under the agreement is available only to the US: the European Commission has made it clear to the Japanese side that it wants similar access to the review mechanism. Negotiations are planned between the two parties to arrive at an acceptable solution.

NTT's procurement procedures are divided into three groups:

- Track I procedures: general commodities (including general communications equipment such as fax machines, Private Branch Exchange (PBX), computers, modems, etc.) submitted to GATT Government Procurement Agreement (GPA).

- Track II procedures: covering telecommunications equipment available on the market such as switches, transmission equipment, telephone sets, radios, cables, etc.; no open tendering, not submitted to GATT GPA. (Procedure IIa covers follow-up procurement under II).

- Track III procedures: covering telecommunications equipment not available on the market, i.e. requiring new developments; open to international tendering, but not submitted to GATT GPA. (Procedure IIIa covers follow up procurement of products developed under III).

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12 Global competitiveness of US advanced-technology industries: computers, chapter 3, page 13. Publication 2705, décember 1993.

Under the previous procedures problem arised from the following practices:

- Track II procedures: No possibility to tender for foreign entities, NTT tends to select products from the "NTT family" (Oki, Fujitsu, Toshiba, NEC, Hitachi) with whom NTT generally tightly cooperates for the development of new products (a cooperation which does not necessarily involve track III procedures);
- Track III procedures: In principle open to foreign players and fair, but "uncontrollable";
  - (a) none of the "safeguards" included in the GPA is applicable (in particular the principle of open procedures, of non-discrimination, which consequently cannot be monitored or verified). EU firms receive erga omnes treatment, but the monitoring procedures put in place by the agreement are not yet open;
  - (b) interested firms complain that no long-term market perspective can be guaranteed by NTT though significant start-up investment is generally required from bidding firms to qualify as prototype developers;
  - (c) interested firms have no guarantee that know-how brought in during the prototype development is not disclosed to third parties;
  - (d) NTT requires compliance to technical standards which are proprietary to NTT since the Telecommunications Business Law (TBL) does not impose technical rules other than the "no harm to the network" conditions. In practice, foreign firms (especially newcomers) are disadvantaged vis-à-vis Japanese players who do not generally know in detail NTT's specifications. In addition, NTT as a dominant carrier can impose de facto standards which will be endorsed by NTT's competitors, the New Common Carriers (NCC); The new agreement obliges NTT to use international or *de facto* standards, without specifying what the latter comprises;
  - e) Criteria for tender decisions will be based on the "economically most advantageous offer" approach;
  - (f) no challenge procedure (other than an NTT internal ombudsman scheme) is foreseen.

Concerning the management of the bilateral agreement, EU objectives are:

- Maintain the Erga Omnes status for European firms interested in tenders (procedural wise, but also in practice through including European firms in the scope of the flanking measures of NTT, such as, procurement information distribution, request for cooperation in establishing technical standards mandatory for NTT procurement, etc.), whilst ensuring a maximum of transparency of the procedures under the given circumstances.

This is to be pursued as an overriding priority , namely to see telecommunications equipment procurement by market dominant players in Japan, including NTT, covered by a public code. In this sense, NTT's procurement falls equally on the chapter of the general procurement where the object formulated is to include NTT in the list of entities covered by the harmonised public procurement code established in Japan.

3.1. GOVERNMENT TELECOMMUNICATIONS PROCUREMENT

The governement of Japan also reached a bilateral deal with the US in November 1994 on the procurement of telecommunications equipment by central government agencies. The main procuring agencies that are affected by this deal are the Ministry of Posts and Telecommunications, the Ministry of Transport, and the police service. The deal provides for a number of GPA compatible rules governing contract tendering, selection and award procedures. No numerical targets for the number or value of contracts awarded to non-Japanese firms were agreed. However, although the EU firms are given erga omnes treatment by the agreement, the fact that the monitoring arrangements are not yet open mean that there is a danger of discrimination in practice in favour of US firms.

Comments

The 1992 IT&T trade flows show an export-import ratio of 53% on total EC IT&T trade. Compared to this figure, the 4% export-import ratio for IT&T trade with Japan seems to be extremely low.

This contrasting picture occurs in all IT&T sectors, but above all in telecommunications equipment, where the export-import ratios are 107% for total trade and 3% for trade with Japan. (An export-import ratio greater than 100% indicates exports exceed imports.)

Indeed, there is no national legislation which obliges NTT to follow principles of transparency and non-discrimination. Instead, only political pressure can ensure that NTT does not deviate from it.

In particular, it seems that NTT's approach towards technical specifications is solely based on the aim of ensuring network integrity and functioning. NTT may not give much attention to the economic impact of standards and technical specifications.

About 95% of the NTT's purchases come from the NTT family (NEC, Fujitsu, OKI, Hitachi, Toshiba and others).

A Community company has allegedly been forced to withdraw from the Japanese market although it has successfully bid for a public contract by NTT because NTT's switch market is too small to justify the high costs of having its product conform to Japanese standards and no other purchaser could be found despite NTT's assurances to the contrary.

NTT has seen a steady decline in profits in the last four fiscal years, as erosion of its share in the long distance market continued. The Japanese

government is planning to allow NTT, still 65.7% government owned, to raise local telephone rates in order to revamp the nation's telecommunications system. The investment in Japan's telecommunication network is seen as the centrepiece of an economic stimulus package. A combination of higher rates and government spending should allow NTT room to fatten profits. President Masashi Kojima announced on 7 April 1993 that NTT would invest around 2 trillion yen per year in order to invest a total of 45 trillion yen (US$395 billion) to complete its optical-fiber networks during the next 22 years.

Community Law

The problem of extending tendering procedures to telecommunications bids has been addressed and solved by the Council Directive of 17 September 1990 on the procurement procedures of entities operating in the water, energy, transport and telecommunications sectors [13] which applies equally to undertakings over which the public authorities may exercise directly or indirectly a dominant influence in particular by virtue of their ownership of it.

Existence of Bilateral and Multilateral Agreements

In the framework of the GATT negotiations, the Japanese government has offered to include track I NTT telecommunications equipemnt under the GPA provided that the procedures spelled out in their bilateral agreement with the US also apply.

4. PROCUREMENT OF TELECOMMUNICATION EQUIPMENT (UNITED STATES)

4.1 ATT procurement

ATT is not subject to open procurement rules and buys all of its central office equipment, representing about 8% of the total U.S. market, from its own manufacturing subsidiary[14]. AT&T's internal market for telecom equipment (switching, transmission and cables) amounts to more than $ 1.5 billion p.a. In total, this is a $ 1.5 billion market which is structurally out of reach of European competitors. As a telecommunications manufacturer AT&T is a principal supplier to the regional Bell Companies. With regard to the RBOC's, the procurement process is not very transparent - intimate knowledge of their organisation and preference is necessary-. The process inherently favours those suppliers which are most familiar with the RBOCs.

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13 L 297/1 dated 29.10.90

14 Communications from the Commission "The European Telecommunications Equipment Industry, the State of Play, Issues at Stake and Proposals for Action" - SEC (92) 1049 final - pages 20-21

Comments

In its response to the Commission's communication on the telecommunications equipment industry, the European Telecommunications and Professional Electronics Industry (ECTEL) stated that [15]*:*

"The CEC should insist that regulated operating companies (having special or exclusive rights), whether privately or publicly owned, follow procurement procedures which are comparable to those enforced within the EC, in order to demonstrate that such procedures are based exclusively on sound commercial considerations.

Moreover, even in the absence of special or exclusive rights, in the case of a dominant position, a telecom operator vertically integrated with a supplier should follow procurement procedures comparable in their effect to the ones in place in the European Community."

More generally, any assessment of the level of Community access to the US network equipment market is difficult, because of a variety of factors, such as the insufficient transparency in Regional Bell Operating Companies (RBOC) and AT&T procurement procedures, the special rights and/or dominant position enjoyed by these utilities, the existence on this market of strong manufacturers who are also carriers, the influence of the Federal Communications Commission (FCC) and of State Public Commissions (PUCs) on the procurement practice which create little incentive to buy competitively. AT&T and Northern Telecom have almost a duopoly position in the equipment market. Moreover, AT&T also benefits from a set of advantages such as the company's large installed base; the fact that network specifications are based on the requirements of the AT&T telecommunications network and the influence that the company has on the standardisation process in the US.

Existence of Bilateral or Multilateral Agreements

Telecommunication equipment is at present excluded from the GATT Procurement Code - apart from the partial inclusion of NTT in Japan. In the framework of the GATT negotiations, the US side has refrained from extending the coverage of provisions on public procurement to the many private entities which carry out their activities under special or exclusive rights. This implies in particular that the telecommunication operators were not included in the American offer.

Negotiations in the Uruguay Round have proved inconclusive because of the lack of political willingness from the US side to make commitment. This is on the ground that their market is "open" while other countries markets are "closed". An assumption that is now patently flawed. The Commission has

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15 "Industrial Policy for the Telecommunications Equipment Industry" by ECTEL, December 1992

concerns that the US with a leading position in the services market, regards bilateralitism and reciprocity as the quickest route to market access.

4.2 US unilateral sanctions

Access to US public procurement may be impeded to EU operators following the US government's decision to impose sanctions against the EU, on the grounds that procurement practices in the EU are discriminatory for US interests. Two instruments are available: Title VII of the Omnibus Trade and Competitiveness Act of 1988 and the Telecommunications Trade Act of 1988. In particular the US Trade representative, M. Kantor announced on 30 April 1994 that the US would maintain sanctions imposed on 28 May 1993 against the EU operators because of the EU's remaining discriminatory procurement practices in the telecommunications equipement sector. These US sanctions prevent European bidders from participating in some Federal agency contracts for supplies, services contracts and construction.

Comments

The US administration has put forward the figure of $19 million for the estimated impact of its 28 May 1993 decision to exclude European bidders from some US federal procurement. At that time, the EU reacted by deciding on 8 June 1993 to impose counter sanctions against US operators, which mirror US sanctions. The EU counter sanctions are also still in force.[16]

5. PROCUREMENT OF SATELLITE (JAPAN)

The commercial satellite market has been opened in April 1990 to foreign suppliers through US-Japan bilateral negotiations. This represents about 50% of the Japanese satellite demand. US companies have benefited most from this change. Experimental satellites will be kept within the domestic industry. For true opening, the question is what the new Japanese satellite schedule will be, and how much of the technology used in experimental satellites will be required in the future specifications of the commercial satellites [17].

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16 "Report on United States Barriers to Trade and Investment" 1994 Services of the Commission,page 32

17 "The Japanese Telecommunications Procurement Market" by EGIS. August 1990

Comments

Since Japan opened the market to international bidders, all three commercial satellites bought by Japan, were sold by US companies. The EC has requested that Japan apply erga omnes treatment for satellite procurement. A non-paper of the MPT confirmed that the satellite procurement procedures are applied on a non-discriminatory basis to all nations. However, a bilateral consulting mechanism provided for disputes with the US government does not apply to the EC. Thus, as far as complaint mechanisms are concerned, preferential treatment is provided for the U.S.

III. STATE AIDS

The Community's objective in state aids is to eliminate illegal aids and to achieve comparable award conditions.

1. STATE AIDS (UNITED STATES)

1.1. HPCC

Under the programme for High Performance Computing and Communication (HPCC) firms may benefit from up to 100% funding subsidies unlike the maximum 50% funding scheme of Esprit. Also the aids extend far beyond R&D and cover all costs prior to commercial sale. (See annex 6).

Comments

Such a high rate of aid would not be allowed under the Community framework of state aids for R&D and the scope of the aid could not extend beyond R&D. The goal of the HPCC programme is to develop computer architectures that can achieve a trillion mathematical operations per second - two or three orders of magnitude above current performance levels. The systems that seem most likely to develop this power first are called massively parallel supercomputers. Conventional supercomputers have a small number - usually fewer than 16 - of very fast processing units working on a problem. In contrast, the massively parallel systems can have several hundred or even thousand slower processing units.

The TFLOPS machine performance is 1,000 times faster than that of current supercomputers, and the Grand Challenge aims at the achievement of this level in 1995. Problems which require 500 hours of CPU time will be solved in only 0.5 hours. Furthermore, if tasks can be accomplished 1,000 times faster than at present, not only the area of science and technology, but also basic intelligent labor in all areas such business, and culture and arts will be influenced and drastic change will take place.

On 12 January 1994, Bell Atlantic Corp. announced that it will spend some $25 million for three new supercomputers plus software to build a first leg of the information superhighway. Two companies, nCube Inc and software maker Oracle Systems Corp., will share the spoils. With the Bell Atlantic deal a new market is opening: giant servers to feed digitized movies, home shopping, games and other interactive multimedia services to homes across the country. Selling servers for movies on demand could help develop other markets such as video-based business information services. For instance DEC envisions setting up media service centers around the country to help detailers create video-shopping services.

In digital form, a feature film takes 2 billion characters, or bytes, of computer storage-Just a few dozen of the tapes in any video store would, if digitalized, exceed the 100 billion bytes or so used by the largest airline reservation system and unlike banking transactions video data streams can

tolerate no more than microscopic delays in transmission. There are good reasons why digital data should be more expensive than traditional text, recordings or video. For one thing, information in digital form can be easily transmitted, edited and manipulated with a computer to find trends, patterns or insights. That makes it more valuable to the user. For another, converting text and images (e.g. photographs, charts and paintings) into digital form can be costly. This is one reason why less than 1% of mankind documented knowledge has been captured in digital form.. Computer archives go back only 12 years (i.e. to when newspapers began using computerised type-setting). This leaves more than 99% of the world's knowledge in books, reports and other publications gathering dust on library shelves.

That is why many players are insisting that only a massively parallel machine - such as the nCube machine selected by Bell Atlantic will do.

While hundreds of computers such as nCube will be needed to move digitized data from point to point, legions of workers will be needed to digitalize the data to be moved. It will then be up to the software developpers to write programmes to make the data really accessible and hardware manufacturers to offer equipment to present the data easily and effectively.

1.2. Flat Panels Displays

In the biggest industrial policy move since the creation of Sematech the US government has approved a plan to spend up to $ 1 billion to help the American flat-panel computer display screen industry compete with Japan. The plan involves a partnership between more than a dozen of US companies and the Defense Department in a bid to overtake Japan's lead in the manufacture of thin electronic screens.

The plan goes far beyond Sematech, a consortium that has limited itself to developing computer-chip production techniques but does not sell chips. For flat-panel displays, which are thin computer screens mainly used in laptop computers and other portables devices, the government wants to help with research and development, the construction of commercial factories and even marketing.

The plan calls for the Defense Department to contribute $ 50 million for the immediate construction of a high-capacity pilot plant, while the Defense and Energy Department would jointly spend $ 450 million to subsidize development over the next five years. The government is already subsidizing the construction of a small pilot plant in Michigan.

In order to support this partnership a provision has been added to H.R. 4650, the Defense Department Appropriations Bill, that would prohibit the department from procuring flat panel displays unless they are produced and manufactured in the United States by a domestic-owned and domestic-operated entity.

Comments

The companies which include Xerox Corp. and AT&T submitted a proposal to the Defense Advanced Research Project Agency on January 15, 1993, five days before President Bill Clinton was to be inaugurated.

The plan, if approved by Congress, would be a major example of government backing for an industry viewed as important to US competitiveness. If the United States does succeed in becoming a major competitor in the mass manufacture of "Flat-Panel" display screens, it will be a surprising turn in a story that many have cited as a startling example of US failure to exploit its own technological breakthroughs.

Several American companies invented the screens more than three decades ago. But Japanese companies took the lead in manufacturing them for lap-top computers and other products, and many American companies closed their doors in the face of competition.

American computer makers such as Apple Computer Inc. have bemoaned the lack of a US display industry, which has forced them to rely mainly on imported screens. The lack of an American industry also has potential national security implications. In the future, the screens will be used in military ships, armored vehicles, fighter plane cockpits, training programmes and command and control centres. They will also be used in wall-mounted televisions, video-phones and space vehicles; nearly everywhere information is displayed electronically.

American companies currently account for less than 5 % of a $ 3.5 billion industry, one that is expected to swell to $ 8.4 billion by 1995 and to $ 15.2 billion by the year 2000.

Industry sources said there were several reasons why American companies have decided to band together with the Defense Department including a sense of urgency over Japan's efforts to develop a new generation of displays. Some industry sources estimate the Japanese are outspending the United States more than 20 to 1 on flat-panel research, with the lead Japanese company, Sharp Co, having committed close to $ 1 billion for research and development between 1991 and 1993.

Existence of Bilateral or Multilateral Agreements

Under the GATT subsidy code, a subsidy on R&D may be non-actionable if "the assistance covers not more than 75% of the cost of industrial research or 50% of the costs of pre-competitive development activity".

2. STATE AIDS (JAPAN)

The $ 116 billion stimulus package adopted by the Japanese government features prominently the "Mandala Project on High Performance Computing and Communications [18]. The project is a direct response to the US government's High Performance Computing and Communications Program. The Japanese say they fear their industry could be held hostage by a U.S. refusal to grant Japan access to "this closed (HPCC) intellectual possession".

Therefore, the "urgent employment of HPCC (in the United States) will control life in the future of Japan." With the "drastic improvement in performance in computing networking environments used for intelligent work in manufacturing and service businesses ... Japanese research development power, industrial manufacturing power and economic competitive power will decrease in quantity as well as quality. Long-term decrease in GNP and the standard of living will occur within a few years."

The central part of Japan's HPCC program would be the creation of 10 centers for high performance computing. These would be open to manufacturers as well as to public and educational organizations throughout Japan. Like the supercomputing centers in the United States, they would be tied together by a gigabit-per-second network. "To build nationwide HPCC centers quickly and smoothly, it would be most effective to establish a foundation by collecting funds from Government and the private sector," says the Mandala project summary.

The program would "borrow" one trillion yen from the government for use over 10 years and would spend 100 billion yen a year.

Detailed expenses

HPCC Centers (10 locations)	50 billion Yen
Super High Speed Network	20 billion Yen
Project Operation expense	10 billion Yen
Business Office Activity Expense	10 billion Yen
Fund Accumulation	10 billion Yen
TOTAL	**100 billion Yen/year**

18 Report on "Mandala Project on High Performance Computing and Communications".

The Community's objective is to ensure that Japan and the US implement and enforce the principle of national treatment.

1. STANDARDS AND CERTIFICATION SYSTEMS (JAPAN)

1.1. Video products

Examination and authorisation procedures at the import stage are far more complicated than the corresponding procedures for national producers. In particular, the norms and standards are used to partition off the national market.

The Japanese authority has published two different guide-lines for foreign and national products and has thus made a distinction between treatment reserved for national products and that applied to foreign products.

Video products and especially televisions need a lot of alterations and developments to conform to local specifications. These products must conform to the requirements of the "T" norm, as laid down in the law on electrical appliances and the control of materials. The competent organisation is the MITI [19].

Optional norms that apply to certain products can be much more insidious. They can hold up sales quite considerably because retailers refuse to distribute products that have not been officially recognised. Apart from the image of guarantee, safety and good quality that is given by these norms, an insurance is attached to certain of them and thus the retailer is not held responsible in the case of a problem or an accident. It is the organisation which delivered the norm who compensates the victim directly. It is thus in the retailers' interest to select preferably articles which are "guaranteed", not only from a financial viewpoint but for its image.

Comments

Certification procedures for materials can hold up and even block access to a market. It is therefore necessary to take into account the equivalence of standards and certification procedures.

In Europe, electronic products must conform with the Low Tension Directive [20]. One of the means of proof is the declaration of meeting the norms delivered by the manufacturer. This means that a Japanese product can be immediately available on the European market without a previous control.

In Japan the standards to conform with are national and specific as they are provided for under the electrical appliances and materials control law. This

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19 "The Distribution of Consumer Electronics in Japan" by BIS Strategic Decisions - page 19

20 The Directive (73/23/EEC of 19.2.73) covers electrical material intended to be used at a nominal level of tension of between 50 and 1.000 volts for alternate current.

law provides in particular that all products bear the mark of safety "T" (triangle) [21]. *However, the ways of obtaining this mark are different depending on whether a given product is Japanese or imported.*

For products made in Japan, it is the manufacturer's workshop which is officially recognised, allowing thus the product's immediate entry into the market.

The importer must first submit each batch of goods to a control by approved testing laboratories whereupon MITI authorises the manufacturer to place the mark "T". The whole procedure creates delays of up to three months for the effective market entry.

It is also worthwhile to mention that under Article 54 of the Material Control Law, electrical appliances and materials for export may, in accordance with cabinet order, be exempted from the application of provisions of this law or be given special consideration.

1.2. Terminals (See annex 7)

For terminals, there exists a restricted group called "Harmonisation of Advanced Telecommunications Services" (HATS) which gathers representatives of Japanese industry in order to ensure the compatibility of the respective equipment. After testing a label is put on the equipment. No Community firm has ever tried to participate in HATS. The telecommunication terminal equipement is the main source of the large and growing telecommunications trade deficit between the Community and Japan.

Comments

The great importance of terminals lies in their role as the interface to networks and services for the customers and in their consumption of state of the art micro-electronics in large volumes. A further erosion of European terminal manufacturing will therefore have consequences on the micro-electronics components industry in the EC and on the ability of European service providers to compete in the longer term where there is a need for dedicated terminals to cover specific services.

The terminal market represents an important segment of the telecommunications equipment market (nearly 10 billion Ecu/year) and European industry shows a real weakness in this sector. Nearly three quarter of the Community's imports from Japan consist of terminal equipment with over half of the imports being accounted for by fax machines and parts.

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21 For category A electrical appliances and materials (appliances and materials particularly liable to cause risk and injury judging from their structure, method of use and other conditions of use): 425 products.

Existence of Bilateral or Multilateral Agreements

In the GATT framework, the code on the technical barriers to trade (TBT) provides for an obligation inter alia to notify the standards and marks adopted by the contracting parties and encourage the conclusion of mutual recognition agreements (MRA)

On 21 September 1992 the Council has approved the negotiating mandate concerning mutual recognition agreements on conformity assessment which aims at facilitating trade in the regulated sectors. Japan is included in the mandate as one of the ten priority countries to negotiate with. One of these sectors covers telecommunication terminal equipment (Dir 91/263/EEC). The situation concerning the structure and functioning of the Japanese standardisation and certification systems and their relationship with informal provisions or voluntary codes of practice for access to the market is presently not fully transparent. The Commission has held exploratory talks with Japan.

2. OWNERSHIP RESTRICTIONS (JAPAN)

2.1. Type I Carriers

Ownership restrictions are placed on what are known as "Type I carriers". Foreign ownership is restricted to a 33% investment.

Furthermore, this 33% is divided between several countries. As a result individual foreign companies acquire a comparatively small percentage holding. This holding does not allow the participant to exercise a decisive role in the organisation and management of the Type I operator.

With respect to international communications there are foreign ownership restrictions limited to 25%. There are also restrictions on foreign ownership of radio licences. This means ownership of a licence to use the electro-magnetic spectrum. Many forms of communications involve the use of radio waves, i.e. radio, television, satellite communications, etc[22].

Comments

- *A company has alleged that in the allocation of shareholdings, US firms are treated more favourably than European firms. This state of affairs is believed to reflect the more effective lobbying of the US government.*

2.2. Company Acquisition

The European Business Council (EBC), which represents European companies established in Japan, has on the occasion of Mr. Bangemann's visit to Japan (end of March 1993), drawn his attention to the very low number of Japanese companies

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22 "Market access problems in Japan-State of play" by the Commission services, April 1994, page 14

that have been acquired by foreign companies, although there has been an increase recently, i.e. 37 acquisitions in 1992 against 15 in 1989 (see Annex 8).

Japan's lack of receptivity to foreign investment has the effect of a trade barrier in today's global economy where investment pulls trade. Foreign subsidiaries or affliates frequently purchase or sell to the parent companies back home, to the extent that intracompany trade constitutes 30 to 40 percent of total world trade in manufactures. The effective denial to establish majority owned subsidiaries which source from their affiliates translates into a substantial loss of potential exports from foreign firms to potential Japanese subsidiaries [23].

When buying a Japanese company, the Japanese government has the right of veto on the basis of vague provisions (article 26 of the law on the control of international commerce and transactions) [24] (see Annex 9).

Comments

A part of transactions, concerning the in-flow of foreign funds, are defined as "direct domestic investments" and therefore are excluded from the definition of capital transactions; the relevant provisions are therefore different from those applicable to the flow of internal funds, i.e. this implies that no right of veto is applicable to them. The category of direct domestic investments, etc. employs a concept of "foreign investor" as a party involved, which differs from either the concept of resident or non-resident. For direct domestic investments, the administration's main concerns rest upon how to discern and regulate the transactions after effects such as how or to what extent the recipient business concerned is controlled by foreign investors etc., rather than how to regulate the flow funds crossing the border.

2.3. Different Types of Carriers

The telecommunications business law (TBL) of April 1985 distinguishes between types of carriers based on facilities ownership (see Annex 10). Additional regulatory guidelines cloud this distinction by introducing the concepts of "basic" and "enhanced" services. The services type II carriers can offer are limited by these definitions. Yet, type I carriers are free to enter into enhanced services without sufficient safeguards to ensure fair competition [25].

The Japanese government is expected to adopt a fast-track package of deregulation measures in the near future.

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23 Section on Japan from the 1994 US national trade estimate report on foreign trade barriers, page 168.

24 United States-Japan Trade White Paper 1993 by the American Chamber of Commerce in Japan (ACCJ)

25 United States-Japan Trade White Paper 1993 by the American Chamber of Commerce in Japan (ACCJ)

3. OWNERSHIP RESTRICTIONS (UNITED STATES)

3.1. Common carrier services

Foreigners are virtually precluded from offering common carrier (telephone, telex, etc.) services in the US using radio communications by the ownership restrictions imposed on common carriers under the US Communications Act (47 U.S.C.).

Comments

There is a significant part of the US domestic market to which EC companies have, in principle, unrestricted access, i.e. private services.

Section 310 does not apply to companies offering non-common (or private carrier) communications. Entities which lease or own domestic transporter capacity may offer that capacity to users on a non-common carrier basis. The difference between carriers [26] and non-common carriers tends to be that common carriers may provide services which interconnect with the public switched network, while a non-common carrier provides private communications to closed user groups (i.e. not to the general public). However, common carrier is not a well-defined term and there are many sub-issues of law and fact upon which the outcome may turn in a particular case. Hence it may often be difficult for a would-be license applicant to predict its licensability under Title III of the Act.

Section 310 obliges foreign carriers either to enter into subcontracting arrangements with US carriers, or to use alternative (non-radio) technology. The ultimate rationale for these restrictions is the argument that US control of communications is essential at all times, for reasons of national security.

3.2. Radio Communications (See annex 11)

Section 310 of the Communications Act of 1934 imposes limitation on foreign investment in radio communications: no broadcast (or aeronautical en route or fixed radio station licence) may be held by foreign governments, aliens, corporations in which any officer or director is an alien or of which more than 20% of the capital stock is owned by an alien (25% if the ownership is indirect). As most common carriers need to integrate radio transmission stations, satellite earth stations and in some cases, microwave towers in their network, foreign-owned US common carriers are unable to compete in much of the long-distance market, and only through a minority shareholding in the mobile market [27]

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26 Communications Act of 1934, Sec 3(h) : "Common carrier" or "carrier" means any person engaged as a common carrier for hire, in interstate or foreign communication by wire or radio or in interstate or foreign radio transmission of energy, except where reference is made to common carriers not subject to this Act ... (i.e. a common carrier is a common carrier !).

27 Report on United States Trade and Investment Barriers (1993) by Services of the Commission of the European Communities - page 72

Comments

Opening the US telecommunications market to British operators will test US regulatory authorities, and the outcome is likely to have significant implications for access to the US market by other overseas operators.

Cable & Wireless, the UK Telecommunications group is seeking a waiver from a restriction on foreign operators owning more than 25% of a company holding a radio-based licence in the US. The waiver application to the Federal Communications Commission, is prompted by the prospect of licence being granted nationwide for personal communications services (PCS) a new cellular mobile technology.

More than 400 licences will be granted for franchise areas across the US. The contest for licences will be fought fiercely among US Telecoms operators: more than $10 billions is expected to be raised by the government in fees.

The FCC has discretion to issue a waiver and will judge the C & W application on its merits. The terms of this rulings are that the US has placed no bar on foreign ownership of licences for personal communications networks, the UK equipvalent of PCS. One network was launched last year, in wich US West has a 50% share with C & W its partner.

The 25% ceiling dates back to the first world war and its was imposed for security reasons. Despite this the evidence of openess in the UK could lead to a change of policy with regard to the UK. The decision has wider ramifications. British Telecommunications has sought and obtained a clearance by the FCC of its joint venture with MCI as AT&T has obtained a licence to operate in the UK.

3.3. Mergers, Acquisitions and Takeovers

Section 5021 of the 1988 Trade Act, the so-called Exon-Florio amendment (from the names of its sponsors), provides that the President or his nominee may investigate the effects on US national security of any mergers, acquisitions and takeovers which could result in foreign control of legal persons engaged in interstate commerce in the US. This screening is carried out by the Treasury-chaired Committee on Foreign Investment in the US (CFIUS)[28] (see Annex 12).

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28 United States-Japan Trade White Paper 1993 by the American Chamber of Commerce in Japan (ACCJ)

4. CONDITIONAL NATIONAL TREATMENT (UNITED STATES)

4.1. Advanced Technology Programme (ATP)

Already in the past, there have been US provisions conditioning the granting of national treatment to foreign-controlled economic operators by reciprocity clauses or the fulfiment of performance requirements [29]. Under the Advanced Technology Programme (ATP), a company's eligibility to receive financial assistance under the programme depends on a determination by the Department of Commerce of the US economic interests as evidenced by the company's investment in the US, its significant employment contributions, and local manufacturing and procurement from competitive suppliers. Furthermore, the ATP submits foreign-owned firm's participation to reciprocity and non-germane conditions regarding local investment and intellectual property rights protection. (See Annex 13)

4.2 Proliferation of conditional national treatment

Under the current, 103 rd, Congress, there has been a marked increase in draft legislative proposals which seek to condition national treatment for foreign-owned companies. The following legislation regarding R&D is affected:

- National Cooperative Production Amendments Act of 1993, signed into law on 10 June 1993;
- National Competitiveness Act (S 4 / HR.820)
- Aeronautical Technology Consortium Act (S 419 / HR 1675);
- National Environmental Technology Act (S 978);
- Hydrogen Future Act (HR 1479);
- National Aeronautics and Space Administration Authorisation Act (HR 2200);
- Omnibus Space Commercialisation Act (HR 2731);
- Defense Authorization Legislation (HR 2401 / S 1298);
- Authorization for the Earthquake Hazards Reduction Act of 1977 (HR 3485);
- Environmental Technologies Act of 1994 (HR 3870)

The discrimination of non-US controlled companies is mainly brought about by two different kinds of conditioning the granting of national treatment. On the one hand, there is the straightforward conditioning of national treatment towards private operators by requiring the country of origin of the foreign economic operator to

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[29] Cf. Stevenson-Wydler Technology Innovation Act of 1980, Bayh-Dole Act of 1980, Primary Dealers Act of 1988; American technology Preeminence Act including the technology Administration Authorization Act of 1991; National Critical technologies Act of 1991; Advanced Manufacturing technology Act of 1991; Energy policy Act of 1992.

grant reciprocal treatment to US companies which are economically active in that country in order for the foreign company to receive formal national treatment in the US. It is important to note that the reciprocity conditions is not always related to the sector in which the foreign company is active in the US, but may also be cross-sectoral. Furthermore, the proposed US legislation contains distinctive operative conditions either in the form of a definition of the notion of "US company", or in the form of additional performance requirements for non-US companies. In general, the performance requirements formally apply to all economic operators whether or not they are domestic or foreign-controlled, and thus do not constitute a de jure deviation from the formal national treatment principle. However, in these cases foreign-controlled enterprises can face indirect, de facto discrimination, in that they experience more practical difficulties than US firms in fulfilling the performance requirements.

Comments

Even if the need for the US Administration to seek the best value for US tax-payer's money is acceptable, this does not necessitate the exclusion of non-US companies from all federally funded R&D projects. In particular, some European firms already have substantial research operations in the US, which contribute substantially to the development of the US technological base; it seems inappropriate that they should be arbitrarily excluded from funded projects. While the Administration has normally resisted Congress's proposals for CNT, it has often not done so very vociferously; equally, it has not pressed ahead with its own internal reflections on what constitutes a US company for the purpose of defining automatic eligibility to federal funding.

5. SATELLITES AND SATELLITE LAUNCH SERVICES (UNITED STATES)

The National Space Policy Directive of 6 September 1990 establishes that US Government satellites will be launched on US manufactured launch vehicles unless a specific exemption has been granted by the President. The measure is explained as part of a set of coordinated actions which are required to reach the long term goal of creating a free and fair market in which the US launch industry can compete.

The promotion of the US commercial space launch industry, by reserving all US launches of government satellites exclusively to domestic launch service suppliers, is clearly detrimental to European launch service providers. European launch operators are effectively barred from competing for US government launch contracts, which account for approximately 80 % of the US satellite market. The restriction, which is justified by the US for national security reasons as regards the launching of military satellites, is now also imposed on government satellites for civilian use [30].

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30 Report on United States Trade and Investment Barriers (1993) by Services of the Commission of the European Communities - page 75

Satellite manufacturing is dominated by the US space industry which takes benefit of their important protected domestic civil and defense markets (see Annex 14).

It is recognised that the US **satellite services** market is restricted as regards entry by European satellite service providers, in the sense that licences may not be granted to operators owned by foreign governments (e.g. state-owned telecom operators and broadcasters), nor to suppliers of broadcast, common carrier or aeronautical services in cases where the foreign ownership exceeds 20% (or 25% indirectly).

Regarding **mobile satellite services** (MSS), the FCC decision to give American Mobile Satellite Corporation (AMSC) the exclusive monopoly rights to serve the domestic US market for these services means that any foreign competition, either at space segment level or at service level is excluded. The US Court of Appeals reversed the FCC's decision to require several mobile satellite service applicants to join a consortium under a single license. However, in January 1992 the FCC launched the process for a final decision granting the US monopoly mobile satellite service licence to AMSC.

As far as **aeronautical mobile satellite services** are concerned, in 1989, the FCC confirmed its 1987 decision on the exclusivity of the AMSC licence and ruled that Inmarsat-based aeronautical satellite services may not be used on the domestic segments of international flights, thereby preventing effective market entry by Inmarsat-based systems, since any aircraft in flight between two domestic US points would be obliged to use AMSC space segment [31].

Comments

US manufacturers have a 69% market share of the worldwide commercial satellite market. The US Department of Commerce estimates that US exports in this area were about $ 600 million in 1991 compared with $ 643 million in 1990, and that imports were as little as $ 20.000 in each of those years ! It is worth noting that Hughes alone has approximately 38% worldwide market share which is greater than all of Europe's collective share (approximately 25%).

This market dominance by US manufacturers is a result of economies of scale and market power due to the overall size of the commercial US market, but more significantly, to the size of the government civilian and military markets which are largely closed to non-US suppliers.

6. PATENT AND TRADEMARK APPLICATIONS (JAPAN)

In recent years the Japanese Patent Office (JPO) has made progress in reducing the uncommonly long time involved in the processing of patent and trademark

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31 Report on United States Trade and Investment Barriers (1993) by Services of the Commission of the European Communities - page 82

applications. Unfortunately, however, the process remains one of the slowest among developed nations when coupled with the practice of publishing all applications. This results in a long period of public access without legal protection of the inventions.

The problem is compounded by a number of additional issues:

- due both to the common practice in Japan of filing a large number of applications to cover slight variations in known technology and to the narrow interpretation of patent claims by Japanese courts, protection is effectively reduced and the system is overburdened with applications;

- multiple oppositions after examination often introduce significant delays in the patenting process, since the applicant must respond to each opposition separately. In addition, since Japanese law contains no discovery procedure whereby the owner of a process patent may seek evidence of suspected infringement, the protection offered by a process patent is weakened;

- Japan has a well-established trademark registration system. However, as in the Japanese patent system, the period of pendency, even in uncontested cases, is still unduly long (about three years on average, versus one year or less in the United States);

- Despite the recent enactment of the Trade Secret Law, there is still a lack of effective protection for trade secret material during procedures in the courts [32].

While the Japanese patent office has stated that it has reduced the pendency period from 37 months in 1988 to 28 months today, this refers only to one portion of the patent issuance process. Total time submission of a patent application to granting of a patent is usually five to six years, and it is much longer in many cases.[33]

Comments

The publication "Sub-committee Report on Patent and Utility Model Laws and Their Practices Leading to International Harmonisation" by an Advisory Council to the Ministry of International Trade and Industry (MITI) addresses this problem according to the American Chamber of Commerce. Its implementation should be closely monitored.

Existence of Bilateral and Multilateral Agreements

Articles 35 to 38 of the Trips Agreement provide protection to the layout-designs (topographies) of integrated circuits.

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32 United States-Japan Trade White Paper 1993 by the American Chamber of Commerce in Japan (ACCJ)

33 Section on Japan from the 1994 US national trade estimate report on foreign trade barriers, page 161

7. PATENT ISSUES (UNITED STATES)

7.1. Patents

US patent law is based on the "first to invent system", with almost the rest of the world following the "first to file system". Section 104 of the US Patent Law says that it is not possible to establish a date of invention by reference to any activity in a foreign country. A non-US inventor who typically carries out research and development activities outside the US cannot therefore establish a date earlier than that in which he or she applied for the patent.

This treatment clearly discriminates vis-à-vis foreign inventive activities in comparison to US domestic inventive activities and thus has the effect of forcing foreign companies to carry out research and development in the US rather than abroad. The discrimination features under Section 104 appear incompatible with Article 27 of the Uruguay round Agreement on TRIPS. The US will have to undertake the necessary modifications.

7.2. Government use

US law allows governmental use of intellectual property rights without even having to notify the right holder. This practice is particularly frequent in the activities of the Department of Defense. For obvious reasons this practice is particularly detrimental for foreign right holders because they will generally not be able to detect such government use and are thus likely to miss the opportunity to initiate an administrative claims procedure. The TRIPS Agreement contains some safeguards for the patent holder which should eventually lead to considerable changes in the US law and practices on mandatory licensing.

7.3. Section 337 of Tariff Act 1930.

Sec. 337 of the US Tariff Act provides among others remedies for holders of US patents with a view to keeping imported goods infringing such patents out of the US (exclusion order) or to get them out of the US market once they have come into the country (cease and desist order).

These procedures are carried out by the US International Trade Commission (ITC) and are not available against domestic products infringing US patents.

In July 1987 the European Community requested the establishment of a panel to consider the compatibility of Sec. 337 of the US Tariff Act with the US' obligations under the GATT notably with its Article III.

The Panel Report which was adopted by the Contracting Parties on 7 November 1989 established the existence of a number of inconsistencies with US obligations under article III of the Agreement[34]

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[34]Report on United States barriers to trade and investment, 1994, page 61

Comments

Despite the GATT Panel finding of 1989 the US have to date not taken any measure to bring Sec. 337 in line with its international obligations under the GATT.

The chilling effects of Sec. 337 on European companies' activities were highlighted in 1992 by several cases, whereby the discriminatory character became particularly apparent in one case where the federal district court had stayed the procedure before it on the ground of an arbitration clause, which did not prevent the ITC which was subsequently petitioned to take action. In 1992 Senator Rockefeller introduced a bill into the US Senate which was intended to bring Sec. 337 in line with the GATT panel findings. While the bill addresses indeed some of the issues addressed in the panel findings it clearly falls short of remedying the GATT inconsistencies in a meaningful manner.

V. STRUCTURAL IMPEDIMENTS

The Community's objective is to remove all barriers which objectively block access for Community companies to the Japanese and US markets.

1. ACCESS TO TECHNOLOGY IN THE SEMICONDUCTOR FIELD (JAPAN)

The intricate types of association among Japanese firms and the strong links between business and public administration make it easy to ensure that Japanese firms have a systematic preferential access to technology developed in Japan.

Difficulties have been allegedly experienced in the timely access to state-of-the-art materials, processes and equipment newly developed by Japanese suppliers, necessary to develop and produce the most advanced generations of the (semiconductor) technology supporting the most advanced electronic equipment and products. The report by Lloyd Bentsen on US business access to certain foreign state-of-the-art technology has outlined the problem from the US perspective.[35]

Difficulties are also experienced in the access to the highest quality materials, processes and equipment necessary to develop the most advanced and to produce with highest quality the generations of the technology supporting the advanced electronic equipment and products (in semiconductor this often relates to production with lower cost).

Some examples:

Photo lithographic equipment e.g. Canon, for the production of semiconductors, defining the line width of the lines on the silicon, which is the main factor for improved performances and increased density, is first introduced in the internal market of Japan. European firms trying to access this crucial equipment for introducing their next generation of technology are offered this equipment 1 to 1.5 years later and face long delivery times resulting in delays in entering the market, higher costs, longer learning curves. Basically this delay is encountered while all development of these types of new equipment is done in combination with local customers and only released after full qualification.

Photo lithographic equipment for the production of flat panels follow the same pattern.

Japanese suppliers are generally presenting engineering samples of components several (10-18) months in advance to their preferred (Japanese) customers, which allow these customers to use this advantage in more up to date electronic equipment. Typically Europe is a half generation behind Japan for electronic equipment.

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35 "US business access to certain foreign state-of-the-art technology" september 1991

Some advanced materials e.g. sputtering material for advanced deposition and e.g. high quality resist materials for advanced photolithographic processing are today not available in Europe and are delivered with major delays and in small quantities. This is delaying the learning curve related with the production ramp-up of semiconductor processing. Some gases and chemicals are not delivered with the highest quality available (liquid source chemicals, gases for deposition) resulting in decreased quality and yielding loss in the processing (higher cost).

Packaging of components are using plastic packaging material of high quality. The most advanced materials (e.g. Sumitomo) are delivered much later to European companies and initially only in small quantities. This results in a delay in reliability improvements and yield loss. The same with ceramic substrates and high quality spin-on glass for planarisation used in the fabrication process of semiconductors.

Comments

The US market is served before Europe. The delay can be from 1 to 2 years. Japanese suppliers, by systematically serving their own market before the US and Europe, influence the early introduction of new products putting European companies at a disadvantage even to compete in their own home market.

This, systematically serving the home market earlier and with higher quality supporting materials, processes and equipment for the manufacturing, influences the ultimate quality of the product, the initial cost and the progress of the learning curve in manufacturing.

The Act concerning prohibition of private monopoly and maintenance of fair trade prohibits in particular the unreasonable restraint of trade. This term means "that any entrepreneur, by contract, agreement or any other concerted actions, irrespective of the names, with other entrepreneurs, mutually restrict or conduct their business activities in such a manner as to fix, maintain, or increase prices, or to limit production, technology, products, facilities, or customers or suppliers, thereby restraining, contrary to the public interest, substantially competition in any particular field of trade. The same Act provides that no trade associations shall engage in acts "causing entrepreneurs to employ such acts as constitute unfair trade practices". Concerted refusal to deal and other refusal to deal fall within the definition of unfair trade practices [36]. On the contrary, there is no provision concerning the delayed refusal to deal.

Two Community companies manufacturing semiconductor fabrication equipment are attempting to commence trading in Japan with their latest products and they view that market as crucial to support their business level.

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36 Japanese Competition Law by the Fair Trade Commission of Japan - September 1991

Comments

The world-wide market for integrated circuit production equipment is currently at 6B$ and forecast to rise to 9.3B$ by 1996. Besides this commercial consideration, it is more important to appreciate the impact of such equipment arising from its capability to manufacture advanced intergrated circuits, which is dependent on its level of technological development. In an industry which has technology upgrades every three to five years, the equipment manufacturers' ability to offer the latest technology is dependant on very high R&D expenditures - typically 15% to 20%. Failing to invest will result in not outperforming the competition and then resulting in an insufficient market share to survive.

Since the money for R&D comes from volume sales, and the endemic European IC manufacturers do not represent sufficient market size then European equipment companies must look to areas such as Japan for volume sales. The single market has encouraged foreign manufacturers to set up factories in Europe, but to sell equipment to Japanese companies here, it is first necessary to sell in Japan. However, European IC manufacturers need advanced production tools available locally, to ensure that they are in time to market advanced microelectronics

2. ACCESS TO TECHNOLOGY IN THE SEMICONDUCTOR FIELD (UNITED STATES)

Semiconductor equipment in the US is developed in the framework of Sematech, the semi-conductor programme in the US, which is using only local suppliers. Consequently there is a delayed access to the most advanced equipment. European producers established in the US have so far not been able to directly participate to Sematech programmes. However, US producers with R&D facilities established in Europe are able to participate and receive support in Community and Eureka (Jessi) activities

Comments

JESSI have established an arms-length frame for cooperation with Sematech including workshops for exchange of information, but so far this has been limited in scope to the involvement of European equipment and material (E&M) producers. However, this is viewed as important from the European perspective since the European market size alone is not sufficient to allow viable development of advanced technologies. The best way to sell offshore in the E&M business is to collaborate at an early stage of development with the prospective customers. The limited existing cooperation is, therefore, valuable to Europeans as it gives them access to the "club" of US IC producers who are key customers. At present joint working is also difficult due to differences in the legal status and structure of JESSI (cooperation agreement status) and Sematech (legal entity). Direct transatlantic strategic alliances have been established on essentially commercial grounds (e.g. Siemens/IBM alliances on 64 Mbit and 256 Mbit memories).

Vice-President Gore has announced at the beginning of March 1994 a new government-industry partnership to strengthen America's leadership in semiconductors.

The goal of this initiative is to assist the US industry to develop the semiconductors technology for the next 15 years, on the basis of a "roadmap" of the long-term technology requirements of the industry, developed earlier by expert in industry, government and Academia.

To this end the Department of Commerce through the National Institute of Science and Technology will establish a National Semiconductor Methodology programme. The Department of Defense will sponsor high priority research on electronic packaging and will continue to support the efforts of Sematech. The Department of Energy will establish a Center on a cost-shared basis with industry, for the simulation and modelling of semiconductor materials, manufacturing processes and chip design. The National Science Foundation will continue to invest in long-term research.

This initiative, in principle, will not involve additional funding for R&D, but rather represents a shift in priorities. To this end the administration will establish later in the year 1994 a Semiconductor Technology Council composed of top government officials, senior industry executives and leading academicians.

3. STANDARDS SETTING (UNITED STATES)

The EC continues to be concerned about certain developments taking place in the United States because of :

- standards for Telecommunications services being developed independently of national and international standardisation procedures;
- the high cost of adapting European-based switching equipment to US specifications;
- the existence of voluntary standards for terminal equipment which are "de facto mandatory";
- the attempt by the FCC to enforce a standard in the area of mobile communications which is incompatible with the Digital European Cordless Technology (DECT), system for which Technical Bases for Regulations (TBRs) under Directive 91/263/EEC has recently been finalized.

Comments

Standards are strategic in terms of controlling the further flow of products. The standards of the US telecoms network are completely different from those in Europe.

Before any telecommunications equipment can be sold in the U.S., it must be approved by Bellcore, U.S. largest research consortium which performs technical work for its shareholders, the seven Regional Holding Companies (RHCs), in five major areas : applied research, operations technology, software technology and systems, network technology, and information networking services. The process for EC producers of adapting their products to U.S. standards and of gaining such "type approval" for equipment in combination with the tendering process makes securing orders difficult. In addition, the expense of testing certain network equipment through Bellcore can be very high in some cases, so that although the system is open to all in theory, in practice it is open only to those suppliers with the ability to make this investment.

Although officially FCC requirements are the only mandatory standards imported terminals have to meet, exporters have no certainty as to which other standards will in practice need to be complied with in order to sell their products. The multiplicity of "voluntary" standards and the absence of a central point where information on all relevant standards can be obtained represents an effective trade barrier.

In the area of mobile communications the FCC has taken a stand against promoting internationally compatible standards. Under pressure from a national industry grouping, the FCC is in the process of creating a technical barrier to trade against European DECT systems.

Existence of bilateral or multilatéral agreements

Negotiations are being pursued with the US for the mutual recognition agreement of conformity assessment of terminal equipment.

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FINANCIAL PENALTIES FOR ANTI-COMPETITIVE PRACTICES IN JAPAN
-SOME EXAMPLES-

ANNEX 1

In February 1992, Japan's Fair Trade Commission asked prosecutors to file charges in the case against four printing companies i.e. Toppan Moore, Hitachi Information Systems, Dai-Nippon Printing Co. and Kobayashi Kirokushi Co. According to the Fair Trade Commission, at a meeting in late April 1992 at a Tokyo branch of Kobayashi Kirokushi, the four decided to allow one among them to win a contract and sub-contract to the others.

On 30 March 1993, in the first convictions in nearly two decades under Japan's anti-trust legislation, two former officers of two printing companies were found guilty on charges of bid-rigging. The Tokyo District Court gave a former officer of Toppan Moore Co. a one-year suspended prison sentence and three years probation. A former officer of Hitachi Information Systems Ltd. received an 18-month suspended sentence and three years probation. The convictions were the first of their kind since 1974. They came as Washington is pressing Tokyo to step up the fight against the price cartels and other monopolistic practices that the United States considers barriers to imports. Prosecutors arrested 14 officers including the 2 sentenced, at 5 printing companies in October and November, 1992. They were suspected of illegally fixing prices on the coded seals the Social Insurance Agency affixes to post card identifications of pension payments. The cases of the other 12 officials are still pending.

On Friday, 21 May 1993 in a conclusion to a closely watched anti-trust case, a Tokyo court found eight companies guilty of fixing prices of plastic film used for wrapping food. The companies were given fines of between 6 million and 8 million yen, or about $ 54,000 to $ 73.000. Fifteen executives of the companies were given suspended sentences of six months to one year in prison. Some of the eight food-wrap companies did not deny price fixing but argued in court that it would be unfair to single them out since there were so many other more serious examples of price fixing in Japan.

Source: Commission's services

ANNEX 2

It is instructive to contrast AT&T's position with that of companies in the more dynamic segments of the U.S. telecommunication market, where EC suppliers are afforded a fair opportunity to compete. In those dynamic market segments, for example the supply of switches, mobile communications, and transmission products to the U.S. independent telephone companies, EC suppliers have been more successful in obtaining orders. Nonetheless, taking the U.S. switch market as a whole, the recent independent study demonstrates that two North American companies, AT&T and Northern Telecom, supplied respectively 44% and 40% of the U.S. central office switching market in 1990 and that virtually all switches sold in the U.S. are manufactured in North America [1]. From the same study, one can also derive the average price per line for AT&T on the one hand and the other IXC's (MCI, Sprint, other smaller long distance carriers) on the other hand. The resulting prices are the following:

	1989	1990
AT&T's : price per line ($)	1073	745
Other IXC's : price per line ($)	565	601

It seems therefore that the price at which AT&T buys its switching equipment from itself is actually higher than the purchase price the other IXC's get from competitors of AT&T. This is in line with the existence of the monopoly and contradicts the repeated US official statement that there cannot be any bias resulting from the self-dealing practices of AT&T.

AT&T share which climbed to about 47% in 1992 is expected to grow to about 50% of a $6 billion market by the end of 1993 while Northern's share would sink to 33%.

Northern Business Information Inc., a New York research firm, plans to increase that share further to 60% within a couple of years. AT&T network systems has put further distance between itself and foreign entrants such as Siemens and Ericson. At the same time the upturn also owes much to the troubles at Northern Telecom.

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1 Northern Business Information (NBI), "Central Office Equipment Purchases", a report prepared for The Office of the U.S. Trade Representative Executive Office of the President, Mc Graw Hill, 20 March 1992.

US Public Network Digital Switch Market		
	1993 ($6 billion)	1992 ($5.2 billion)
AT&T	50%	47%
Northern Telecom	33%	35%
Siemens Stromberg	6%	6%
GTE*	5%	6%
LM Ericsson	5%	5%
DSC	1%	1%

*Equipment Unit 50% owned by AT&T

ANNEX 3

The Chairmen of the House Energy and Commerce Committee (Dingell) and the House Judiciary Committee (Brooks) have reached agreement on a bill (H.R. 3626) which would phase out the limitations contained in the Modification of Final Judgment (MFJ) which prevent the RBOCs from engaging in long-distance telephony services and manufacturing. The bill will be the subject of hearings in 1994.

The bill would allow an RBOC, within one year of enactment, to submit an application to the Justice Deptartment to engage in manufacturing. The Justice Dept. will have to determine "whether there is no possibility that such company or its affiliate could use monopoly power to impede competition in the market such company seeks to enter".

If, within the following year, the Attorney General fails to enjoin the company from going forward with its plans, the RBOC will be free to engage in manufacturing, subject to certain safeguards:

- separate subsidiary requirements;
- separate books, records and accounts;
- obligation to sell equipment to other carriers on non-discriminatory terms, provided such carriers do not manufacture telecom equipment, or provided they agree to make available telecom equipment which they manufacture;
- filing of information on protocols and interconnection requirements with the FCC;
- no cross subsidization.

The bill does not contain any requirements that the RBOCs procure equipment in a transparent and non-discriminatory manner (a request made by the Telecommunications Industry Association with respect to previous bills).

The RBOCs must conduct all manufacturing in the US and, like the old "Hollings Bill", they may use foreign components only if they make "a good faith effort to obtain equivalent components in the US at reasonable prices, terms and conditions", and if the cost of foreign components does not exceed 40% of the sales revenues derived in any calendar year from such equipment. The RBOCs must also certify to the FCC on a quartely basis that they have made good faith efforts to obtain parts in the US and they must list foreign components. Failure to do so would entail the imposition of penalties by the FCC. Also, any supplier claiming to be damaged because of a RBOC's failure to make the good faith effort may make complaint to the Federal Communications Commission or may bring suit for the recovery of actual damage in any district court of the United States of competent jurisdiction.

Also, the Chairman of the House Energy Subcommittee on Telecom (Markey) has succeeded to craft, with bi-partisan support, a bill allowing RBOCs' entry into cable in their area of telephone service and (as a quid pro quo) competition in the local network. The bill (H.R. 3636), "the National Communications Competition and Information Infrastructure Act of 1993", will be the subject of hearing in 1994.

The bill, which aims at promoting competition and preserving universal service, would:

- repeal the cable-telco cross-ownership rules;
- prohibit telcos from buying cable systems within their service areas;
- create a Federal-State Joint Board to ensure universal service by requiring all providers to contribute to universal service;
- require the FCC to review how the concept of universal service should be expanded to include provisions of "digital service" (digital service means making available to residential consumers, at reasonalbe cost, digital compression capability). Specifically, the FCC must investigate the policy changes necessary to provide "open Platform Service" ("Open Platform Service" means a switched end-to-end digital telecom service, which 1) provides subscribers with sufficient network capability to access multimedia information services, 2) is widely available throughout each State, 3) is provided based on accepted standards, and 4) is available to all customers on a single line basis upon resonable request);
- preempt State laws prohibiting entry into local telephone networks,
- require telcos to set up separate subsidiaries for video programming services, and
- require local phone companies to provide equal access to and interconnection with their network.

The administration will work with Congress to pass legislation by the end of 1994 that will increase competition and ensure universal access in communications markets; particularly those, such as the cable television and local telephone markets, that have been dominated by monopolies. Such legislation will explicitly promote private sector infrastructure investment, both by companies already in the market and those seeking entry.

The US administration is hoping to influence events by reducing the regulatory barriers that have prevented competition between telephone and cable television companies. The US administration also wants to promote standards that allow different networks to communicate with each other and gently prod the players to think about the broad public interest. The administration will propose that companies providing a wide array of switched, broadband digital services be only lightly regulated by the FCC (a new title VII of the communications act) in exchange for providing services and access to their facilites by others on a non-discriminatory basis.

The decision taken in February 1994 by the Federal Communications Commission to lower the cable rates have made unlikely that the cable industry could generate the cash flow expected. Consequently two partnership between a telephone company and a cable-TV company have collapsed, i.e. the partnership between Southwestern Bell Corp and Cox Cable Communications, Bell Atlantic Corp. and Tele-communications Inc.

On Friday 26 August 1994 a Federal appeals court ruled that telephone companies seeking to provide cable services over their lines do not need to obtain costly franchises from local governments. The decision which affirms federal communications commission policy, was a setback to the cable industry. The cable industry, which pays

local governments millions of dollars annually in franchise fees, has appealed the FCC's three year old policy, saying it put cable operators at disadvantage.

These two decisions have led to a reshuffle of the cards and it now appears that the two industries i.e. telephone and cable are direct competitors. Accordingly Walt Disney Co. and three regional companies, Ameritech Corp, Bell South Corp and Southwestern Bell Corp. announced Monday 8 August 1994 that they had signed a Memorandum of understanding to form a joint venture to develop intereactive video services. Services could ultimately include existing broadcasting and satellite televison networks as well as movies on demand, home shoppping, educational programmes, games and travel assistance. Americtch, Bellsouth and Southewestern Bell provide telecommunications services to about 50 million customers lines in 19 States.

At the same time four of the largest US cable television companies announced on Tuesday 9 August 1994 that they would spend more than $2 billion for equipment this Autumn in an effort to offer "one-stop" telecommunications services to consumers. Chief Executive of Cox Cable communications inc, Continental Cablevision inc, Comcast Corp. and Tele-Communications Inc. said they each intended to offer high-definition television, wireless telephone, video on demand basic telephone and computer on-line services. The upgrades to their networks will allow them to compete directly with the seven regional Bell operating companies in the $90 Billion a year local telephone market.

Source: Commission's services

ANNEX 4

The regulatory framework of the Modified Final Judgement is increasingly rocked to its very foundations by the new competitive trends that permeate the US market and which are likely to bring radical change.

The monopolies enjoyed by the local industry, which comprises seven so-called "Baby Bell" regional companies and a host of independents are beginning to break room thanks to the new technologies of high-capacity fibre optic cable, digital compression and cellphones. New competitors are starting to eat into the phone companies' most lucrative existing businesses, and threaten to take a large slice of promising new ones such as interactive video to the home.

On the one hand the RBOCs face a looming end to their monopolies because of the emerging competition of cable television and try to react and reap the benefits of the new business opportunities by getting rid of the interdictions foreseen in the Modified Final Judgement, where they were barred from entering three markets i.e. long-distance, equipment manufacturing and information services. After a long campaign, the Baby Bells managed to get the information services ban removed in 1991 and their request has been eventually upheld by the Supreme Court and they are pressing to be allowed into the two other businesses on the grounds that they now face significant local competition.

Ameritech Corp. is pushing a plan to enter the long distance market in a trial as early as 1995, sparking loud objections from AT&T and the two other major rivals in the market: MCI Communications Corp. and Sprint Corp. Opponents have argued that the baby bells shouldn't be allowed in long distance because they enjoy a monopoly in local phone services. Ameritech has sought to sidested that argument by offering to surrender its own monopoly rights. The Chicago based Bell company told US regulators it would throw open its local calling market to all comers in exchange for the right to offer long-distance services in the five States it serves.

On the other hand, AT&T and the other long-distance carriers are urging that the local market be opened to greater competition in the hope that this will cut access charges and spur traffic growth. They, in particular, resent the high charges they have to pay the local telephone companies to carry calls over the last mile or two of wire to customers. These "access charges" bear little relation to the cost of providing the service, yet account for about 30% of local operations' revenues and are the largest single expense for long-distance groups (about 40% of the total cost of a long-distance call).

MCI Communications Corp. intends to challenge regional Bell monopolies in at least 20 major US cities, including New York and Los Angeles, for the right to provide local communication services and to spend $20 billion on the electronic equivalent of widening, paving and building access ramps, for its idea of a US information superhighway. If successful, the bid for local service would give MCI, which is already the primary competitor of the long-distance leader AT&T, an opportunity to carry a full range of communication and entertainment products directly to consumers and businesses, with business as the initial target.

Also, there has been a rapid growth of the cellular telephone industry, which offers an alternative means of communication to the local phone companies' network. The Baby Bells are among the leading players in this business but by acquiring McCaw Cellular Communications Inc., the US's largest cellular phone company, AT&T plans to get a foothold in the local market, as well as another potential means of by-passing the Baby Bells' access charges. Mr. Allen, AT&T's president, recently declared that cellular is "an exploding market" and such wireless services combined with pocket communicators "will make anywhere, any time, communications a reality".

On Monday 28 February 1994, MCI Communications Corp announced it was spending $1.3 billion for a 17% stake in Nextel Communications Inc. in an effort to provide the first nationwide wireless personal communications services later in the year: MCI and Nextel will form a "strategic alliance" with Comcast Corp which also holds 17% of Nextel. The agreement will allow the three companies to provide wireless voice and data service to 95% of the US population. It will also allow users to have one number for their office, home and mobile telephone.

The group will use equipment made by Motorola Inc; Nextel offered a 20% stake to Motorola in November 1993 in exchange for mobile radio licences. Nextel's Network is digital rather than analog, which means customers will have to use a sophisticated telephone made by Motorola to take advantage of the system.

Finally, state and federal regulators have allowed new local telecommunications companies, known as "competitive access providers" (CAPs), to establish themselves in many metropolitan areas, where they operate highly efficient fibre optic networks. They cream off some of the local monopolies' most profitable business customers by offering cheaper rates to transmit their bulk traffic around the area and directly into networks run by long-distance carriers.

But apart from the individual strides to best position itself in order to take advantage of the new business opportunities, a new cooperation trend is taking shape as multimedia's emphasis on integration flies in the face of the administrative breakup of communications services such as that embodied in the 1982 court order.

For a while it seemed that telecom operators and cable TV owners would be natural competitors, each of them trying a technical or legal way to step into the other one's kingdom. Recently, however, both entities have realized that it is to their common advantage to cooperate. Through such associations, telecom operators may hope to get around the many limitations ruled by Judge Green when setting up Baby Bells (1984) while cable operators acquire the funds needed in order to build up the "information highways".

Each Baby Bell can see its local-exchange monopoly coming under increasing pressure from cellular companies, private-line operators and nimble intermediaries offering customers alternative ways to reach long-distance operators. The growth of cable networks is even more of a threat. The 1992 Cable Act bans the Baby Bells from taking a stake in cable networks in their monopoly areas. They can, however, invest in others that operate in other Bell franchises. By developing telephone services via the data highway, they might be able to expand in each other's markets. Accordingly Pacific Bell has sought to offer customers on the East coast around Washington a "video dial tone"

that would bring a wide choice of video services into their homes and offices on request. Any local telephone company that can wire a house and produce that kind of dial tone has the opportunity to dominate its market.

Other Baby Bells have hooked up with cable companies to ugrade their systems for entertainement, interactive television, home shopping, access to data bases and other telecommunications advances. Bell Atlantic has agreed to buy Tele-Communications Inc., America's top cable company; US West Inc. has invested in Time Warner Inc. and intends to buy two Atlanta-area cable TV companies; Nynex Corp. has invested in Viacom Inc; Bell South is expected to join with QVC Inc., the home shopping network; South Western Bell and Cox plan a cable partnership.

For one thing cable companies are ahead on certain technologies, such as digital compression. On the other hand, the Federal Communications Commission (FCC) has served notice that it is going to treat cable firms under the terms of the 1992 Cable Act, more or less as it treats telephone companies, that is with vigilance. Price cuts of 10% on basic cable services are already being imposed. Cable bosses once sought to keep the Baby Bells out of their industry fearing the telephone firms would use local-exchange profits to cross-subsidize cable subsidiaries unfairly. Now they are keen to get in on any subsidization themselves.

A Federal District judge in Alexandria, Virginia, declared unconstitutional, on first amendment grounds, a provision of the 1984 Cable Act that prevents telephone companies from selling video programming to subscribers in their own telephone service area. If the ruling by judge T.S. Ellis is upheld in appeal, it would give telephone companies an incentive to spend billions of dollars building new fiber-optic networks to provide both telephone and video services. The cable industry has argued that allowing telephone companies to sell programming would be dangerous, because they could use their monopoly over telephone service to subsidize low rates for video services.

Furthermore in order to reduce the cost for consumers and to stimulate the competition of new technologies, the Attorney General of the State of New York has announced at the beginning of June 1993 that seven cable companies, i.e. Telecommunications Inc. (TCI), Time Warner as well as Newhouse, Cox, Continental, Comcast, Viacom and the joint venture Primestar Partners between the seven and General Electric on satellite communication, had agreed to allow an equal access to cable television programmes to operators using technologies different from the cable. This is intended to allow operators using any other technology but cable, i.e. microwave or telephony, to gain access to entertainment or news programmes at competitive prices. AT&T is presently talking with US cable companies about linking their customers into one big multimedia network.

American Telephone & Telegraph Co has urged the Government to allow it to compete for long-distance customers on the same terms as its competitors do within and outside the United States. The company said that the Federal Communication Commission should end the designation of AT&T as a "dominant carrier" that requires it to notify the government in advance of deploying new services.

On Thursday, 23 September 1993, the Federal Communications Commission adopted rules that will create two to six new wireless networks in every American city and town. In what the communications industry considers a landmark decision, the FCC by a 2-1

vote, designated 160 megahertz of spectrum for the new services, an amount that far outstrips the bandwith alloted to the now booming cellular industry.

The new wireless technology will take cellular telephones into the next century, allowing voice, paging and computer communications to be linked by radio waves rather than the age old traditional copper telephone wires. It will be more powerful than current cellular technology, a hybrid of radio waves and traditional land wires, and open up a new area of competition in mobile communications. The technology is expected to fuel a revolution in mobile pocket-sized phones, making it possible for customers to have one telephone number to reach them wherever they are.

Source: Commission's services

ANNEX 5

Under article 9.1 of the Council Directive of 22 March 1988 amending directive 77/62/EEC relating to the coordination of procedures on the award of public supply contracts and repealing certain provisions of Directive 80/67/EEC :

1. The contracting authorities listed in Annex 1 to Directive 80/767/EEC shall make known, as from 1 January 1989, as soon as possible after the beginning of their budgetary year, by means of an indicative notice, the total procurement by product area of which the estimated value, taking into account the provisions of Article 5 of this Directive, is equal or greater than 750.000 ECU and which they envisage awarding during the coming 12 months.

2. Contracting authorities who wish to award a public supply contract by open, restricted or, under the conditions laid down in Article 6 (3), by negotiated procedure within the meaning of Article 1 shall make known their intention by means of a notice.

Under article 6.e of the Council Directive of 21 December 1976 coordinating procedures for the award of public supply contracts, contracting authorities may award their supply contracts by negotiated procedure without prior publication of a tender notice. "For additional deliveries by the original supplier which are intended either as part replacement of normal supplies or installations, or as the extension of existing supplies or installations where a change of supplier would compel the contracting authority to purchase equipment having different technical characteristics which could result in incompatibility or disproportionate technical difficulties of operation or maintenance. The length of such contracts as well as that of recurrent contracts may, as a general rule, not exceed three years".

Under article 7.2 of Council Directive of 21 December 1976 coordinating procedures for the award of public supply contracts :

"2. Unless such specifications are justified by the subject of the contract, Member States shall prohibit the introduction into the contractual clauses relating to a given contract of technical specifications which mention goods of a specific make or source or of a particular process and which have the effect of favouring or eliminating certain undertakings or products. In particular, the indication of trade marks, patents, types or specific origin or productions shall be prohibited; however, such an indication accompanied by the words "or equivalent" shall be authorized where the subject of the contract cannot otherwise be described by specifications which are sufficiently precise and fully intelligible to all concerned."

Source: Commission's services

ANNEX 6

The HPCC programme comprises four sub-programmes of which one, the NREN, is specifically focussed on networking. The sub-programmes are:

- *High Performance Computing Systems (HPCS) - the development of the underlying technology required for scalable high performance computing systems capable of sustaining trillions of operations per second on large problems. Research in very high performance systems is focusing both on increasing the absolute level of performance attainable and on reducing the cost and size of these very high performance systems in order to make them accessible to a broader range of applications.*

- *Advanced Software Technology and Algorithms (ASTA) - the development of generic software technology and algorithms and the deployment of the most innovative systems for Grand Challenge research application in a networked environment.*

- *National Research and Education Network (NREN) - the development of a national high speed network to provide distributed computing capability to research and educational institutions and to further advanced research on very high speed networks and applications.*

- *Basic Research and Human Resources (BRHR) - support for individual investigator and multidisciplinary long term research drawn from diverse disciplines, including computer science, computer engineering, and computational science and engineering; initiation of activities to significantly increase the pool of trained personnel; and support for efforts leading to accelerated technology transition.*

The High Performance Computing and High Speed Networking Applications Act of 1993 (H.R. 1757) has incorporated a new program into the HPCC by adding a fifth component to the program for FY 1994 and by putting more emphasis on applications throughout the program. This new component, Information Infrastructure Technology and Applications (IITA), will develop and apply high performance computing and communications technologies to improve information systems needed to address what are called "National Challenges" - major societal needs that computing and communications technology can help us address - and include design and manufacturing, health care, education, digital libraries, environmental monitoring, energy demand management, public safety and national security. These National Challenges are analogous to the "Grand Challenge" research problems which have been the primary focus of the HPCC Program to date. In addition to addressing these problems, this new component will support the development, with industry, of the NII and the development of the computer, network and database technology needed to provide appropriate privacy and security protection for users.

Source: High performance computing and communication: toward a national information infrastructure. 1994

ANNEX 7

Technical standards and **Technical Requirements** for terminal facilities are based on three principles stipulated by the **Telecommunications Business Law of 1985**:

1. Telecommunications circuits facilities shall not be damaged or impaired, nor shall functions there of be impaired.

2. Nuisance shall not be caused to other users of the telecommunications circuit facilities.

3. The demarcation of responsability between the telecommunications circuit facilities established by a Type I telecommunications carrier and terminal facilities connected to them by a user shall be clearly stipulated.

Technical Standards are stipulated by the Regulations concerning Terminal Facilities, etc. (Ministerial Ordinance N° 31 of 1985).

Technical Requirements are specified by Type I telecommunications carriers who provide their telecommunications circuit facilities with the approval of the Ministry of Posts and Telecommunications. They do not guarantee telecommunications quality and functions, or reliability and operability of terminal equipment.

Source: Commission's services

ANNEX 8

Japan accounts for 16% of the world's GNP, but has attracted only about 1% of the world's cumulative inbound foreign direct investment (FDI) since 1970. Cumulative outbound investment by Japan since 1950 is $ 352.4 billion, while cumulative direct investment by foreign firms in Japan is $ 22.8 billion. Foreign firms now account for less than 2% of Japan's domestic sales and assets, compared to 15% for the U.S., 18% for Germany, and 26% each for France and Canada [2].

Japan's massive investments in the United States are boosting Japanese exports of parts and machinery, just as the huge investments in Europe by American companies in the 1960's promoted, and are still promoting, US exports to Europe. A key element of the new global economy is that a staggering amount of trade is now conducted within multinational companies. More and more trade consists of parts and components that are shuttled around the globe as every stage of production is moved to the most economically efficient area.

One of the reasons the US-European trade relationship is so much more stable and uncontentious than the US-Japanese or the European-Japanese is the vast amount of trans-Atlantic investment in both directions. If the US-Japanese or the European-Japanese investment could be brought into greater balance, it would have a similarly beneficial effect on trade relations. According to Eurostat the trend is leading downwards as the flow of funds to Japan which amounted to MECU 667 in 1989 and MECU 914 in 1990 has actually fallen to MECU 363 in 1991.

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2 United-States - Japan Trade White Paper 1993 by the American Chamber of Commerce in Japan (ACCJ)

ANNEX 9

Article 26 reads in particular as follows:

"3. Any foreign investor who wants to make a direct domestic investment, etc., mentioned in any Item of the preceding Paragraph (except for those cases determined by a Cabinet Order, in consideration of such instances as inheritance, legacy, amalgamation of juridical persons, etc.) shall give a prior notice, as a Cabinet Order provides for, to the Minister of Finance and the Minister(s) in charge of the industry involved of those matters as designated by the Cabinet Order such as the objective of the business, amount, time of execution, and others concerning that direct domestic investment, etc.

4. Any foreign investor who has given a notice under the provisions of the preceding Paragraph concerning the direct domestic investment, etc., mentioned in Paragraph 2 (hereinafter referred to as "direct domestic investment, etc.,") shall not execute that direct domestic investment, etc., until a period of thirty (30) days has elapsed, counting from the day of receipt of the notice by the Minister of Finance and the Minister(s) in charge of the industry involved. However, the Ministers may shorten this period when they deem it not specifically harmful, judging from the objective of the business, etc., of the direct domestic investment, etc., under notice.

5. Any person other than a foreign investor (including a juridical person or other organization, which shall also apply to Paragraph 1 of the next Article) who performs any transaction or act tantamount to a direct domestic investment, etc., on behalf of a foreign investor but not in the latter's name shall be deemed as a foreign investor, and the provisions of the preceding two Paragraphs shall apply to such a person."

The following text is taken from the "Gist of Bill for Partial Amendment of the Foreign Exchange and Foreign Trade Control Law".

"When the Minister of Finance and the Minister(s) in charge of the industry involved deem that a given direct domestic investment, etc., under notice would cause apprehensions as to the occurrence of any of the consequences mentioned in (i) or (ii) below, or that it falls under (iii) or (iv) below, they may, upon hearing the opinion of the Committee on Foreign Exchange and Other Transactions and within a specified period, recommend or direct the one who gave that notice either to alter the particulars thereof, or to suspend the execution thereof. (Article 27)

(i) It might imperil the national security, disturb the maintenance of public order, or hamper the protection of the safety of the general public;

(ii) It might adversely and seriously affect activities of our business enterprises engaging in a line of business similar to the one in which the direct domestic investment, etc., is to be made, or the smooth performance of our national economy;

(iii) Because it is made by a foreign investor with whose country no treaties or other international agreements are concluded by our country in regard to direct domestic

investments, etc., its particulars are required to be altered, or its execution is required to be suspended, so as to make conditions substantially equal to those allowed to our national's similar investment activities in that country; or

(iv) When seen from its purpose of the use of funds and others, it falls under, in whole or in part, the capital transactions upon which an obligation to obtain a license is imposed, and therefore its particulars are required to be altered, or its execution is required to be suspended.

Special provisions concerning acquisition of stock of listed companies, etc. :

(a) For the time being, when the Minister of Finance and the Minister(s) in charge of the industry involved deem it necessary to make an inquiry in order to determine whether or not apprehensions as to the occurrence of any consequences mentioned in (i) or (ii) above might ensue from the acquisition by a non-resident, etc., of stock, etc., in excess of a certain quantity of listed companies, etc., they may designate certain companies which issue such stock, etc. (Article 2, Paragraph 1 of Supplementary Provisions).

(b) Any non-resident, etc., who is to acquire stock, etc., in excess of a certain quantity of a designated company shall give a prior notice to the Minister of Finance and the Minister(s) in charge of the industry involved. (Article 3, Paragraph I of Supplementary Provisions)

(c) When the Minister of Finance and the Minister(s) in charge of the industry involved deem that given acquistion of stock, etc., in excess of a certain quantity under notice would cause apprehensions as to the occurrence of any of the consequences mentioned in (i) or (ii) above, they may, upon hearing the opinion of the Committee on Foreign Exchange and Other Transactions and within a specified period, recommend or direct the one who gave that notice to suspend such acquisitions in whole or in part. (Article 3, Paragraph 3, Paragraph 5, and Paragraph 6 of Supplementary Provisions).

Source: Foreign exchange and foreign trade control law.

ANNEX 10

No distinction between telecommunications carriers based on facilities ownership exists in the Community. The Council Directive of 28 June 1990 on the establishment of the Internal Market for telecommunications services through the implementation of open network provisions concerns the harmonisation of conditions for open and efficient access to and use of public telecommunications networks and, where applicable, public telecommunications services [3]. Under this Directive Open Network Provisions, concerning areas selected in accordance with the list in annex I of this Directive "must not restrict access to public telecommunications networks or public telecommunications services, except for reasons based on essential requirements, within the framework of Community law, namely,

- security of network operations,
- maintenance of network integrity,
- interoperability of services, in justified cases,
- protection of data, as appropriate.

In addition, the conditions generally applicable to the connection of terminal equipment to the network shall apply.

Open network provision conditions may not allow for any additional restrictions on the use of the public telecommunications networks and/or public telecommunications services except the restrictions which may be derived from the exercise of special or exclusive rights granted by Member States and which are compatible with Community law."

Equal footing for both types of carriers, who do serve third parties, should be established to include:

- equal access to type I networks for type II carriers including access at the same carrier's rate and under equal terms and conditions,
- realisation of an open network architecture policy that provides for the release of information regarding interconnects and technical requirements for the development of new services, and which ensures that type II carriers will have access to the network capabilities required to provide the enhanced services that customers demand.

3 OJ L 192/1 dated 24.7.90

ANNEX 11

Restrictions for foreign companies generally in the US are the following:

i) Licences for any service may not be granted to companies owned by foreign governments (Sec 310(a)).

ii) Licences for broadcast, common carrier or aeronautical services may not be granted to foreigners or foreign corporations; that is to say, a foreign business or individual cannot, by itself, receive a licence from the FCC (Section 310 (b) (1) and (2)).

iii) Licences for broadcast, common carrier or aeronautical services can be granted to companies so long as they do not have foreign officers or directors or are not more than 20% owned by foreigners (or 25% indirectly) Sec 310 (b) (3) and (4)).

iv) Any foreign-owned carrier which provides international services is classified as a "dominant carrier" and regulated accordingly, i.e. subjected to "full" as opposed to "streamlined" regulatory treatment depending on whether " ... a relationship between a US international carrier and a foreign carrier may present some substantial risk of anti-competitive conduct ...". (FCC Report and Order, 6 November 1992).

The newly articulated FCC policy shifts the focus of competition analysis from whether a given operator is US or non-US owned, and toward a focus on affiliated relationships which may exist between specific US and non-US based operators. Accordingly, under its new policy, FCC will " .... regulate a US international carrier, whether US or foreign-owned, as dominant only on those routes where a foreign affiliate of the carrier has the ability to discriminate in favor of its US affiliate in the provision of services or facilities used to terminate US international traffic.

A key issue which faced FCC in arriving at this policy was an appropriate definition of "affiliation". The FCC decided to treat " ... a US carrier as an affiliate of a foreign carrier when the US carrier controls, is controlled by, or is under common control with a foreign carrier." For the purpose of applying this rule, it elected to adopt a legal test for "control" which results in a case-by-case analysis.

The new FCC policy on international common carriers appears to move in a progressive direction because it abolishes the presumption of "non-dominance" on the part of most US operators and the presumption of "dominance" on the part of all non-US owned operators. However, it must not be overlooked that, as the FCC was itself careful to note in a footnote to the November 6 Report and Order :

"The scope of this Order is limited to addressing the question of how to regulate US common carriers with foreign affiliations **once they have been granted entry to the US market. The Order does not address the question of entry standards for foreign-affiliated entities that apply for authority to operate in the US market**.

These foreign-owned carriers face discriminatory treatment in matters pertaining to the construction of lines, tariffs and traffic and revenue reports as follows:

- Section 214 of the Communications Act requires common carriers to seek FCC **authorisation to construct new lines or extend existing lines**. The FCC currently forebears regulation for domestic services; but for international services, "dominant" carriers must obtain authorisation for the construction and extension of lines; authorisation is required for each type of service, and each country; **"non-dominant" carriers must only get authorisation for the construction of new lines.**

All carriers must file tariffs at the FCC for international services; however:

- "dominant" carriers must file most tariffs at the FCC on a 45 days' notice instead of 14 days for "non-dominant" carriers;

- "non-dominant" carriers' tariffs enter automatically into effect at the end of 14 days unless found unlawful, whereas dominant carriers' tariffs must obtain a positive authorisation;

- "dominant" carriers must also submit their costs to justify any tariff changes.

All carriers must file annual international traffic and revenue reports; **but only foreign-owned "dominant" carriers must file annual domestic traffic and revenue reports.**

Regarding Section 214 authorisation, this requires that common carriers may not construct, extend or acquire a communications line unless the FCC determines it would be in the public interest. The legislative intent behind this section of the Act was to regulate monopoly providers of communication services, and to make sure that they did not duplicate facilities, which would lead to the monopoly's "captive" customers paying higher charges than they should for surplus facilities. **However, there are no set criteria used by the FCC in order to judge whether it is in the present or future public convenience that carriers provide services**, and there is some concern that the FCC, through its application of Section 214, is beginning to move away from the original intent of the section and to independently make decisions affecting international trade policy. For example, the FCC in its Further Notice of Proposed Rulemaking (May 1991), on international accounting rates, sought comments on whether to condition Section 214 authorisations to ensure non-discriminatory treatment of US carriers serving a given country [4].

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4 Report on United States Trade and Investment Barriers (1993) by Services of the Commission of the European Communities - page 73

Finally, the Cable Landing Act requires a common carrier to seek a (marine) cable landing licence from the Secretary of State. This authority has been delegated to the FCC. The Act requires consideration of reciprocity.

ANNEX 12

In determining whether a transaction threatens to impair national security, the President is to consider, among other factors: domestic production needed for projected national defense requirements; the capability and capacity of domestic industries to meet national defense requirements; and the control of domestic industries and commercial activity by foreign citizens as it affects the capability and capacity of the United States to meet the requirements of national security.

Should the President decide that any such transactions threaten national security, he may take action to suspend or prohibit them. This could include the forced divestment of assets. There are no provisions for judicial review or for compensation in the case of divestment.

Thus far in only one out of a total of 677 transactions reviewed, has the President blocked or reversed an acquistion - that one instance being the purchase of an aircraft parts manufacturered by an arm of the aerospace ministry of the People's Republic of China.

A number of bills intended to extend the scope of Exon-Florio provisions, or to widen the concept of national security to purely economic matters, have been tabled in Congress. The Fiscal Year 1993 Defense Authorisation Act has strengthened Exon-Florio procedures, by requiring a report by the President to the Congress on the results of each CFIUS investigation and by including among other factors to be considered "the potential effect of the proposed or pending transaction on US's international technological leadership in areas affecting US national security". This economic criterion is new.

Moreover, there are three new provisions concerning entities controlled by foreign governments. This first requires that, if they engage in any merger, acquisition or take-over which could result in a control that could affect the national security of the US, an Exon-Florio investigation be made. The other two, although not substantially burdensome, constitute a declaration of policy aimed at discouraging acquisitions by (and certain contract awards to) such entities.

According to the provisions of the International Investment and Trade in Services Act (IITSSA), all foreign investments in US business enterprises in which a foreign person owns a 10% or more voting interest (or the equivalent) are subject to reporting.

Many States impose reporting requirements for investments by foreign individuals, foreign-controlled and foreign-incorporated corporations. Some States distinguish between reporting requirements imposed on foreign individuals and those imposed on foreign business entities. Also, some states treat differently aliens, aliens who have not declared their intention to become a US citizen and alien corporations. Most states with reporting requirements impose penalties for noncompliance with the reporting requirements.

The ultimate rationale for these restrictions is the argument that US control of communications is essential at all times, for reasons of national security.

Comments/Estimated Impact

While the European Community understands the wishes of the United States to take all necessary steps to safeguard its national security, there is concern that the scope of application may be carried beyond what is necessary to protect essential security interests. In this context, the Community has highlighted in comments to the US Administration the wide scope of the statute, the lack of definition of national security and the uncertainty as to which transactions are notifiable. Although the US Treasury's implementing regulations, which were published in November 1991, do provide some additional guidance on certain issues, these uncertainties remain. Coupled with the fear of potential forced divestment, they have meant in practice that many, if not most, foreign investors have felt obliged to give prior notification of their proposed investments. In effect, a very significant number of EC firms' acquisitions in the US will be subject to pre-screening.

The Exon-Florio provisions could inhibit the efforts of OECD members to improve the free flow of foreign investment and could conflict with the principles of the OECD Code of Liberalisation of Capital Movements. Such an approach would also harm common EC-US efforts to establish multilateral disciplines on trade-related investment measures in the Uruguay Round negotiations and to strengthen the OECD National Treatment Instrument.

Source: Report on United States Trade and Investment Barriers, 1993 by Commission's services, page 82

ANNEX 13

COMPARISON OF CURRENT ADVANCED TECHNOLOGY PROGRAM LANGUAGE WITH MANTON AMENDMENT ADOPTED BY HOUSE

15 USC 278n. Advanced Technology Program ... (d) Contracts or awards; criteria; restrictions ...

(9) A company shall be eligible to receive financial assistance under this section only if ...

(A) the Secretary finds that the company's participation in the Program would be in the economic interest of the United States, as evidenced by investments in the United States in research, development, and manufacturing (including, for example, the manufacture of major components or subassemblies in the United States); significant contributions to employment in the United States; and agreement with respect to any technology arising from assistance provided under this section to promote the manufacture within the United States of products resulting from that technology (taking into account the goals of promoting the competitiveness of United States industry), and to procure parts and materials from competitive suppliers; and

(B) either -

(i) the company is a United States-owned company, or

(ii) the Secretary finds that the company is incorporated in the United States and has a parent company which is incorporated in a country which affords to United States-owned companies opportunities, comparable to those afforded to any other company, to participate in any joint venture similar to those authorized under this chapter, affords adequate and effective protection for the intellectual property rights of United States-owned companies.

"(20) the term 'United States company' means an entity which the Secretary finds, based on a demonstration by such entity-

"(A) maintains substantial employment in the United States;

"(B) agrees, with respect to a technology arising from assistance provided under this Act or the National Competitiveness Act of 1993, to promote the manufacture within the United States of products resulting from that technology;

"(C) agrees to procure parts and materials for such products from competitive United States suppliers; and

"(D) either-

"(i) is a United States-owned company; or

"(ii) is a company incorporated in the United States that has a parent company incorporated in a country which the Secretary finds-

"(I) affords to United States-owned companies opportunities comparable to those afforded to any other company to participate in programs and to have access to resources and information equivalent to the opportunities authorized under this Act or the National Competitiveness Act of 1993 to foreign-owned entities engaged in commerce in the United States;

"(II) has a standards development and conformity assessment process that is open and transparent, and that results in standards that are fair and reasonable and do not discriminate against United States products and production processes;

"(III) affords to United States-owned companies local investment opportunities comparable to those afforded in any other company; and

"(IV) affords adequate and effective protection for the intellectual property rights of United States-owned companies;

"(21) the term 'United States manufacturer" means a United States company which the Secretary finds, based on a demonstration by such company, makes substantial investments in the United States in research, development, and manufacturing (including the manufacture of major components or subassemblies in the United States);

"(22) the term 'United States-owned company' has the meaning given such term in section 28(j)(2) of the National Institute of Standards and Technology Act (15 U.S.C. 278n(j)(2));"

The Manton amendment adds additional definitions to-15 USC 3703. Definitions

ANNEX 14

The US space industry had an annual revenue of approximately $ 22 billion in 1991, ten times greater than that of Europe's industry. As shown below, $ 21 billion of US expenditure (95%) is by the government compared to just $ 1.5 billion (70%) collectively by Europe's governments.

	US SPACE INDUSTRY		EUR SPACE INDUSTRY		
	BN ECU	% total	BN ECU	% Total	Europe % of US
Total sales	26.00	100	2.50	100	9.60
Government Markets	24.70	95	1.75	70	7.10
— Military	13.85	53	0.25	10	1.80
— Civilian	10.85	42	1.50	60	13.80
Commercial	1.30	5	0.75	30	57.70

(Exchange rate : 1 ECU = $ 1.166)

Sources : Aerospace Industries Association, Euroconsult, CEC

The high level of US government expenditure provides a very significant commercial advantage to US satellite manufacturers over European manufacturers. Government markets are effectively closed to non-domestic providers. This large captive market provides US satellite manufacturers with sufficient revenue and production volume to avail of:

- economies of scale in production, procurement, staffing, research and development,
- opportunities to cross-subsidise eg. sales to the commercial market,
- market credibility and image.

Although European organisations may establish or buy US defense subsidiaries, to meet national security requirements they must be staffed by US citizens making direct control of a subsidiary more difficult. Also, the onus is on the US purchaser to justify to government that they are buying from foreign suppliers for every purchase undertaken.

This entails that the only way to compete in the US satellite market is as a member of a US-led consortium.

European investment in the US to date has been limited. In addition to establishing some US subsidiaries to target the equipment and private service markets mainly, European companies have invested recently in US-led consortia (eg. Orion) to provide international mobile satellite services. This reflects the US regulatory barriers but also the desire of US

companies to spread the high capital costs involved, and their wish to have European partners in order to facilitate entry to the European market.

US builders of commercial communications satellites have reasserted their dominance in world markets after losing ground in the 1980's, slowing the advance of European and Asian manufacturers. According to the most recent multi-client study, by Euroconsult, Hughes Space and Communications Company and General Electricity have pulled away from the rest of the competition and appear likely to pace the market in the 1990's.

The study throws into sharp relief the fact that the United States continues to make space a higher priority for government spending than any other nation.

U.S. spending for both military and civilian space programs, which in 1992 topped $35 billion, is equivalent to 0.6% of the American gross domestic product. 60% of that spending is on behalf of the U.S. Defense Department.

The 12 nations of the European Community spend a combined O.O5% of these nations' domestic economic output - one-twelfth of the American level. Even in France, which is Europe's biggest space power and has a thriving civil and military space program, spends less than 0.2% of its gross domestic product on space.

The contrast remains striking no matter how the figures are sliced: The United States spends nearly 2.4% of its federal government budget on space, both civil and military; France spends less than 0.4%, with the rest of Europe and Japan at much lower levels.

These figures do not include spending in Russia, which is nearly impossible to assess on Western terms. While impenetrable accounting practises may camouflage Russian military space spending, the study says investment in these systems in Russia "is visibly decreasing faster than the civilian budget."

Euroconsult's annual report gives the impression that Europe's space spending effort in the 1980s did little to undermine the United States' leadership. The 13-nation European Space Agency more than quadrupled its spending between 1981 and 1992, but U.S. industry remains "clearly dominant," the study concludes.

U.S. companies have won slightly more than 73% of the worldwide market in civil communications satellites in geostationary orbit set for launch between 1990 and 1996. Europe has 25% of the market.

The total market for these satellites thus far is 125 spacecraft launched or firmly ordered, with a market value of $10.4 billion in 1992 economic conditions.

Two years ago, Euroconsult's figures suggested that U.S. companies would continue to lose market share to the Europeans in the early 1990s, just as they had in the early 1980s. However, a series of hotly contested battles since 1990 in Japan, the Middle East and elsewhere, won by Hughes and GE Astro Space against European competition, appears to have reversed the trend.

The American advantage is occurring despite a drift of satellite concentration away from North America and toward Europe, Asia and elsewhere.

Euroconsult reports that one-third of the communications satellites made in the 1980s were for the U.S.market. That will slip to less than a quarter between 1992 and 2003, meaning that U.S. satellite builders will be doing more and more business for non-U.S. customers.

United States continues to dominate Satellite Manufacturing despite increased competition, U.S. market share projected to grow in the 90's.

	1972-79	1980-89	1990-96*
Number of satellites	37	99	125
Market value in billions of 1992 dollars	2	6.39	10.40
UNITED STATES	**100%**	**69.7%**	**72.3%**
Hughes Aircraft	87.1%	27.7%	30.0%
General Electric	12.9%	16.8%	26.6%
Space systems/Loral	0.0%	18.9%	9.9%
TRW	0.0%	6.3%	4.3%
Fairchild	0.0%	0.0%	1.0%
CTA	0.0%	0.0%	0.5%
EUROPE	**0.0%**	**23.5%**	**25.1%**
Matra	0.0%	4.4%	9.8%
Aerospatiale	0.0%	5.2%	8.2%
British Aerospace	0.0%	8.2%	3.3%
Alenia	0.0%	0.9%	2.5%
Deutsche Aerospace	0.0%	4.8%	1.3%
CANADA	**0.0%**	**3.8%**	**1.4%**
JAPAN	**0.0%**	**3.0%**	**1.2%**

*** Includes firm contracts for future launches**

Source: barriers to European industry trading in the US satellite communications market. A study by KPMG, January 1993

STATISTICAL TABLES

MARKET SHARES 1993

Workstations

Market Share In	Europe	US	Japan	ROW	WWide
Vendors					
European Vendors	2.3%				0.7%
US Vendors	7%	98.8%	59.80%		89.4%
Japanese Vendors		0.0%	40.2%		9.4%
Other		1.2%			0.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Personal Computers

Market Share In	Europe	US	Japan	ROW	WWide
Vendors	1993				
European Vendors	32.2%	2.5%	0.0%	1.8%	11.4%
US Vendors	56.5%	85.7.%	22.8%	45.1%	63.3%
Japanese Vendors	3.6%	7.6%	77.3%	3.5%	13.2%
Other	7.7%	4.2%	0.1%	49.6%	12.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Source: International Data Corporation

Personal computers

Market share figures for personal computer manufacturers are collated by IDC in the US at London in the Personal Computer European Expertise Centre and for the EDP IDC Japan Reporting Service.

The single-user market (eg PCs, workstations, printers, add-on storage such as CD-ROMs) is particularly strong at the moment, driven by decreasing prices, improving chip technology (primarly the Intel 80486) and the Windows interface to the DOS operating system. In 1993, IDC's preliminary figure for sales were 36.260.00 units, up from 30.376.000 in 1992 (19% growth).

Dominant players in each market are:

Europe	USA	Japan
IBM	Apple	Nec (46.2%)
Compacq	IBM	Apple
Apple	Compacq	IBM
Olivetti	HP	Fujistsu
Hewlett-Packard	Dell	Epson

Worldwide, Compaq has increased its market share from 5.1% of the market to 8.5%, as its worldwide sales increased 98%. Of the two major European suppliers, ZDS (i.e. Bull) has increased sales 62% whereas Olivetti has put in a growth rate of 15%, below the industry average (but not surprising as the company operates mostly in Europe which suffered widespread economic recession in 1993).

Europe

Market size: 10.604.000 units, $19.310 million

Olivetti has targeted the PC market in recent years and is now the largest Europe-base supplier. The company's offering tend to be lower cost machines than the other four companies in the top five. Its unit market share being higher than its value market share whereas for IBM, Compaq, Apple and HP the opposite is the case. However, Siemens, Nixdorf (SNI) has recently made clear that it intends to target the PC market in the future.

Digital, one of the poorest performing IT companies at present, has also signalled its intention to target the PC market more ferociously than in the past.

The most recent development (announced in the last two weeks) has been the intense price war breaking out between Compaq and IBM as they attempt to shift boxes. Price cuts of 20 - 30% price have been announced, in part to cut stock levels before future launches. IBM is suffering particularly from having excess supplies of its low-end machines but a shortage of its nex Power PCs.

USA

At present, only unit values for the US market are available. The most noticeable feature of the US market is the strong growth of three companies - Compaq, Hewlett-Packard's PC arm -Packard Bell and AST. IBM is still growing but market share is declining.

The only European supplier with a strong US presence is Bull. Bull's PC arm - Zenith Data Systems (ZDS) - has been the saviour of Groupe Bull in recent months. Large revenue increases for Groupe Bull have almost all been derived from the exceptionally strong performance of ZDS.

In both the US and Europe, Japanese strength is in the notebook market where Toshiba is particularly strong.

Japan

The Japanese market continues to be dominated by NEC (46% of the market by value, 49% by unit). However, Apple has a 13.4% market share and IBM 6.4%. No European players are particularly active in Japan (ICL is defined by IDC as a European supplier in Europe although Fujitsu has a majority stake in the company).

The second rank of US vendors have almost no presence in Japan, accounting for less than 1% of shipments.

Rest of World

The two largest markets in "Rest of World" are Canada and Australia. Information on those markets is collated by Wordwilde PC Research by is not available until the year end, although aggregate information is available (hence worldwide figures).

Workstations

Largest suppliers in each market (in descending order of importance)

Europe	USA	Japan
Sun	Sun	Sun
HP	HP	Yokogawa HP
Digital	Digital	Fujitsu
IBM	SGI	NEC
SGI	IBM	Hitachi

Sun continues to dominate the worskstation market with 37.8% of the worldwide market. However, Hewlett-Packard is also a strong performer with nearly 20% of worldwide sales. IDC expects the two companies leading the market in 1994 with Silicon Graphics

moving into third position within the traditional workstation segment as IBM focuses more on personal workstations and servers and Digital continues rough times.

In 1993 a new category of system was being created from the upward push of PCs and the downward push of workstations. IDC has labelled this category of system the personal workstation. Sun accounts for the majority of sales at present (e.g. 60% in Europe) following the launch of low cost SparcStations (now under $3000).

Europe

Hewlett-Packard is performing particularly well at present in Europe. While Sun continues to dominate the worldwide market, in Europe the company only leads HP by 3.5%.

USA

Hewlett-Packard is expected to experience continued strong growth as it has neared completion of its transition from Motorola-based workstations to PA-RISC-based workstations.

Tatung, the Taiwanese firm, sold 3000 units in the US in 1993, accounting for the small proportion of sales outside Europe/Japan/US suppliers.

Japan

Growth of 10.6% in the Japanese market in 1993 was driven by an accelerated shift towards downsizing from mainframes and proprietary minicomputers to Unix workstations and servers. This trend is causing the focus of the workstation market to migrate from traditional scientific and engineering applications to commercial applications.

The US suppliers are working in counjunction with Japanese companies, hence Nihon Sun Microsystems and Yokogawa-Hewlett-Packard. IDC Japan forecast almost 20% growth in the Japanese workstation market in 1994.

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