



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

16068

Perspectives of the REMLAC countries to strengthen their negotiating capabilities in the acquisition of software and hardware

1. Introduction

The purpose of the last part of this report is twofold. First, it contains reflections on the findings presented in chapter I. Second, it justifies a series of specific recommendations for improving the performance of Latin American importers in the field of negotiating acquisition of hardware and software elaborated in chapter II.

This short study is based on a series of interviews with representatives of the REMLAC focal points, government officials, and businessmen conducted during November and December 1985 in the eight countries of the Region. In addition, the author relied on source materials and publications listed in Annex 1 /infra/.

As already mentioned, the evidence gathered during the mission is to some extent, "patchy" but in all probability, it corroborates the assumption that the future success of the Latin American countries in developing their electronics industries depends not only upon achieving technological progress but also improving their marketing competence. The upgrading of human resources in the latter field should be viewed as a necessary component of the overall policy of industrial development.

At the outset, in order to more clearly demonstrate the phenomenon of the seller's dominance in the relevant markets,

this Chapter analyzes typical examples of "unbalance" in hardware and software contracts. Then the study discusses relevant aspects of government policies of importation of computer technology. Finally, the author examines implications of the existing differences between the internal economic and legal systems in the importing countries and those prevailing in the countries of exportation. While analyzing these systems and policies, we will be solely concerned with the problem to what extent, these determinants improve the importers' bargaining position or professional competence during negotiation process. Broader economic or political aspects of these complex issues are beyond the pale of this study. ^{1/}

2. Patterns of dominance in hardware and software markets

2.1. General observations

It is difficult to summarize the findings with regard to problem areas specified in a questionnaire employed for personal interviews and guided discussions conducted by the author of this report. The interviewees represented both unhappy and importers ^{and} more or less satisfied representatives of the sellers. There were also a variety of political and business factors that influenced each individual response to the questions presented. Notwithstanding these caveats, the findings of the mission corroborate the assumption that the hardware and software markets in the Region have all characteristics of the seller's market. Furthermore, large-scale and medium-size computers, as well as, systems software, are acquired mainly from foreign or foreign-controlled firms. With the exception of Brazil where the local manufacturers control the market for small and mini-computers

accounting for almost 50% of the total sales of data processing equipment on the domestic market,^{2/} the local manufacture of mini-computers and peripherals on a larger scale exists only in Mexico, Argentina, Venezuela, and Cuba. During the early eighties even more developed countries in the Region imported some 90% of their domestic demand for computers from abroad.^{3/}

Due to the present role of an in-house production practiced by almost all major computer users, the percentages of imported application software in the Region are much smaller today.^{4/} However, the in-house software production is becoming more complicated and expensive. Therefore, the role of ^{the} in-house supply of computer programmes is likely to be gradually substituted for cheaper and more advanced services offered by the fastly developing software houses. The technological and marketing lead of foreign firms, especially those domiciled in the United States, is unquestionable also in this area. Their level of market penetration in the Region seems to be much higher than indicated by official statistics. Some of them have established local software-houses to serve Spanish speaking clients in Latin America. Others dominate "black" markets in the Region.

These trends suggest that even countries like Brazil and Mexico, which have achieved considerable successes in the development of their domestic computer industries, must rely upon external sources of supply of hardware and software products.

The examples of the seller's dominance and abuse of exemption or restrictive clauses by the provider of computer products described in the following sections can be roughly divided into two categories: Those resulting from the unequal

bargaining position of the parties to a transaction and those that can be attributed to the buyer's lack of commercial or legal experience. In many cases, however, both factors are present. A clinical example of such a relationship is a network of contracts existing between I.B.M. and several instrumentalities of the Government of Guatemala. The background of a recent dispute which arose between the multinational and its clients in that Central American country is described below.

2.2. R i s k s i n h e r e n t i n l o n g - t e r m
c o n t r a c t s w i t h a s o l e s u p p l i e r
o f t e c h n o l o g y

At the beginning of 1985 I.B.M. de Guatemala, S.A. had informed its clients from the public sector that the¹ periodic payments due for rented equipment, software and computer services would be increased by roughly 40 percent. Such drastic price increase, allegedly unprecedented in the past, was protested by the representatives of the users. The protesters described the new terms of payments as unjustified and unilaterally decided on the basis of onesided contractual stipulations imposed upon them in the past. ^{5/} They also indicated that the sudden and drastic increase was inconsistent with the course of dealings practiced by the parties in the pas'.

After prolonged negotiations I.B.M. promised to suspend the hike, but by the end of the year the rent ^{the} for equipment, maintenance, software, and services was increased again, that time, by the margin of 70% /!/. The users responded with new protests, while the Government of Guatemala has issued an executive order which empowered a newly established interdepartmental commission to renegotiate the existing hardware, software,

and computer services contracts. Although, as already mentioned, ^{5a/} the commission does not seem to have the power to set arbitrarily the terms of payments with respect to the "old" contracts, it has been given a mandate to promulgate binding model contracts but, again, in consultation with the suppliers of computer technology and services.

The reading of the correspondence between the parties reveal that the options contemplated by the users are limited. Because the great bulk of the equipment and system software used by the public sector in Guatemala belong to I.B.M. and its clients are subject to drastical fiscal constraints, the prospects of rescinding the long term contract and finding an alternative supplier are remote, indeed. On the other hand, even a short term suspension of services by I.B.M. could paralyze the proper functioning of such key government instrumentalities as the Central Bank, Ministry of Finance, Ministry of Defense, public utilities, etc.

It is even more striking that the agreements between the said government agencies and I.B.M. lack standard clauses which usually protect the client against arbitrary actions by the provider of services ~~which~~ has been given the benefits of a long term and privileged position in a country. Almost all government instrumentalities and other public institutions, such as educational and data centers, have given I.B.M. the benefits of a long term, *d e f a c t o* exclusive contract, without requiring in exchange, some forms of protection against exorbitant price increases. The contracts lack, for instance, price escalation clauses providing, for instance, that the rent may be modified upward only to reflect an agreed increase in operating expenditu-

res, costs of labour or increases in Consumer Price Index.

While explaining its consecutive price increases I.B.M. relied upon the contractual stipulations which give the lessor an unrestricted freedom in this area. Furthermore, the firm argued that it is their policy to charge uniform prices for renting equipment and other services on a world-wide basis.^{6/} However, the lessor did not bother to adduce any argument to prove that the level of the rents binding the lessees of Guatemala had fallen so much below that prevailing in the world markets.

In markets dominated by a single multinational or few firms, the clients which have entered into long term supply and service contracts complain that the quality of software and maintenance services rendered by the suppliers is unsatisfactory due to lack of competition. A recent report prepared by Comision Nacional de Computacion of Guatemala states that the relations between suppliers and clients are characterized by unsatisfactory service, pressures, and one-sided dependence.^{7/} The document postulates that representatives of suppliers should be prevented from unduly influencing the decisions of government procurement officers.

2.3. The problems of tie-in agreement and "unbundling" policies

The exporter of a desired hardware equipment may sell it only to those who agree to acquire a second product or a "cluster" of related services. The "tied" products are usually software, peripheral equipment, maintenance, and training services. Depending upon the exporter's economic position, the quality and price of the "tied" and "tying" products, etc., the importer may feel "coerced" by such practices or welcome it.

Under the majority of transfer of technology laws in the Region, the requirements of "unbundling", that is to say separately pricing each product involved in a package, apply *m u t a t i s m u t a n d i s* to offers consisting of hardware, software, and computer services. The purpose of those laws is to enable the importer to compare the commercial terms proposed by the first offeror with those available from its competitors. This gives the offeree an opportunity to buy each separable product from the cheapest supplier. But the implementation of the policies of unbundling in the area of computer products is difficult, indeed.

Firstly, while *a p p l i c a t i o n* and *s u p p o r t* software can be treated as distinct and separate products, there are doubts whether the so called *b a s i c* software should be treated as a separable item. Since the function of the latter is to facilitate the proper functioning of the computer, it can be characterized as an indispensable component of the machine. It is true that the operation of the central processing unit and its interaction with peripheral equipment can be achieved with the help of alternative systems software acquired from other sources than the mainframe manufacturer. In such a case the latter will usually refuse to offer meaningful guarantees of proper functioning of the combination. For similar reasons, the provider of basic software will always blame the equipment rather than his software for any defects discovered during the warranty period.

Second, unless the buyer has its own well trained and versatile technical staff, the practice of acquiring major components of the package from different sources raises problems of compatability of the individual elements. It may also increase the costs of maintenance services. The personnel of leading

computer firms is usually trained to service only its own products.^{3/} In some countries or regions there is only one supplier of services or there is no meaningful choice between competitors.

Third, many interviewees indicated that because of the apparent simplicity of acquiring a full line of computer products from one source some purchasing officers, especially those from the public sector, are ready to accept a whole package, or even welcome it. Such agreements may be characterized as "voluntary", although the importers are "coerced" by such factors as lack of technical and legal expertise to take advantage of the "unbundling" policies, the risks involved in assembling the final product composed of components acquired from different sources, and other valid commercial considerations beyond those just considered.

To sum up, combatting negative effects of tying and taking full advantage of "unbundling" policies depends primarily on the importer's technological and procurement skill, general level of industrial development within the importing country, and other factors discussed above.

2.4. R e s t r i c t i v e c l a u s e s a n d o t h e r c o n t r a c t u a l a s p e c t s o f a c q u i s i t i o n o f s o f t w a r e

Using as the criterion their degree of standardization computer programmes are classified into two broad categories: package software and custom software. The legal and commercial considerations associated with acquisitions of programmes belonging to the two categories are so different that it is appropriate to discuss them separately.

P a c k a g e software embraces programmes aimed at performing standard, pre-determined functions and usable with various types of computers. It is sold to the general public or a class of customers. While the producer of c u s t o m software sells or licences his product to a concrete user to meet the requirements specified by the client, the developer of package software offers it to unknown customers through mass-market distribution centers, without individually, negotiated contracts.

Despite the existing doubts whether computer programmes can be copyrighted or protected under the concept of trade secrets,^{9/} both local and foreign developers of software use the same legal forms of distribution as those practiced in the United States and other developed countries. A buyer of a package software in Mexico or Argentina is usually informed that he or she can use the programme only in accordance with the terms of a written agreement attached to the package. The content of the programme is usually described as copyrighted, trademarked, and/or owned by the developer as proprietary information. The client is requested to accept the terms of the license or to return the product in exchange for the money paid. The typical license contains a plethora of restrictive clauses forbidding unauthorized copying, upgrading or rewriting the programme. After the termination of the agreement, the package shall be destroyed or returned to the licensor or his representative. As a rule, the licensor excludes all liability for infringement of third parties' rights and offers minimal, if any, guarantees that the programme will fit the specified function or meet standards of merchantability.

Although the validity of many contractual clauses described above is questionable, introduction and enforcement of stricter

legal standards upon the developer presents a formidable task. In the meantime, piracy is rampant. Although it contributes to the lowering of prices, it also discourages capital intensive investmentsⁱⁿ software projects within the Region.

The role of procurement and legal staff is much more important in acquisitions of custom software. Here, in principle, the client can specify his technical, commercial, and legal conditions. Again, the findings of the mission confirm that the patterns of contracting are dictated by the suppliers.

In talking with the various users from the public sector it was invariably found that in government procurements the emphasis is always on buying at the lowest initial and direct cost. The procurement officers are usually unable to assign precise values to software support, maintenance services and upgrading capabilities^{there}. In clauses dealing with payments, the suppliers are usually free to increase prices while periodic payments in the form of royalties are not linked with predetermined performance guarantees.

Use restrictions, disclaimers of warranty, short term guarantee periods, and vaguely defined performance tests, start-up and consulting services, ^{10/} are common features of custom software contracts. On the other hand, we found no example of contracts providing for remuneration based upon the concept of diminishing scale of royalties, maximum royalties, ^{or} downward adjustment of price if the user's right to use the programme would be adversely affected by third party rights, etc. Also, the contracts analyzed during seminars and interviews held during the mission show ^{ed} that the client's remedies in case of breach of warranty are drastically limited in time and scope. They

are usually reduced to a best-effort promise to eliminate a "bug", with the exclusion of direct and consequential losses.

As some local users of computer equipment are becoming sophisticated, they place more and more orders with small foreign software-houses. These offer sometimes excellent products at bargain prices. However, such firms are often undercapitalized and their clients are at a critical disadvantage in case of bankruptcy of the former. If such supplier is declared insolvent or bankrupt, its customer runs the risk of having its license terminated by the trustee in bankruptcy and thereby losing access to past or future improvements. The licensee may also lose the benefits of software maintenance, consulting services, etc. To reduce these risks, the client should require the supplier to accept special "bankruptcy arrangements" providing that a copy of the source-code^{11/} and improvements are deposited with a third party who is obliged to release them, as well as to perform additional obligations to the benefit of the creditor. Latin American clients entering into long term contracts with less known foreign software houses should also carefully check the financial background of the potential licensor and the credentials of their representatives.

In one software agreement examined in Mexico, the representative of a potential U.S. licensor described his firm in the explanatory notes as a corporation organized "under the federal laws of the United States". It is well known that the matters pertaining to the creation and organization of corporations are within the exclusive domain of state law. Such presentation of the supplier's corporate identity calls for vigilance and speedy verification.

3. Government Procurement Practices

Public procurement in the field of hardware and software acquisitions has been practiced in varying degrees by all countries in the Region. Government departments and public utilities are among the largest buyers of these products. This purchasing power gives them substantial leverage even in dealing with multinationals. State buying programmes can be used as an instrument of supporting local firms, promoting innovations, and providing the public sector with the best available product at the lowest price.

Although in theory the concept of public procurement offers obvious advantages its implementation, however, is usually far from perfect. First, each government is composed of departments representing often conflicting interests. The identification of the national interest is not easy in practice. Second, preferences offered by state purchasing agencies to selected firms, often exclusive suppliers, may lead to limiting competition and "distortion" of trade. Third, no public institution is immune from the danger of "red tape", incompetence, and inefficiencies.

Among preconditions for successful public purchasing policies in the relevant markets are: /1/ an effective system of interdepartmental coordination, /2/ promulgation of consistent policies and clear guidelines, and /3/ availability of competent procurement staff.

Although in many countries of the Region there are special administrative agencies responsible for policies in the field of data processing and electronics, ^{the} powers and competences concerning public procurement orders, imports, financing, standards, etc. are shared by various state organs. With the possible exception of

Brazil, there seems to be no single coordinating body to turn to for the resolution of an interdepartmental dispute, financial support or professional advice.^{12/}

The lack of interdepartmental coordination in the processes of government procurements of hardware and software was confirmed by many interviewees in the Region. Unnecessary duplication of acquisition of hardware equipment by various ministries seems to be a major problem in several countries there. As a rule, there are no inter-agency authorities that would be empowered to order transfer of equipment between departments or provide for joint utilization of hardware or software. According to an expert opinion in one REMLAC country, the degree of underutilization of the computer equipment used in the public sector ranges from seventy to ninety percent. Another interviewee complained, that several departments of the same government negotiated and acquired independently from each other copies of the same computer programme from the same foreign supplier. Of course, none of the individual buyers was able to fully utilize the product.^{13/}

Even in Brazil, where Secretaria Especial de Informatica /SEI/ has been granted broad regulatory powers in the relevant field, there are no comprehensive guidelines concerning government procurements with respect to automatic data processing equipment, software, and related services. Such specific guidelines by introducing procedures, technical and legal standards could improve the quality and performance of public purchasing organisations thus contributing to better understanding of government policies within the public sector and by foreign suppliers.

The reasons for the advocated scope of regulations are twofold. First, the buyer of hardware or software from a developing country is less familiar with the intricacies of the business than his foreign counterpart.^{14/} Second, because of its technological complexity, social and economic impact in the receiving country, etc., the evaluation of such contracts in the light of the existing transfer of technology laws is not sufficient.^{15/}

Although comprehensive and specific government purchasing regulations could contribute to strengthening the bargaining position of developing countries in the negotiating process by offering their procurement staff more detailed guidelines, they are no substitute for the development of indigenous commercial and legal competence that has to be learned over a longer period of time. Furthermore, the policy of too high technical and legal standards imposed upon the seller may turn out to be counterproductive. Thus, for instance, by imposing sweeping warranty and technical service obligations upon the foreign supplier, the government may trigger price increases over which it has no effective control. Likewise, excessive technical standards or bench-marking.^{16/} requirements in the bidding process for government contracts, may result in increasing the cost of ^{the} bid preparation and eliminating smaller firms, often local ones, from the competition. Studying government procurement procedures and their effects in developed countries may be of significant help in the process of preparation of state purchasing guidelines by governments of the Region.^{17/}

4. The Impact of Legal Environment

Do transfer of technology laws, model software contracts, standards, and laws on protection of computer programmes now in force in the Region have contributed to the strengthening of the bargaining position of those developing countries vis-a-vis foreign suppliers in the relevant markets?

The evidence is not conclusive and even available facts are subject to conflicting interpretations. Some countries of the Region, especially Brazil, Mexico, and Cuba have substantially developed their domestic computer industries. Others, like Argentina have recorded a process of technological regression. Some authors stress the fact that the dramatic process of stagnation of the electronics complex in Argentina took place in the era of "opening the markets" /1976-1983/.^{18/} According to this opinion, during the same period Brazil witnessed an unprecedented growth of its computer industries. In contrast, in the latter country regulatory schemes and government participation constitute essential elements of the national strategy of industrial development.^{19/} On the other hand, the active role of the state coupled with the existence of detailed and even more strict transfer of technology laws in Andean Pact countries have had less beneficial effects on the processes of industrialization in such countries as Peru or Venezuela.^{20/}

These and other examples suggest that government procurement practices and other forms of state intervention, combined with flexible and realistic transfer of technology requirements, if carefully conceived and skillfully implemented, can provide developing countries with effective instruments of strengthening their negotiating capabilities in the technology

acquisition, including hardware and software.

The basic precondition for successful implementation of such policies is availability of well trained personnel. Many interviewees, especially those from the private sector emphasized that detailed transfer of technology laws, which contain numerous p e r s e rules, discourage foreign suppliers, thus creating additional barriers to new sources of know-how.^{21/} According to the opinion of a leading Venezuelan law firm, it would be desirable to change the approach of the transfer of technology authorities so that they should evaluate the pros and contras of a submitted contract in the light of its overall social and economic impact, instead of applying formal legal criteria.^{22/}

The task of implementation of government policies of controlling transfer of technology transactions in the field of computer programmes, especially p a c k a g e software, is very difficult, if not impossible. It should be noted that software may be transferred through modern means of communication i.e. through telephone, which are outside the reach of government authorities. Despite administrative and fiscal measures introduced in Brazil to enforce registration of such transactions, the authorities acknowledge the fact that until today they have been unable to establish effective barriers to the illegal importation of foreign made software^{23/} SEI and INPI have been contemplating promulgation of new guidelines on marketing officially imported software that would give the supplier an opportunity to sell it to clients from the public sector and a degree of legal protection against unauthorized copying.

Representatives of the private sector, including potential users of computer programmes, are of the opinion that their preference for foreign source software offered on the "black

market" is simply dictated by quality and price considerations. According to one opinion, foreign package software is cheaper and superior to locally developed programmes. It should be remembered that foreign software is sold in the countries of the Region on an incremental costs basis or simply copied and distributed without authorization. Apart from Mexico, where programmes are copyrightable, in the remaining countries there are no legal precedents giving the developer proprietary rights in such intangibles.^{24/} As long as the prospective software developer has no assurance that his product can be protected against copying, he is reluctant to invest in this field.

By contrast, some government officials emphasize that patents or copyrights would offer too much protection to foreign firms. Thus, SEI, encourages computer trade associations to study alternative ways and means of protection and "punish", "infringers" by exposing their irregularities, promoting code of ethics, etc. Local producers of software and hardware favour either copyright or hybrid form of protection for computer programmes. They indicate that a simple and cheap system of registration, giving rise to a proprietary interest in the submitted programme, is a precondition of strengthening the incentives for larger investments by domestic firms.^{25/} Some of the persons interviewed indicated that the present situation inhibits inter-regional exchanges of software. On the other hand, there is a considerable consensus that future grants offered to software developers should be limited in time to 5-10 years and take into account legitimate interests of the user /i.e. to allow him to modify the programme/.

5. Professional formation of procurement cadres

As mentioned in Ch.I, the thrust of the secondary and tertiary level educational programmes sponsored by universities, trade associations, and government agencies responsible for the implementation of informatics policies is on upgrading technical and, to a lesser extent, managerial skills of the domestic human resources. Thus, for instance, detailed government directives issued recently in Brazil, Venezuela, and Argentina deal with personnel training principally in the areas of software research, development, and production. SEI /Brazil/ also recommends introduction of graduate curricula in management of software production. But these programmes fail to address the issue of training the cadres of procurement personnel, especially businessmen and lawyers.

Although no systematic evidence was gathered in this respect during the mission, the interviewed representatives of the focal points and ^{those} from the private sector complained that universities offer almost no specialized courses in the relevant fields. There exists a near total lack of ^{information on} the courses, research and theses even in the area of software engineering.^{26/} In Buenos Aires, for instance, when the author of this report asked a representative of the Secretaria de Ciencia y Technica about university lawyers specializing in the field of transnational transactions in hardware and software, he was given the names of two retired professors who were introduced as the only experts among the Faculty. Similar situation prevailed in the other countries, but it is difficult to say whether it reflected the actual curriculum gap or lack of communication between the universities and the institutions visited.

Under the circumstances, the task of upgrading the qualific:

government agencies /i.e. SEI and INPI in Brazil/, focal points, associations of producers of software and hardware, associations of advocates, and such international organisations as CREALC-IB. There is no doubt that the programme of action presented in Ch.2 if financed and supported by UNIDO, would enable the focal point to fill the existing gap in the upgrading the purchasing and legal skills of human resources in the Region.

All highly trained businessmen and lawyers met during the mission have learned their skills while dealing with foreign firms studying abroad or both. Two of them raised independently of each other an interesting point, namely that one of the side effects of their government policies, aimed at minimizing foreign influence, are isolation of the domestic market from competition and offering little marketing /purchasing/ experience to participate in transnational transactions. The former phenomenon is well known, but the problem of what is the optimum degree of protectionism for developing countries is beyond the scope of this study. The latter side effect, which consists in reducing the domestic purchasing /marketing/ personnel's opportunities to learn the art of buying /selling/ in accordance with the rules prevailing in the world markets, should be taken into account while weighing the costs and benefits of economic policies. Thus, for instance, if the domestic system offers little experience how to protect, license or lease software, the more important becomes formal and post-graduate training for cadres which represent government and local firms in dealings with partners from developed countries.

Finally, evaluation of major hardware and software transactions should be conducted by interdisciplinary teams composed of engineers, businessmen, lawyers, etc. The effectiveness of such interdisciplinary approach depends upon mutual understandin

and cooperation among experts from the different fields. The programme of workshops and courses outlined in Ch. 2 is designed to facilitate better communication and exchange of experience among their future participants.

F o o t n o t e s

- 1/ See, for instance H. Nochteff, Government Policies for the Data Processing Industries in Argentina, Brazil, and Mexico, UNIDO, ID/WG 440/7 /1985/; Survey of Government of Policies in Informatics, UNIDO, IF /1984/.
- 2/ H. Nochteff, op.cit., at 38.
- 3/ For instance, Argentina, ib.id.at 8.
- 4/ Acquisitions of software account for 1-3 percent of the total expenditures and for importation of electronic equipment in the countries concerned. Thus, for instance, in 1982 Venezuela imports of computer programmes amounted to 54 millions bolivar representing approximately 2 percent of the total value of imports in the field of electronics. See the source materials identified as Ann. 2 at 41.
- 5/ A letter from the Guatemalan users of computer equipment to IMB of March 8, 1985. Ann. 3.
- 5a/ See, the Guatemalan Hardware and Software Procurement Order of November 21, 1985, discussed in Ch. I, at 6, note 14.
- 6/ Price differentiation between separate markets is a common phenomenon today and, unlike in the field of tangible goods, suppliers of services are not subject to anti-dumping or anti-trust like constraints. Only in cases involving "sales" of services below actual costs, there is a possibility of a potential legal sanction under some legal systems. Such facts are not alleged in the dispute described above. See an IBM letter of IBM World Trade Americas of April 5, 1985, Ann. 4 i n f r a.
- 7/ Annex 9 at 14-17.
- 8/ Ib.id. at 15.
- 9/ Such situation exists, for instance, in Venezuela.
- 10/ Note 7, at 16-17 s u p r a.

- 11/ The supplier usually restricts his client's access to the source-code, thus preventing its modification and upgrading. See, further C. Correa, *The Commercialization of Software*, UNIDO 1985, at
- 12/ But even SEI must coordinate its policies and decisions with INPI, Secretary of Federal Revenue, Central Bank, Ministry of Finance, etc.
- 13/ Unless specifically authorized by an interviewee, the author of this report does not disclose the identity of his source of information.
- 14/ See C. Correa, *op.cit.*, at 84.
- 15/ In a similar context, H. Nochteff criticizes a recent Resolution of the Argentinian Government concerning State purchasing of data processing products stressing that ensuring compliance with existing internal buying laws "does not add any specific preference", which is a precondition for the success of the new programme. *Op.cit.*, at 19. But as mentioned in Ch.I, 1.4. *supra*, the transfer of technology laws in Brazil and Mexico contain special rules governing some aspects of evaluation of software contracts.
- 16/ "Bench-marking" is a requirement in the bidding process whereby the potential supplier is required to prove, by actual computer operation, that its product is capable to perform the ordered function and/or to meet other specifications. On potential anti-competitive effects of this procedure see B. Gilchrist, M. Wessel, *Government Regulation of the Computer Industry /1972/*, at 14.
- 17/ See for instance documents and findings presented by B. Gilchrist and M. Wessel, *ib.id.*

18/ H. Nochteff, op.cit., at 9-10, 43.

19/ Ib.id.

20/ Some of these countries, i.e. Venezuela and Ecuador, have recently liberalized their transfer of technology and foreign investment laws. Compare Decree 656 of June 20, 1985, on Foreign Investment and Transfer of Technology.

21/ Thus, for instance, in Venezuela the list of "forbidden" clauses consists of 23 practices. The legislation of Peru lists about two dozens of restrictive practices and only some of them can be exempted under specific circumstances. Compare Resolution 675-78-NG-EP, of November 24, 1978, sobre contratos de importacion de tecnologia.

22/ An opinion stated in a circular letter of August 15, 1985 addressed by Caracas Law Offices of Matthies, Klahr Zigelboim and Colmenares to their clients.

23/ Recommendations of the Special Commission on Software and Services /1981/, item 4. /Brazil/.

24/ According to information obtained in INPI, there are two pending cases before Brazilian courts that may clarify the legal status of software.

25/ The opinion stated by Mr A. Mesquita, President of the Brazilian Association of Producers of Computers and Peripheral Equipment.

26/ Recommendations of SEI of 1981, note 19 s u p r a.

ANNEX 1.

List of source materials attached:

- /1/ Source materials evaluating perspectives of development of electronics industries in Venezuela obtained from Fondo de Inversiones de Venezuela /pp. 11-45/, Ann. 2.
- /2/ Informe de la Reunion Sobre Informatica en el Sector Publico de Guatemala /1984/, Ann. 9.
- /3/ IBM Letters dated April 5, 1985 and December 6, 1985 /Ann. 4 and 8/.
- /4/ Letters from Banco de Guatemala to IBM dated February 27, May 15, and December 13, 1985, Ann. 5 - 7.
- /5/ Letter from the users of computer equipment in Guatemala to IBM of March 8, 1985.
- /6/ D. Herrera, La Industria Electronica y de Telecomunicaciones y el Desarrollo Tecnologica en el Peru.