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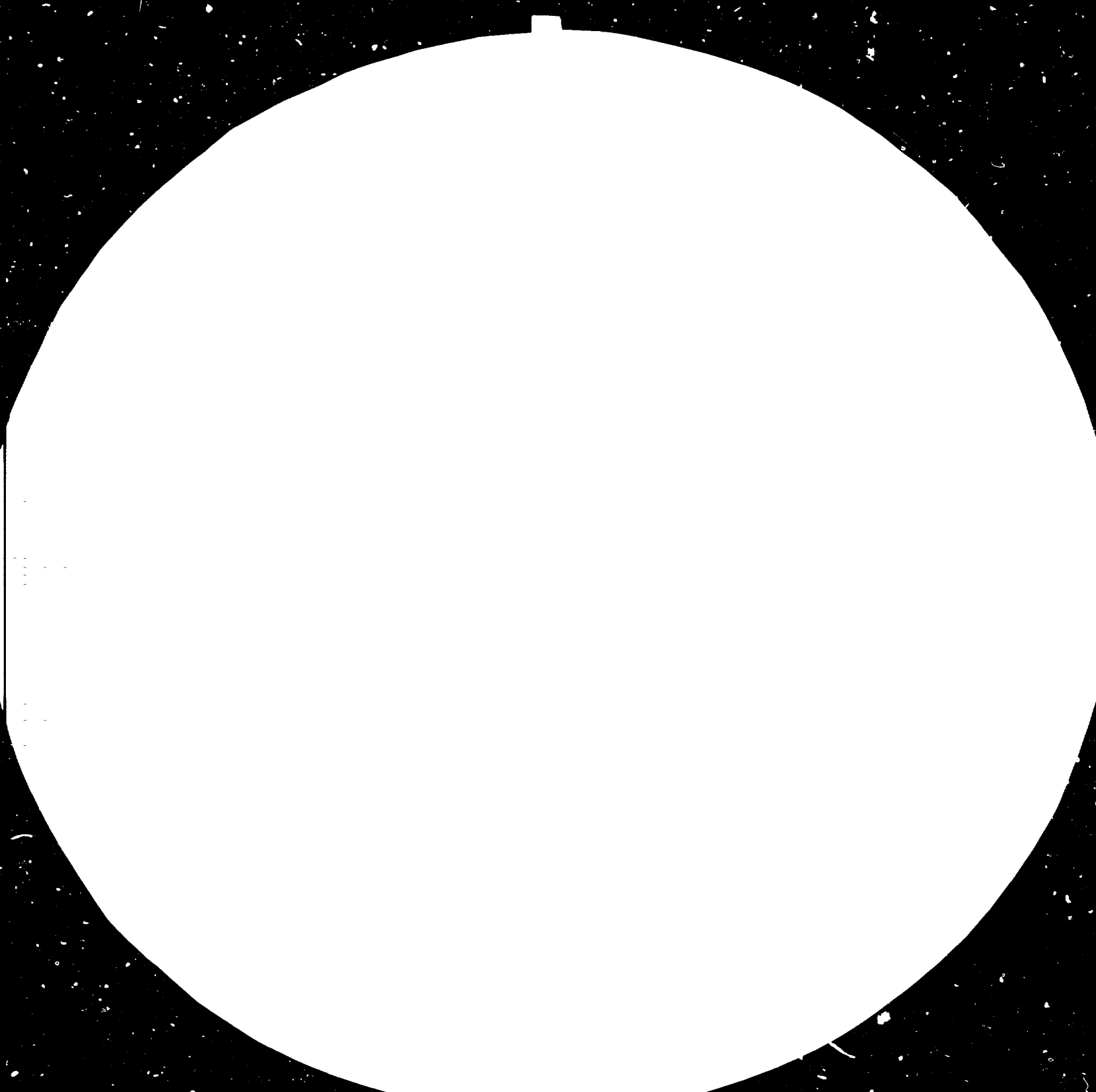
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English

PROSPECTS OF TECHNOLOGY TRANSFER
REGISTRY COMPUTERIZATION *

Prepared by the UNIDO secretariat

82'

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V.83 59260

INTRODUCTION

The paper is the result of a mission to technology transfer registries in Peru, Venezuela, Mexico and Spain.

The mission was intended to assess the status of national efforts to computerize technology transfer registries information systems, to determine the flow of information in each registry visited and evaluate the information exchange feasibility through TIES on magnetic tapes.

The first part of the paper presents an account of the discussion and describes computer facilities visited. This part of the paper is called "Inventory" and enclosed information flow diagrammes drawn for each registry illustrate the discussed subject. It is followed by "Common Features" paragraph and two sets of recommendations - first for programme of computerized TIES co-operation, and second for computerization of national registries.

The paper is supplemented by the questionnaire prepared by UNIDO Secretariat with the summary information of the national technology transfer registries visited.

I. INVENTORY (FINDINGS OF THE MISSION)

1. PERU

The scope of Peruvian Registry Approval Authority covers all collaboration types (see questionnaire) but "equipment repair" and "maintainance agreements". There are guidelines for internal contract evaluation, but there are no guidelines for contract negotiations.

Contract submission is accompanied by an application form (see information flow diagramme for Peruvian Registry). Peruvian Registry does not perform technological evaluation. If necessary, on the individual decision of the General Secretary, technological evaluations are performed by specialized branches of the appropriate ministries (e.g. ITINTEC - for industry, IMARRE - for fishing, etc.).

Peruvian Registry has two main outputs:

- (a) To the Andean Technology Information System (SAIT);
- (b) As a monthly bulletin for public use, governmental press included.

Several quantitative values concerning the Registry have been established:

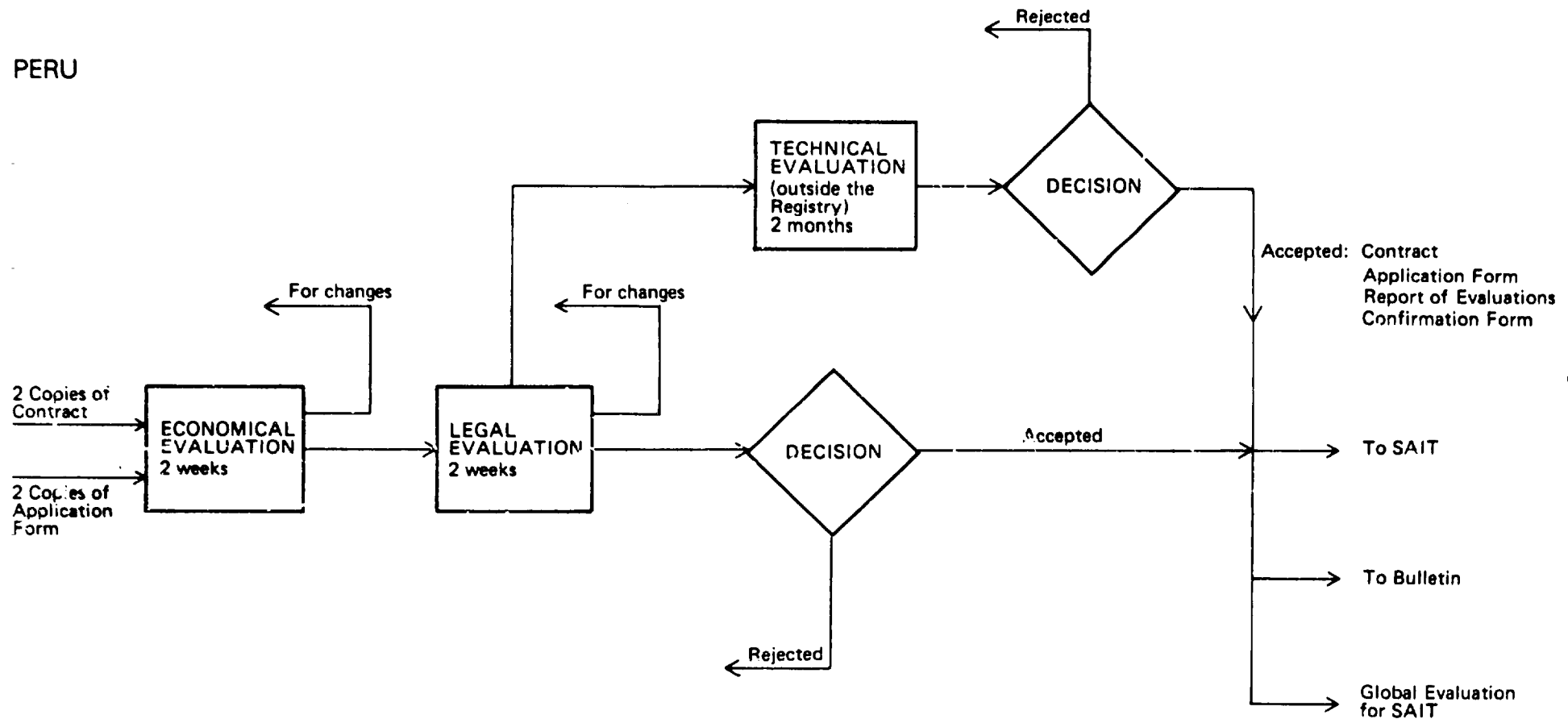
- Approximately 120 contracts/year on input;
- Two weeks delay for economic evaluation and another two weeks for legislative evaluation;
- Approximately 12 staff;
- A three months answering time.

The Peruvian Registry co-operates with SAIT which consists of four informatical networks:

- A. Foreign Investment
- B. International Prices
- C. Technological Transfer
- D. Industrial Property

and several sectoral projects (e.g. food). Each network has focal points of national character in each country of the Andean Group. In Peru, the national

PERU



focal points for SAIT are respectively:

- A. CONITE
- B. Ministry of Economy, Finance and Commerce
- C. CONITE
- D. ININTEC

The input for all four systems is covered by questionnaires. Output is created by rewriting the contents of the questionnaires on another form in a more compact way. These forms are disseminated to Andean member countries.

For TIES, the System III of SAIT is relevant (technology transfer). The input form of the system has been studied in detail and compared with the TIES coding form. There are elements: "Annual sales", "annual production volume", "annual production capacity" requested by TIES and not available in SAIT III, thus to co-operate with TIES the information in SAIT is not sufficient and the national focal point must be asked for additional data.

The computer center is located in the Board of the Cartagena Agreement (JUNAC) building where, in future, the SAIT systems are to be run. It is a small configuration IBM 4331 (1 MB internal memory, 3 drives up to 175 MB), one year old.

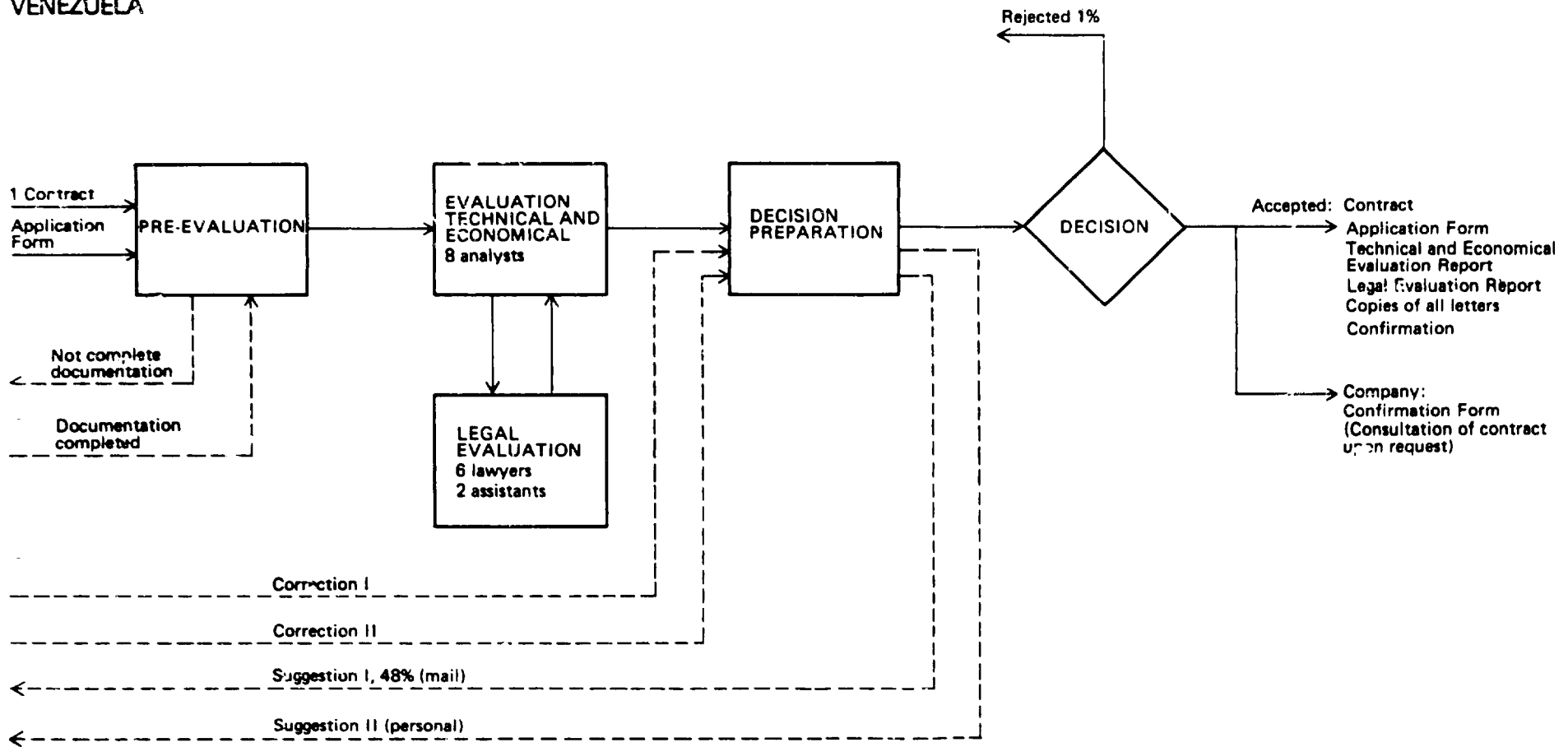
2. VENEZUELA

The Venezuelan Registry Approval Authority covers all types of collaboration except "pre-investment consulting" and turnkey". The Registry has the guidelines on contract negotiation, but guidelines for contract evaluation do not exist in written form. Contract submission is accompanied by an application form.

The Venezuelan Registry has output to TIES and SAIT. Besides these, the special confirmation form is issued after contract acceptance. (See the information flow diagramme for Venezuelan Registry.)

As a result of reorganization, one application form used up to 1983 was substituted by an application form for trademarks only, and a general form for all types of contracts except trademarks. It is possible that in future other application forms will be introduced.

VENEZUELA



The contract is evaluated simultaneously in the Technology and Economics Department (8 analysts, 1 month time after full completion of the application form data) and the Legal Department (6 lawyers, 2 assistants and 3 weeks time).

As a result of evaluation, in 98 per cent of the cases, the contract is sent back to the applying parties to introduce the Registry's suggestions (1 per cent accepted without any amendments, 1 per cent rejected). When the procedure is completed, the following set of documents goes to the Registry: Contract, application form, technological and economical evaluation report, legal evaluation report, copies of all letters exchanged with the applying party, and the special confirmation form.

The average density of the information stream is 210 contracts/year, and an analysis should complete the evaluation of a contract in five working days.

In the Registry, there is a special kind of monitoring the recipient's request for the time when the recipients are going to pay royalties. After presentation of current contract status data, if satisfactory, payment of royalties is authorized by the Registry.

There is a computer unit (two persons), operating since the end of 1981. The system is based on eight Bit Microcomputer 8085 with 208 K Ram, two floppy discs, one Winchester disc of 29 MB, one monitor (Hazeltine 1420) and mosaic printer (Centronics 704), all for roughly US\$ 25,000 - local price. There were complaints that only one person can work with the system at a time.

After contacting the supplier company, Infodata C.A. was explained that using internal memory in partitions up to four users could be connected to the system. For the system exists dBase II (relational) software under which the data base could be established and run.

The dBase II language is a kind of data base management system (DBMS), and it could be utilized for computerization of the Registry in spite of all the limitations resulting from the relatively primitive language of requests (reports) and the small configuration of the system.

Independently, having in mind unification of software for registries in different countries, inquiries about the SIEX possibilities to process data on IBM were undertaken. It was established that in the Ministry of Finance, the supervising organization of SIEX, the IBM 370/148 is used, and in principle the utilization of the IBM for Registry purposes is possible.

3. MEXICO

The Mexican Registry Approval Authority covers: Know-how agreements, trademark licence, patent licence, turnkey, basic and detailed engineering contracts, agreements for management and administrative supervision, franchise agreements and supply of computer software. Neither evaluation nor negotiation guidelines exist.

Contract submission is accompanied by an application form (3 copies of each); eight different application forms are in use. The special Contract Reception Unit (11 employees) verifies the completeness of the submitted documents and, if necessary, with the delay of one day, sends the documents back (by mail) to the interested recipient company. It expects to receive them the second time in 15 days. (See the information flow diagramme for Mexican Registry).

When completeness is warranted, the contract is passed independently to the Technological Evaluation Unit (15 analysts), the Economical Evaluation Unit (8 analysts), and the Legal Evaluation Unit (10 lawyers). All evaluations are expected to be completed within 45 days. The technological and economical evaluation reports are sent to the Legal Unit where a decision is reached.

If Mexican companies only are involved in the technology transfer, the evaluations are limited to the legal one only.

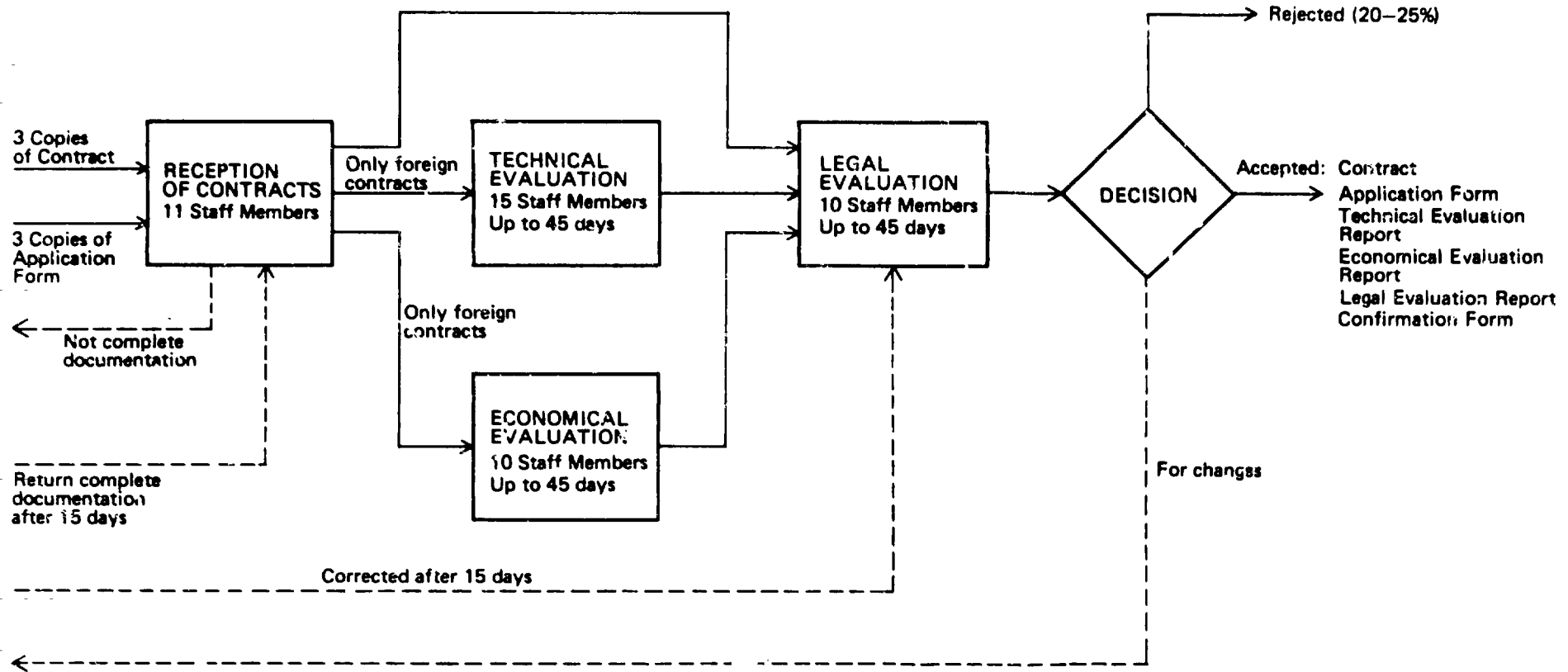
Usually, the applications are either rejected (up to 25 per cent) or sent back to the applying companies for introduction of the Registry's suggestions. The Registry sends back the contracts by mail and expects to have them in the final form within 15 days. If unsatisfactory, the procedure could be repeated several times, and the personal contact of the Registry employees with the interested company is possible.

The accepted contract has a file in which the contract, application form, three evaluation reports and confirmation forms are included. The copy of the contract with confirmation form is sent back to the applying company.

The average flow of contracts is 2000 per year, and after introducing the new law increased by 20 - 25 per cent a year.

Further contacts with the applying company could be (including monitoring) of three different types:

MEXICO



- Once a year, the recipient company is obliged to present to the Register the statement of the contract's progress. If the statement is not presented, a reminder may be sent, but also in this case, the Registry has the power to declare the contract invalid.
- On the Registry as well as on the company initiative, inquiries on all conditions of the contract could be performed. They are performed by Registry employees and the report presented.
- The company could request from the Registry technical and/or economical assistance in the form of consultancy. The consultancy is offered by the special unit of the department and is based not only on information collected in this department but mostly on experts' knowledge and experience.

4. SPAIN

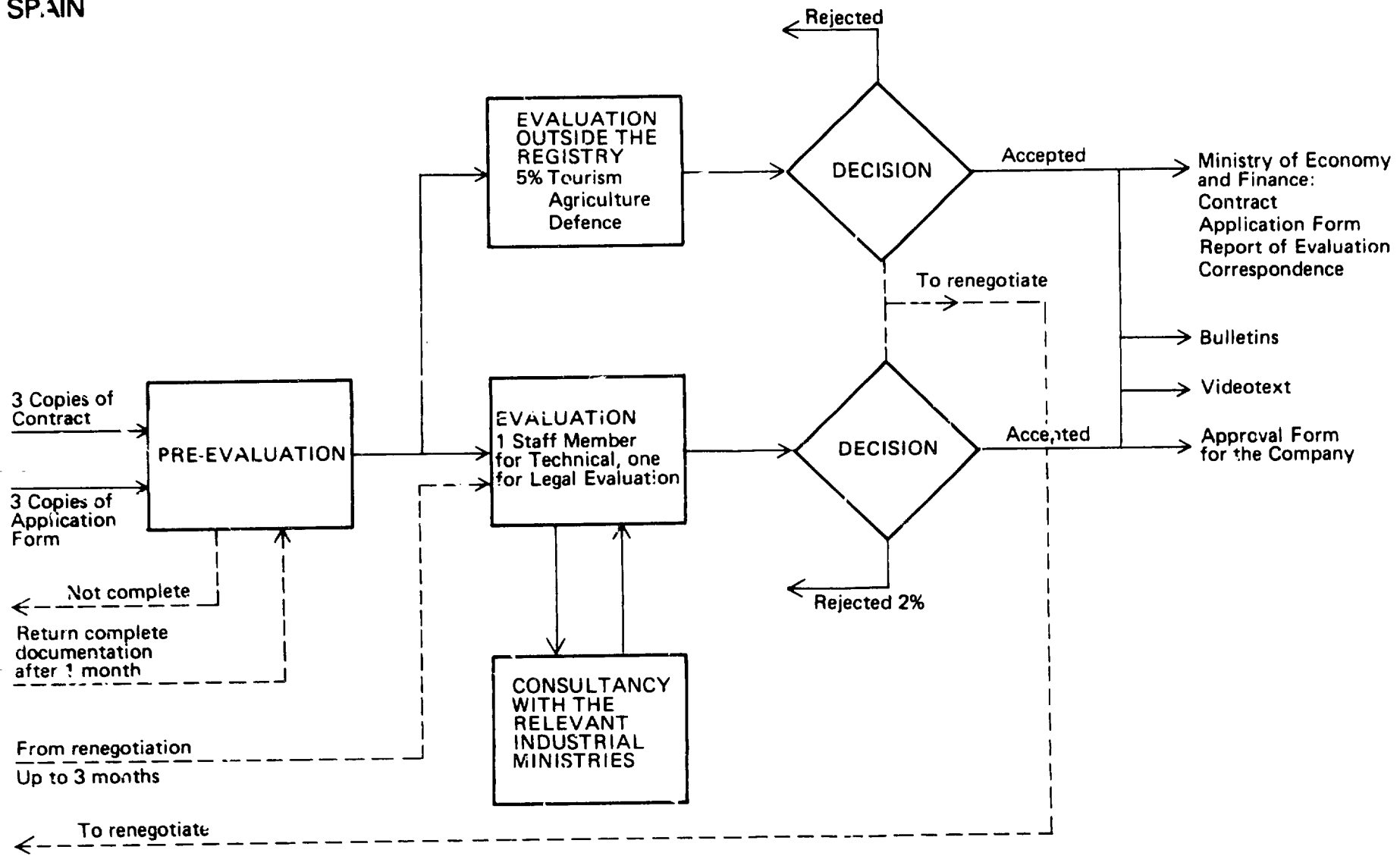
The Spanish Registry Approval Authority covers all types of collaboration. The Registry does not apply any particular guidelines. It uses directly terms of law regulations. A contract submission is accompanied by an application form. (See the information flow diagramme for Spanish Registry).

The Spanish Registry performs the evaluation in the transfer subjects which concern technology, but in subjects concerning e.g. agriculture, defense, tourism, the decision of transfer approval is reached in the relevant ministries, and the Registry performs only office duties. Even in cases concerning industrial subjects, the Registry asks opinions of relevant industrial ministries, but in this scope the decision is its own.

The Spanish Registry has several outputs:

- In monthly published bulletin "Economia Industrial", the pages called "datos registrales" informing of the new contracts and naming both side companies;
- TIES;

SPAIN



- National research information system;
- Videotext as a public means of information.

Several quantitative values concerning the Registry has been established:

- Approximately 800 contracts/year;
- Up to three months delay in the inside registry evaluations;
- Approximately 15 people as staff (2 lawyers, 2 economists, 1 engineer).

Special monitoring is used on the request of the interested Spanish recipient, in a case of the transfer technology acceptance prolongation. The Registry acceptance is limited in time (usually two or three years; maximum five years). After this time, in case of the recipient company's willingness to prolong the contract, the renewed Registry acceptance is needed. The company supplies to the Registry the same (as in a new case) application forms amended by on special sheet comparing the planned and achieved results. Only after consideration of application by the Registry, the extension of the approval may be granted.

The Registry has on-line access from screen-key monitor as a terminal through dedicated line to IBER 2000 computer. This computer is in use since June 1982, and through the terminal approximately 600 documents were introduced. However, on magnetic tapes there are approximately 5000 documents from the period 1973 - 1979, and approximately 2500 documents from 1979 - 1982. The data introduced in each of these three periods differs. As the older formats include the new one it is possible to standardize and transfer data to the new format. The management of the Registry reached the decision to follow this line but it is not clear when it will be performed.

Checking the compatibility of the new format with the TIES format, it was stated that in the Registry format there were no:

- Foreign holding (at least explicit);
- Recipient type (as above);
- Currency code, as all data are in pesetas;
- Currency multiplier;
- Production unit;
- Minimum royalty fee;
- Annual production capacity

and the collaboration type is in different code. The computer is located in the CDTI (Centro para el Desarrollo Tecnológico Industrial). It is the IBER 2000, microcomputer system Spanish language adapted. It has 128 K BYTE internal memory (expandable), hard disc 65 M. BYTE fixed and 13 M BYTE exchangeable, one magnetic tape station, one line printer 300 lines/min. five terminals - one (in the Registry) connected by MODEM and four local, four TV for videotext. The type of work is time-sharing with priorities and that is the main reason for the long response time observed at the Registry terminal, as the priorities are not with the outside terminal processes. As software, there are Basic and DRMS. The cost of the system is approximately US\$ 80,000 (paid locally in pesetas).

II. COMMON FEATURES

In spite of the fact that the tasks performed by visited Registries are similar and the organizational structures are alike, the detailed informational contents of the registries differ substantially.

The set of forms constituting the input of the system consists of:

1. Contract;
2. Application form or forms;
3. In many cases response forms for registry monitoring activity.

The bases for TIES (and also the most important input for the own Registry computerization) is application forms. Its contents is related to the scope or Registry approval authority (see the questionnaire) and differ substantially from one Registry to another. The "common denominator" which could be found is limited to basic information (names of companies, subject of transfer etc.) and usually is not sufficient even for supplying the full information needed in the now-in-use TIES form.

Informational output from the Registries is extremely limited, but it should be realized that it follows from the initial main goal for which the Registries were established i.e. approval functions. Thus, they have been planned rather to collect and store information than to disseminate it.

With the exception of the Spanish Registry all others are not computerized, but the Venezuelan Registry created already its own technical basis for future computerization while two others have computerization in their development plans. In all cases, considering the number of contracts already stored and the density of contract admission, as well as the complexity of internal (comparison purposes) and external (information for outside policy-makers) requests, the computerization of the Registries is sensible.

The existing situation has also its advantages. All of visited Registries are more or less now adjusting the contents and forms of stored information to the actual needs, reorganizing the structure (Venezuela) introduces new application forms (Mexico) or rewriting the existing files on magnetic tapes (Spain). There may be still time to establish from UNIDO side methodological assistance aimed at unification of forms, as partly standardized input form containing all information elements is needed for international co-operation. Once computerized any change in input is extremely time and manpower consuming.

The following recommendations are:

1. TIES (internationally) oriented;
2. REGISTRY (locally) oriented.

III. RECOMMENDATIONS FOR TIES CO-OPERATION

Computerization of TIES does not necessarily commence on time when all Registries have their computers or utilize ones. It should be rather understood as a programme in which each member state Registry could participate increasing its involvement according to its needs and available funds. Thus the programme should be a general frame of co-operation aimed at final computerization. Taking into account the cost effectiveness trend of computerized information systems the computerization of Registries seems inevitable. However, in the initial phase of the programme the basis for information exchange must be established.

Initial Phase

The aim of the initial phase of the programme should solve two problems:

1. What minimum set of data must be (even manually) collected in member state Registries, (e.g. it could be a set of data foreseen in TIES II A);
2. What will be computer format of the data (not necessary for today, but for future use).

The forum on which these two strategic decisions should be reached is international. It should be prepared as the result of "legal" expert group recommendations (concerning the first problem i.e. the minimum set of data). The second expert group recommendations (information and computer specialist group) should propose the solution for the second problem (i.e. format). The work of the second group should be based on the legal expert group results and take into consideration ISO standards. It should be noted that the recommendations of the legal expert group do not limit in any sense the scope of information collected in each national registry, as only the minimum set is determined. Any above minimum data could be collected by each Registry for its internal (or regional) use.

The second group recommendations however should be prepared in a way which would allow the extension of data structure above the minimum level (i.e. to create possibilities to computerize all information collected in each country).

Phase One

Phase one could start with one operating central computer service answering the registries requests and disseminating information according to the registry established profiles. It should be noted that the minimum set of data need not necessarily be introduced to the computer. Actually introduced data could be limited to names of companies, subject of technology transfer and other data enabling the further contacts of interested parties (e.g. address, telex and telephone numbers) - all which is called address information. It should be noted that the minimum set concerns the data is only collected in all registries and not necessarily constitute the input for computer system. The minimum set (not necessarily computerized) is collected for:

1. Answering the detailed requests generated internationally by computerized address information. The requests for factographical information, generated by computerized address information would be sent to registries by mail from the interested users of the address information;
2. For future use on higher phases;
3. For the internal use in the country.

Phase Two

Phase two begins when besides the central computer there are other computers in Registries (at least one other) but without on-line links between them. It should be noted, that all Registries without computer, perform activities as in phase one. (They are in phase one). In phase two, at least the minimum set of data is introduced in all computers. Information sent to central computer from Registries being on phase two is recorded on magnetic tape and contains the minimum set.

The requested profile information originated from computerized registry and available from central computer for all participants of system (also being in phase one) is not only the address information but consists of minimum set previously delivered to the central computer in the form of recorded tapes or discettes. It is sent from central computer by mail in the form of computer printouts.

Phase Three

In phase three are all Registries which have computers connected on line to the central computer. As a result for the Registries in phase three no mailing is needed and both files of central and registry computers could be searched and exchanged. One way (i.e. from a registry to the central computer) effect of the phase three could be obtained also with the on line terminals located in Registries.

It should be noted that other Registries could act at the same time in phase two or one.

Further possibilities, when all registries have their own computers connected on line (network without central computer) are not discussed as too remote.

IV. RECOMMENDATIONS FOR NATIONAL REGISTRIES COMPUTERIZATION

Computerization of national Registry is the last step in the process of ordering the flow of registry information. Before even the determination of information flow the structural organization of the Registry should be finally established. The organizational structure results from functions of the Registry and the existing constraints (e.g. manpower). However, in the

structure should be foreseen, whether a registry is computerized or not, as an organizational unit dealing with storage and retrieval of stored information. The unit could be called "information unit" and the word "information" refers to the stored registry information i.e. the unit is not performing any substantial task (e.g. evaluation) but only receives from other substantive units documents in previously established form. The task of the information unit is to classify, store and retrieve the Registry information. Without a computer the unit staff does the necessary processing themselves. With a computer the staff takes care of input and output information, while the processing is performed by a computer. Without a computer the traditional manual files are used; with computer information stored in the computer memory. In both cases the staff is responsible for proper storing of information, such, that any performed information search gives relevant (only that which is needed) and full (all that which is needed) information.

Before the computer is introduced it is recommended to split the staff responsibilities into:

- (a) Input activity;
- (b) Output activity.

In the simplest (two staff members) case it means that one staff member performed all activities relating to preparing the information for storing (e.g. proper classification) and storing it properly (keeping files in order) while another, dealing with the already stored information prepares answers and reports to incoming requests.

Later, when the computer has been introduced, the input activity ends on preparation computer readable media, while output activities begin with computer printouts. It should be underlined that proper organization of these activities is even more important than computer processing itself. Input activities must be connected in efficient ways to activities of other registry units while output activities are the implementation of registry co-operation with information users as well as internal (the Registry) and external (e.g. Ministries, Companies, TIES).

Introducing computer processing usually one of two options should be chosen:

1. Terminal processing, using processing facilities of a computer (usually big one) outside the Registry;

2. Stand alone computer (usually mini or micro)
which is located in the Registry.

The first solution could be recommended when computer facilities are already available in the organization to which the Registry belongs. In this solution no cost of purchase of equipment and employment of programmers are borne. However, the quality of computer services available may be of low grade (as it is now the case of the Spanish Registry). Also the confidentiality of data, usually the important factor may be endangered. Taking into account the above and the reasonable price of small computer systems (approx. US\$ 50,000) usually sufficient for processing all Registry's data, stand alone computer is rather more recommended solution. It involves however the employment of a programmer unless in small Registry the staff, which takes care of input as well as of output, runs the computer operations themselves respectively.

Before purchasing of a computer system, a detailed study should be undertaken to determine its configuration and software requirements. The deciding factors for the choice of configuration are:

- Number of documents already stored;
- Information structure of the documents;
- Foreseeable density of incoming documents in the future (number of documents per year);
- Type and complexity of information requests;
- Expected response time;
- Media on which output information is to be presented.

The list is not complete and gives only the outline of factors which should be considered.

With the observed diversity of functions in visited Registries, each case should be considered individually to find the best computer system fulfilling the Registry informational needs. Thus the more detailed computer choice recommendations are hardly reasonable. However, the procedure to introduce computer facilities is common to all Registries and could be summed up as follows:

1. Determining the structural organization or Registry for computerization;
2. After discussion with all involved parties (including UNIDO's representative) establishing the set of Registry data to be introduced into the computer system;
3. Checking whether minimum data set are included into the Registry data to be computerized;
4. Preparing the input pre-computer forms of all data being introduced (including length of records and type of contents - alfanumerical, numerical, logical).

Having checked these and practically verified the computer could be selected, installed, the data base structure generated and, after verification, filled up with data to be used in everyday Registry information activity.

Questionnaire on Technology Transfer Registries Information Systems

I. Approval Authority ^{1/}

- a. Country:
- b. Authority:
- c. Address:
- d. Scope of Approval Authority in Terms of Collaboration Type:

- P - Peru
V - Venezuela
M - Mexico
S - Spain

	<u>Yes</u>	<u>No</u>
Leasing Agreements	P,V,S	M
Know-how Agreements	P,V,S,M	
Trademark Licence	P,V,S,M	
Patent Licence	P,S,M	V
Preinvestment consulting	P,S	V,M
Turn-key	P,V,S,M	
Construction or set-up	P,V,S,	M
Basic Engineering Contracts	P,V,S,M	
Detailed Engineering Contracts	P,V,S,M	
Contracts for Management of Construction Set-up	P,V,S	M
Contracts for Start-up Supervision	P,V,S	M
Contracts for Production Supervision	P,V,S	M
Equipment Repair and Maintenance Agreements	V,S	P,M

^{1/} Authority or secretariat of approval authority for technology transfer contracts, i.e. Foreign Investment Institute, Technology Transfer Board, etc.

	<u>Yes</u>	<u>No</u>
Agreements for Management and Administrative Supervision	P,V,S,M	
Marketing Agreements	P,V,S	M
Training Agreements	P,V,S,	M
Franchise Agreements	P,V,S,M	
Supply of Computer Software	P,V,S,M	
Consultancy Agreements	P,V,S,	M
Others (please enumerate)	(V) Distribution Agreements	
	<hr/>	
	<hr/>	

<u>Sector ISIC</u>	<u>Yes</u>	<u>No</u>
Agriculture, Hunting, Forestry and Fishing	V,S,M	P
Mining and Quarrying	P,V,S,M	
Manufacturing	P,V,S,M	
Electricity, Gas and Water	P,V,S,M	
Construction	P,V,S	M
Wholesale and Retail Trade and Restaurants and Hotels	P,V*,S,M	
Transport, Storage and Communication	V,S,M	P
Financing, Insurance, Real Estate and Business Services	P,V,S	M
Community, Social and Personal Services	V,S	P,M
Activities not Adequately defined	P,V,S	M

V*) only wholesale and retail

II. Legislation/Administration Order

a. Technology Transfer Regulation
Law in Force

Law: P: Dec. 24^o
V: Dec. 24,84
S: Dec. 2343/73

Decree: P: 18900 V: 2442
Leg. 71 746,476
S: Order 5.12.73 - 20.7.81

- | | | | |
|----|--|-----------------------|-----------|
| b. | Does legislation in force refer to confidentiality with respect to activities of approval authority. If yes, quote concerned para of legislation and explain scope of confidentiality. | <u>Yes</u>
P,V,S,M | <u>No</u> |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
-
- | | | | |
|----|--|-------------------|------------------|
| c. | In addition to legislation, do there exist administrative orders concerning confidentiality of approval authorities activities. If yes, please quote number and date of order. | <u>Yes</u>
V,S | <u>No</u>
P,M |
| | | | |
| | | | |
| | | | |
| | | | |

Note: Please attach full text of legislation and administrative orders referred to under a, b and c.

III. Contract Evaluation

- | | | | |
|----|---|-----------------|--------------------|
| a. | Do there exist written guidelines for internal contract evaluation? | <u>Yes</u>
P | <u>No</u>
V,S,M |
| | | | |
-
- | | | | |
|----|--|-----------------|--------------------|
| b. | Do there exist written guidelines for contract negotiations? | <u>Yes</u>
V | <u>No</u>
P,S,M |
| | | | |

		<u>Yes</u>	<u>No</u>
c. Territory:	Production	P,V,S,M	
	Sale	P,V,S,M	
	Use	V,S,M	
d. Payments:	Royalty	P,V,M	S
	Lumpsum	P,V,M	S
	Other		
e. Duration:		P,V,S,M	
f. Restrictions:	Tie-in	P,S,M	
	Tie-out	P,S,M	
	Package/licensing	V,S,M	P
	Post expiration royalties	V,S,M	P
	Price fixing restrictions	P,V,S,M	
	Quantity or volume restrictions	P,V,S,M	
	Other	M: Art 15,16	
g. Guarenty and waranty provisions:		P: yes, V: some comments,	
		M: Art 15,16	

	<u>Yes</u>	<u>No</u>
h. Governing Law	P,V,S,M	
i. Arbitration	P,V,S	M
j. Others (please specify)	M: Art 7 ^o 15 and 16	
	<hr/>	
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	<u>Yes</u>	<u>No</u>
V. Is contract submission accompanied by submission/application form. If yes, does application form include:	P,V,S,M	
a. supplier/recipient company:		
- capital structure supplier company		P,V,S,M
- overseas subsidiaries of supplier company		P,V,S,M
- equity linkage (or any other supplier/recipient)	S,M	P
- capital structure recipient	P,V,S,M	
- productive sector(s) of recipient company	P,V,S,M	
- contracts previously concluded with same technology suppliers	P,V,S	M
- contract previously concluded with other technology suppliers	S	P,M
- number of employees of the recipient company	P,V,S,M	
- research facilities of the recipient company	S,V	P,M
- others (please specify)	<hr/>	
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b. Information requested on:

- | | | |
|--|---------|-----|
| - patent registration | P,V,S,M | |
| - trademark registration | P,V,S,M | |
| - history of ownership
of technology acquired | P,V | S,M |
| - other (please specify) | | |
| | | |
| | | |

c. Payments

- | | <u>Yes</u> | <u>No</u> |
|--|------------|-----------|
| - yearly expected payments
over duration of contract
(by contract) | P,V,S,M | |
| - payments forecasts | | |
| - other(s) (please specify) | | |
| | | |
| | | |

d. Economic aspects

- | | | |
|---|---------|-------|
| - project financing | V | P,S,M |
| - employment generation | P,V,S,M | |
| - competition | P,V,M | S |
| - production estimate | P,V,M | S |
| - estimated net sales value | P,V,S,M | |
| - estimated exportation of product
produced as percentage of total sales | P,V,S,M | |
| - estimated cost of production | P,V | S,M |
| - estimated profits before tax | P,V,M | S |
| - other (please specify) | | |
| | | |
| | | |

<u>Technology</u>	<u>Yes</u>	<u>No</u>
- alternative considered technologies and reason for selection	P, V, M	S
- certification of capability of technology supplier		P, V, S, M
- description of technology acquired in relation with production process	P, V, S	M
- origin and cost	M	P, V, S
- accompanying importation of:		
- machinery	P, V	S, M
- raw material	P, V	S, M
- quality control specifications	P, V	S, M
- cost of research and development recipient company		
- annual	V, M	P, S
- expected	V, M	P, S
- others (please specify)	<u>V: Nature of products</u> _____ _____ _____ _____	

VI. Please describe in detail other sources of information like national economic statistics, technology information banks, international sources used for the evaluation of technology transfer contracts.

P: only SAIT V: SAIT also Mexico, Brazil, Argentina

M: other Ministries

VII. Monitoring

Yes

No

- a. Does the registry require a periodic report from the recipient
- b. If VII (a) is positive, please describe major elements of monitoring report

VIII.

Does the registry produce information on/or has access to:

Yes

No

- a. average royalties by sector
 - national
 - international
- b. foreign holdings by sector
 - national
 - international
- c. supplier country by sector
 - national
 - international
- d. supplier companies by sector
 - national
 - international
- e. collaboration types by sector
 - national
 - international

P,V,S

M

V

S,M

P,V,S

M

V

S,M

P,V,S

M

V

S,M

P,V,S

M

V

S,M

P,V,S

M

V

S,M

	<u>Yes</u>	<u>No</u>
f. duration by sector		
national	P,V,S	M
international	V	S,M
g. total payments authorized by sector		
national	P,V,S	M
international	V	S,M
h. average licensor share of expected profit (LSEP) by sector		
national	V	P,S,M
international		S,M
i. alternative technology suppliers		
national	V	P,S,M
international	V	S,M
j. local technology suppliers	V	S,P,M

k. other (please describe) _____

IX. Kindly indicate which set of information produced under VIII is for internal evaluation purpose, for TIES or external other than TIES using the following sample table.

	Manage- ment	Evalua- tion	Mori- toring	TIES
a. average royalties by sector	S	PVS	PV	SV
b. foreign holding by sector		VS		
c. supplier country by sector	S			SV
d. supplier companies by sector	S		V	SV
e. collaboration types by sector	S	PS	V	V
f. duration by sector		PV	PV	V
g. total payments authorized by sector	S	PVS	V	SV
h. average licensor share of expected profit (LSEP) by sector		PV		
i. alternative technology suppliers		PVS		S
j. local technology suppliers		PV		V
k. other (please describe)				

X. Present status of information flow in the approved authority
(brief description to be attached)

	<u>Yes</u>	<u>No</u>
manual	P, V, S	M
mechanized		S, M
computerized	S	V, M

Attach input/output of information system and information as to the type of computer used.



