

Systems Affecting Technology

The fourth and final part of a report by UNIDO of systems regulating technology inflows in selected developing countries

BY SECRETARIAT OF UNIDO

(EDITOR'S NOTE: Other installments of this extensive and highly significant report were published in the March, June, and September 1982 editions of Les Nouvelles.)

Turkey

Criteria for evaluating technology transfer agreement:

All agreements on technology transfer are evaluated from the commercial, financial and industrial points of view.

In evaluating the project, the Ministry of Commerce takes into account the novelty of the technology to be brought into the country, the increase in production capacity that can be expected as a result, and the minimum export output (usually 15% anticipated).

The State Planning Organization (SPO) and particularly its *ad hoc* Foreign Investment Committee, taking into consideration the findings of the Ministry of Commerce, undertakes a detailed project evaluation to determine the project's compliance with development planning, its effect on employment, and its economic viability. The SPO also undertakes consultations as to the technological content of the project with Ministries concerned, and especially with the Ministry of Finance.

The Ministry of Finance applies the following criteria:

(a) The period of agreements should not exceed five years (for extension, the approval of the responsible authorities should be sought).

(b) The royalty rate should not be more than 4% gross.

(c) The agreement should be implemented in accordance with the Turkish Law.

(d) No lump-sum payment should be made.

(e) Taxes and other dues are to be paid in Turkey from the royalties of the licensor.

(f) The current exchange rate is applicable at the time of transfer (no guarantee of exchange rate).

(g) Payments are to be made in a convertible currency.

(h) The local firm should be able to continue production without the use of a foreign registered mark after the termination of the agreement.

(i) The know-how should not be limited to certain restricted fields but should also include possible

improvements over the period of the agreement.

(j) No export restrictions should be placed on the sale of the product produced in Turkey under license.

(k) The licensor warrants should include a provision that the production by the licensee will be of the same quality as that of the licensor.

(l) The net sales price should be taken as the base for computing royalties, and all packaging, transportation, insurance, taxes, and the import price should be deducted from it.

(m) The technicians of the licensor visiting Turkey should not be paid beyond what they receive to cover the costs of accommodation, daily subsistence and transportation.

(n) In case of conflict, the arbitration of the Paris International Chamber of Commerce should be sought.

The Ministry of Industry and Technology, and in particular its Industrial Department, carries out the bulk of the economic and technical screening of the agreements. Here, in consultation with the Department of Science and Technology and the Industrial Property Section, contracts are screened from the technical and economic points of view. Internal guidelines (unpublished) have been elaborated for evaluating the agreements. The following elements are taken into consideration:

(a) Whether similar technology is already being used in the country.

(b) Whether the technology has novelty subject matter of the agreements.

(c) To what extent it will increase foreign-exchange earnings, create employment and raise income.

(d) What the share of foreign inputs in the total output of a particular project is.

Prohibited Provisions

The following types of provisions are not permitted in agreements:

- Limitations on exports.
- Tie-in requirements.
- Price fixing of final and intermediate products.
- Annual minimum royalties.
- Overly high payments in relation to the value of the technology.
- Restrictions on use of local raw materials, spare parts and components.
- Unjustified quality control.
- Restrictions on production and export.
- Restrictions on use of technology after expiration of agreement.
- One-sided grant-backs.
- Restrictions on use of trademarks.

The following provisions should be included in all agreements:

EVALUATION AND APPROVAL PROCEDURE BASED ON LAW 6224

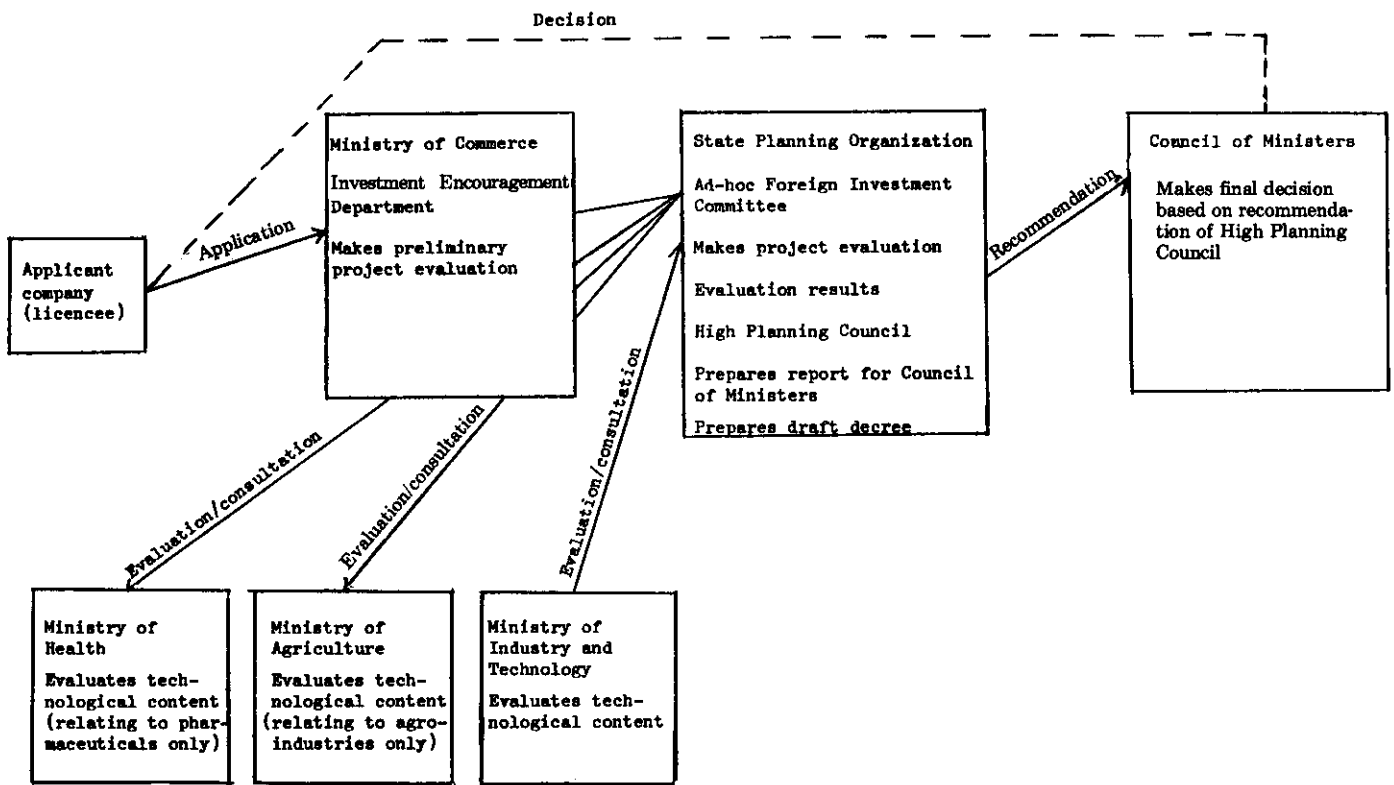


FIGURE I

EVALUATION AND APPROVAL PROCEDURE BASED ON DECREE 17 FOR SIMPLE TECHNOLOGY LICENSING AND KNOW-HOW AGREEMENTS

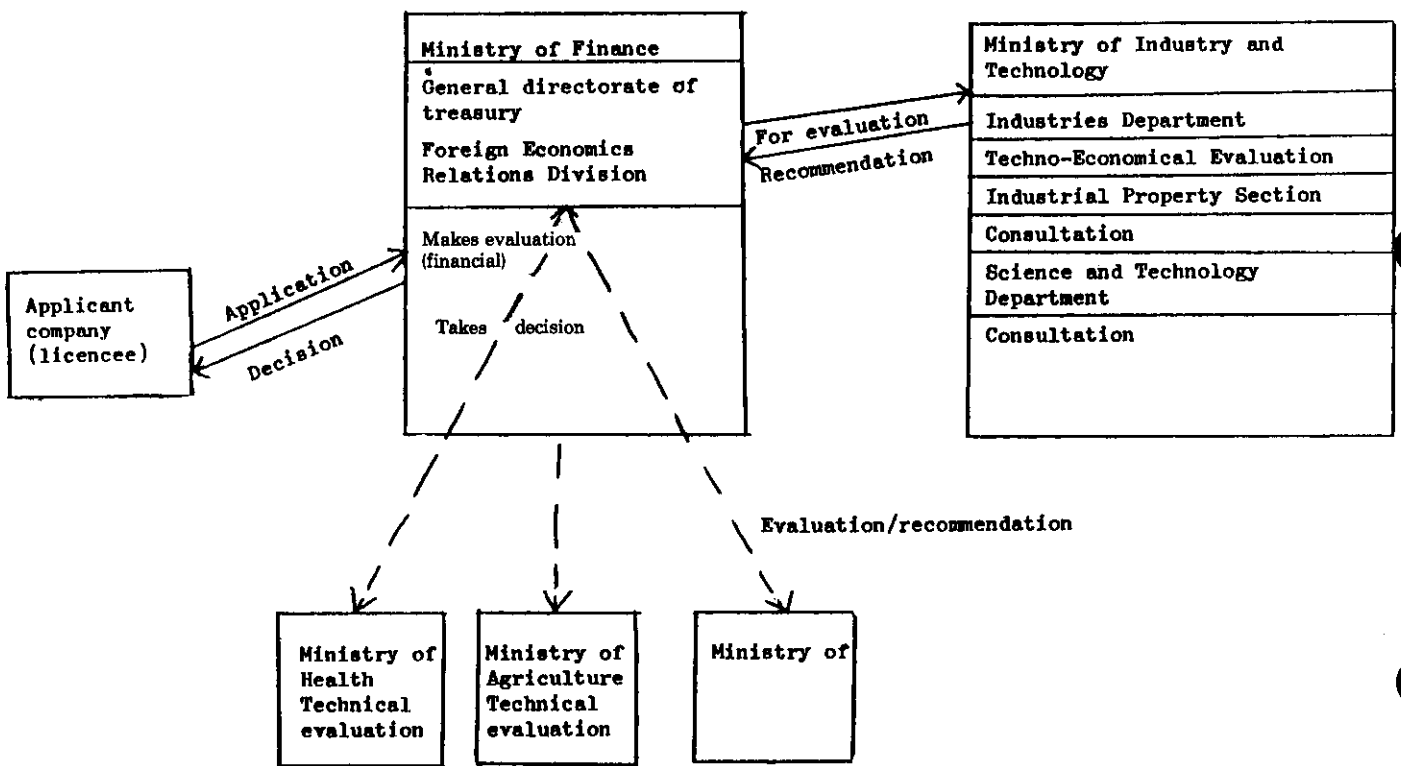


FIGURE II

(a) Duration of contracts should not exceed five years.

(b) The licensor should warrant the validity of patents and the defense against third-party infringements.

(c) Each party should have the right to terminate a contract prior to notification.

(c) The maximum royalty rate is 3% on net sales.

(e) The licensor should guarantee that the quality of products manufactured by the licensee will be the same as that of his products.

Preference should be given to a licensor with a large network of licensees. When comparing the checklist of the Ministry of Finance with that of the Ministry of Industry and Technology, the similarities are obvious.

Procedures

According to Law 6224, a local entrepreneur wishing to import technology is obliged to submit a special application in quintuplicate to the appropriate department of the Ministry of Commerce. After a preliminary evaluation by the Ministry of Commerce, the application, in quadruplicate, is passed along with comments to the State Planning Organization for final assessment and recommendations. On the basis of the organization's assessment, the Council of Ministers issues a decree published in the government gazette concerning a particular case which is the formal basis for the beginning of projects and illustrate procedure described above.

Arab Countries

Iraq

Criteria for importing technology:

The government gives priority to the petroleum and petrochemicals industries in its industrial and economic development. Technology transfer transactions are evaluated as follows:

1. A prefeasibility study on the project is made by technical and economic personnel in the organization and sent to the Ministry of Planning.

2. Technical experts in the Ministry of Planning reevaluate the project. If it is approved, the Ministry of Planning makes a feasibility study on optimum capacity and selected processes.

3. When the project's feasibility has been determined, the steering committee for planning examines the study. If the project falls within the authority of the committee, the committee approves it, including the technical tract according to country policy.

4. If the capital investment is more than the amount the committee is authorized to deal with, the project is sent to the country planning board for approval.

In the evaluation, the main focus is on the commercial and economic terms and the technical superiority of the project over what exists in Iraq. There is no definite procedure to follow, but the evaluation is made based on experience and circumstances. In the future, a definite procedure will be established.

Imported technology plays a secondary role in Iraq's industrial development. In principle, no foreign investments are permitted, and at the moment there is only one joint venture. Turnkey deliveries represented

in the period 1970-1974 about 20% of all new plants established, and 10 import licenses were issued during 1970-1976.

Kuwait

Criteria for importing technology:

Government priorities for industrial and economic development are new industries apart from petroleum, banks and trade and foreign investment.

There are no specific guidelines for evaluating technology transfer transactions. Each case is analyzed separately, mostly by consultants.

In the period 1970-1976, Kuwait issued 940 import licenses and 4,069 trademarks.

Promotion of Foreign Investors

Extracts of Decree 6 of 1965 are given below.

Article 14: Upon the recommendation of the Industrial Development Committee and after the approval of the Council of Ministers, the Minister of Commerce and Industry may:

(a) Exempt the industrial firms that have been registered or granted a permit in accordance with the law from all existing taxes, including income tax or any other tax that may be imposed in future, for a period not exceeding 10 years from the date of the issue of the permit or registration or from the date of the commencement of production;

(b) Exempt the following imports from customs duty:

- i. machines, equipment and spare-parts required by the industrial firm;
- ii. raw materials and semi-processed goods required by the industrial firm for production purposes;

(c) Raise the rate of customs duty on imports similar to local products for a period not exceeding 10 years, provided that local products shall be satisfactory in terms of quantity, quality and consumers' interests. Nevertheless, the Minister of Commerce and Industry, upon the recommendations of the Industrial Development Committee, may decide to extend the validity of the high rate of customs duty for more than 10 years if economic circumstances demanding continuation of local industry protection arise.

(d) Exempt the export of the local industry products from all export duties and taxes.

Article 15: The owner of any industrial firm complying with the provisions hereof, may:

(a) apply for the allocation of a plot of land and such applications shall be submitted to the concerned authorities responsible for the allocation of these plots of land after agreement of the Minister of Commerce and Industry;

(b) obtain from the Ministry of Commerce and Industry on application, all information, statistical statements, technical maps, exploration results and other studies and researches relating to any specific industry which may be of interest to the applicant provided that these be available at the Ministry.

Article 16—The state may contribute financially toward the costs of studies and researches carried out by the owners of industrial projects for the purposes of setting up modern industries, in order to find out whether these industries prove to be successful and prospective, subject to the recommendations of the Industrial Development Committee and the approval of the Minister of Commerce and Industry.

Should the project prove to be successful the owner of the project shall bear all costs of studies and research, but should it prove to be a failure the state shall then bear one half of these costs.

Article 17—In case of setting up of new industries, the owners of the industrial firms shall, after the approval of the Minister of Commerce and Industry, have the right of priority to obtain loans from the Savings and Credit Bank, which shall determine the terms and amounts of the loans.

Article 18—Preference, with regard to government purchases, shall be given to local industry products provided that these products prove to be equivalent to the foreign products from the point of quality, sort and the prevailing prices at normal economic conditions.

Morocco

Criteria for importing technology:

Government priorities for industrial and economic development are farming and agricultural industry and the export of finished products.

What little was spent on indigenous research and development over the period 1970-1980 was mainly for the phosphate industry.

Promoting Foreign Investments

Foreign investment is seen as a vehicle for technology transfer. Certain conditions must be met by investors. The production equipment of the investment project must have a value of at least DH 100,000 net of tax. The enterprise must belong either to Moroccan citizens or to a corporation at least 50% of whose capital belongs to Moroccan citizens.

The main incentives given to foreign investors are:

- 248 1. Exemption from customs duties on equipment, machinery and materials whether imported or locally acquired.
- 2. Complete exemption from products tax on equipment, machinery and materials whether imported or locally acquired.
- 3. Complete exemption from professional profits tax during the first 10 years of operation for firms locating in the provinces of tanger Tetouan, Al Hoceima, Taza, Nader, Qujda, Kasr El Souk, Ouarzazate, Tarfaya and in the Circle of Essaouira.
- 4. Reduction of professional profits tax by 50% for other areas, with the exception of the prefecture of Casablanca.
- 5. Guaranteed transfer of dividends.
- 6. Guaranteed retransfer of capital invested by foreign investor:
 - i. of the share of capital brought into Morocco in the form of, or through the use of, clearing accounts;
 - ii. for the share of capital brought in Morocco by debit of capital account and invested for a minimum of five years;
- 7. Reimbursement of 2% of the interest charge on loans approved by the National Bank for Economic Development. For all investments exceeding DH 30 million further concessions may be granted by special agreements negotiated with the government.

Saudi Arabia

Criteria for importing technology:

No specific criteria have been drawn up; each case is handled separately. Government priorities for industrial and economic development are the petro-

chemical industry and downstream products and agricultural industry.

Amount of technology imported:

Imported technology plays a major role in Saudi Arabia's economic development. Little was spent on indigenous R&D during the period 1970-1976. Technology transfer takes place mostly through foreign investments in the form of turnkey deliveries. Before 1970, 143 plants were acquired from abroad, whereas during the period 1970-1979 the number increased to 1,026. Foreign investment accounts for about 20% of total capital investment, and joint-venture projects represent about 90% of all plants.

Sudan

Criteria for importing technology:

Policy guidelines for technology transfer reflect government priorities for industrial and economic development. The main priorities are to satisfy basic human needs and to achieve an average annual gross rate of GDP of 8,57% with an annual increase in *per capita* of 6% in real terms.

License agreements are rejected if they contain restrictive clauses. The following, however, are not considered to be prohibited restrictions:

- 1. Limitations on the degree, extent, quantity, territory or duration of exploitation of the subject of the patent.
- 2. Limitations justified by the interest of the licensor in the technically flawless exploitation of the subject of the patent.
- 3. Use the obligation imposed on the licensee to abstain from all acts capable of impeding or preventing the grant of the patent or prejudicing its validity.

Assessment of the role of imported technology:

Imported technology is of primary significance for Sudan's economic development. Indigenous research and development are limited and highly concentrated on infrastructure and services. Most research and development work is done in production units and less than 10% in institutions of higher learning (see Table 1).

Expenditures for Research and Development during 1973-1974

Area	Productive Sector Integral	Prod. Sec. Non Integral	Higher education	General services
Advanced technology	23,896	423,878	-	8,000
Industrial productivity technology	15,840	-	600	-
Infrastructure & services	24,350	1,461,000	-	146,149
Agricultural technologies	-	-	4,380	444,516
Advanced Communication services	-	-	-	156,516
Natural science and engineering	48,000	-	11,542	53,376
Social sciences	70,494	-	7,295	112,101
TOTAL	182,580	1,884,878	23,617	920,658

Table 1

Thus, most industrial technology must be imported from abroad. The principal means of technology transfer are turnkey deliveries. During the period 1970-1977 Sudan imported 624 plants with a total capital investment of 632,3 million LSd. The bulk of this import, terms of both number of units and value of investment was directed to light industries—textiles and food. These are the largest branches of industry, employing in the period 1970-1977 90% of all in the public sector (see Table 2).

Turnkey deliveries, 1970 - June 1977

Industry	Plants			Capital investment (millions LSd)		
	Private	Public	Total	Private	Public	Total
Textiles and bags	220	12	232	140.7	108.8	249.5
Food	184	7	191	38.3	214.8	253.1
Basic metals/ Engineering Electricity Chemicals and fertilizers	96	-	96	20.1	-	20.1
Leather and plastics	56	1	57	10.7	90.0	100.7
	46	2	48	5.7	3.2	8.9
Total	602	22	624	215.5	416.9	632.3

Source: Ministry and Industry and Mining Data Act of 1974.

Table 2

It is estimated that during the period 1976-1985, 31 industrial units will be imported for the public sector, with a total capital investment of LSd 360. As in the previous years most of the imported technology will be directed to the textile and food-processing industries (see Table 3).

Turnkey deliveries for the public sector

Industry	Units (number)	Capital investment (million LSd)
Sugar	3	100
Textile	15	105
Food processing	8	5
Kenaf	2	20
Cement	1	25
Tanning	1	5
Fertilizer	1	100
	31	360

Table 3

Turnkey deliveries are supplemented by import of licenses. Over the period 1970-1976 Sudan acquired 462 licenses.

Foreign capital plays a minor role in the transfer of technology. During the period 1970-1976 only two projects were reported to have foreign investment—a foundry and an oil refinery.

Tunisia

Policy guidelines for evaluating technology transfer transactions:

No distinct criteria relating to technology transfer alone exists. Rather, they evolve from the goals of government industrial policy, which are full employment and food market equilibrium.

The evaluation procedure differs depending on whether the technology is transferred to the public or the private sector. In the case of the government sector, a technical committee draws up the criteria for evaluating the technology according to project and the imported technology.

In the case of the private sector, enterprise indicates

to the owner of the technology the guidelines he will use in evaluating the technology after the approval of the Ministry of Commerce and the Central Bank.

Incentives

Investment classification and financial incentives/Law 73-74 of 1974/:

Article 7—Licensed or unopposed investments are classified into one of the categories of Article 9 below according to the number of permanent jobs they create. They are entitled to the benefits of Article 11 and 12 of this law.

They are also entitled to the advantage of Articles 15, 16 and 20 hereunder, according to the following criteria:

—Project location.

—Export percentage within the sales figure (turnover) after tax.

—Value added of the product to be manufactured.

Article 8—Excluded from the classification and therefore ineligible for the benefits and guarantees of this law are investments made for equipment renewals, those creating fewer than 10 permanent jobs, and those including less than 30% in capital stock.

Article 9—The investments referred to in Article 7 above are classified into five categories:

Category A - investments creating 10 to 20 permanent jobs.

Category B - investments creating 21 to 50 permanent jobs.

Category C - investments creating 51 to 100 permanent jobs.

Category D - investments creating 101 to 150 permanent jobs.

Category E - investments creating more than 150 permanent jobs.

Article 10—A job is considered permanent when it secures at least 280 workdays per annum.

Article 11—The investments referred to in Article 9 above are entitled to the following benefits:

1. Payment of a fixed fee for the registration of the instruments incorporating the enterprise.

2. Taxation relief on income or profits when reinvested in the capital of the enterprise. Such tax relief, which may be granted only to the original subscriber, is based on half the value of the stock warrant and is applied to:

-A maximum of 30% of the overall annual income in the case of natural persons who are liable for personal income tax.

-A maximum of 50% of the annual profits in the case of corporate bodies which are assessed for the tax on profits from trade and manufacture or the tax on profits from non-commercial professions.

3. Exemption from customs duties and turnover taxes on imported capital goods which are necessary for production. Such an exemption is granted for non-Tunisian-made capital goods.

If the enterprise purchases capital goods on the domestic market from producers, it is entitled to the exemption from turnover taxes.

It is also entitled for its local purchases from non-producers, to the reimbursement of customs duties and turnover taxes already paid on imported capital

goods, under the same conditions as those laid down in the legislation for exporting industries.

With respect to Category A investments, the exemption is limited to 25% of the customs value of imported items.

Article 12—The investments referred to in Article 9 above are also exempted from the proportional corporate income tax for the first five years of actual operation of the enterprise, in the following proportions:

- 40% of taxable profits for Category A investments.
- 60% of taxable profits for Category B investments.
- 70% of taxable profits for Category C investments.
- 80% of taxable profits for Category D investments.
- 90% of taxable profits for Category E investments.

The enterprises benefiting from the above exemptions are also exempted from the business license fee during the same period.

Article 13—In cases of additional job creation during the exemption period provided for in Article 12 above, the investments classified in one of the Article 9 Categories shall be reclassified in accordance with the new number of employees and for the rest of the exemption period.

At the end of the period of exemption from corporate income tax, as per Articles 12, 14, 15 and 16 of this Law, the enterprises which create additional jobs shall benefit from a reduction in the said tax in proportion to the increase in the number of jobs, during the preceding three years, provided the new reduction does not exceed 20-25%.

This reduction is applicable to the year in which the increase in the number of jobs has been established.

250 Article 14—An expansion taking place during the exemption period of Article 12 above entitles the enterprise to the reclassification benefits for the rest of the period, after which the enterprise is entitled—for the rest of another period of five years starting with the expansion investment—to the benefits of the category corresponding to the number of jobs created by the expansion.

Expansion investments to be made upon expiration of the exemption period of Article 12 above are eligible for classification in accordance with the criteria of Article 7 of this law and entitled to the corresponding classification benefits. With regard to these expansion investments, the exemption from corporate income tax is based on overall cumulative profits. However, the exemption is reduced by 75%.

Article 15—Licensed or unopposed investments to be made in the territorial zones which will be determined by decree, will benefit from the provisions below, over and above their classification advantages:

1. Payment of fixed fees for the registration of deeds on capital increases.
2. Exemption from corporate income tax for one additional year under the same conditions as per Article 12 above.
3. Exemption for the first five years of actual operation from the Stockholder's Tax on the profits distributed to shareholders and to partnership shares issued for the establishment of the enterprise, provided such profits do not exceed annually 6% of the nominal value of the stock certificates.
4. Allowance for interest rate on loans for the financing of the investment, not to exceed 5%.

5. Investment subsidy not to exceed 10% of the total investment, exclusive of the working capital. This subsidy does not come into the computation of the minimum percentage of capital stock required for the classification of the investment.

6. Payment of the costs of infrastructure works in accordance with the decree referred to in paragraph one of this Article.

Article 16—Licensed or unopposed investments to be made with a view to exporting more than 10% of the overall sales after tax, during the first five years of actual operation, entitle the enterprise to the exemption from corporate income tax for one additional year under the same conditions as those of Article 12 of this Law, over and above their classification benefits.

Algeria

An agency following continuously the execution of contracts in Algeria does not clearly exist. This task is done, for every company, at the ministry level, but no overall retrospective analysis is done which would allow to capitalize past difficulties and solutions. The work which is done in many corporations abroad, by the licensing division, on a significant number of contracts aimed at finding their weaker points and discovering means to avoid them, need to be done in the Algerian Government with the double purpose of finding concrete solutions to problems and of training a number of professionals apt to benefit from the rich experience the country is currently going through.

The acquisition of foreign technology is performed mainly in the form of turnkey projects or under a most recent formula called "performance-guaranteed". But an important effort to develop local technical capacities takes place, aimed at the growth of the productive capacity, the design and the management capacity, at the same time.

EUROPE

Portugal

Criteria for Technology Importation as per recent legislation/Law 348/77/:

Article 5—1. The appraisal of transfers of technology shall take into account, primarily, not only their possible effect on the national economy but also the scientific and technological capacity already available in Portugal, such as the availability of research and consultancy services, including engineering, in departments, centers, institutes or companies both public and private.

2. Specific guidelines or criteria for appraisal and authorization purposes may be established for a certain sector, branch of activity or product by means of a joint order of the Minister of Planning and Economic Coordination and the minister responsible for the sector concerned and these shall be taken into account by the Institute.

3. The National Board for Scientific and Technological Research shall keep the Institute informed of the existence in Portugal of those departments, centers, institutes or companies engaged in technological research and its application.

Article 6—1. Agreements for the transfer of technology shall contain:

(a) A detailed description of the nature of the transfer and of the practical form it will take as well as the type, form and amount of payments envisaged.

(b) An indication of the period for which the agreement is to remain in force.

(c) A guarantee that the recipient of the technology concerned will be kept informed of all or any improvements introduced into it during the agreement period unless such improvements are patentable or constitute an invention.

(d) An indication that components, spare parts and services related with the technology concerned will be supplied at the request of the recipient of the technology as well as an indication of the terms governing the supply thereof.

(e) A statement to the effect that the selling price of goods and services will be fixed at levels not exceeding those in force on the international market whenever transactions in such goods and services between the supplier and the recipient of the technology are envisaged.

2. Whenever transfers of technology include rights protected in the country receiving the technology by means of patents, trade names, models, drawings or other legal forms of industrial property, the agreement shall include the following:

(a) A detailed list of the ownership of the titles to the industrial property involved;

(b) An indication of the time scale for the use of the rights conferred by means of the titles referred to in the above paragraph.

3. Agreements for the transfer of technology shall include, whenever possible, appropriate programs for training personnel.

Prohibitions

Article 7-1. In agreements for the transfer of technology, particularly those governing relations between foreign companies and their branches in this country, the following clauses shall not be permitted:

(a) Those which tie the provision of technology to the acquiring of capital goods or of intermediate products and other technologies from a specific source.

(b) Those which oblige the purchaser of the technology to transfer free of charge to the seller all or any inventions or improvement arising from the use of the technology concerned.

(c) Those which restrict the volume and structure of production.

(d) Those which either directly or indirectly restrict markets to which the importer of technology could have access.

(e) Those which limit the distribution channels to be used if such limitation is harmful to the buyer of the technology or to the economic and commercial policy of the country.

(f) Those which reserve to the seller of the technology the right to fix the selling or resale price of products incorporating such technology.

(g) Those which insist on the predominance of a foreign language in the agreements for interpretation purposes.

2. In cases where the transfer of technology assumes special interest for the national economy,

agreements containing one or more of the clauses listed in the preceding paragraph may be authorized.

Article 28-1. In agreements for transfer of technology, particularly where these regulate relations between foreign firms and their branches in this country, the following clauses shall not be permitted:

(a) Those which tie the provision of technology to the acquiring of capital goods or of intermediate products and other technologies from a specific source.

(b) Those which oblige the purchaser of the technology to transfer free of charge to the seller all or any inventions or improvements arising from the use of the technology concerned.

(c) Those which restrict the volume and structure of production.

(d) Those which either directly or indirectly restrict markets to which the importer of technology could have access.

(e) Those which limit the distribution channels to be used if such limitation is damaging to the buyer of the technology or to the economic and commercial policy of the country.

(f) Those which reserve to the seller of the technology the right to fix the selling or resale price of products incorporating such technology.

(g) Those which insist on the predominance of a foreign language in the agreements for interpretation purposes.

Data on technology import

No annual statistics are available on payments arising from licensing agreements. However, a study of 152 companies conducted by the Ministry of Finance revealed that in 1972 these payments amounted to Esc 211,903,000, of which Esc 129,635,000 related to manufacture under license and the licensing of technical processes; Esc 42,061,000 to the registration of patents and Esc 42,207,000 to research and/or experimental work. The values recorded by the Bank of Portugal for patents, trade names, models, drawings, inventions and copyrights amounted in that same year to a total of Esc 293 million.

More recent statistics on payments made through the banking system point to a rise to Esc 500 million in 1976. However, it may be assumed that expenditure on the import of technology has risen significantly since then.

It may be concluded that Portugal's technological requirements cannot be solved through license agreements.

The purchase of capital goods abroad seems to be one of the most important means of acquiring technology not only for small and medium companies but also for certain activities entailing high levels of investment.

This is confirmed by the conclusions reached in the medium- and long-term plan which reads as follows: "In the case of most industries, the ratio of imported equipment to total equipment used is higher than the percentage that was established for the purpose of identifying the dependence on imported inputs. This reveals high widespread technological dependence despite the fact that the value of the imported capital goods in the total imports is not very high /20% in normal periods/".

To evaluate the freedom of action of the licensee, study of the Ministry of Finance was focused specifically on detecting restrictive clauses of the following types: prohibiting or restricting exports; making the use of trade names compulsory; placing limitations on the supply of raw materials and capital goods and on the use of the technology; obligations relating to new products; predominance of a foreign language for purposes of interpretation.

The total number of restrictive clauses found in the 1949 agreements under examined consideration was 82, which is negligible. The most common were clauses forbidding or restricting exports, and these appeared in 36 agreements. In 27 agreements a foreign language was to prevail for purposes of interpretation.

As for the restrictive clauses by sector of activity, agreements in the chemical sector were found to contain 18 and those in the metallomechanical sector 23.

In sum, a total 1,494 agreements were signed by 474 companies, which reveals a highly concentrated demand for foreign technology, 10 of these companies were responsible for 173 agreements.

Seven of the companies, responsible for 89% of the agreements, are large public corporations engaged in fundamental sectors.

Considering the number of companies existing in Portugal, and the fact that 474 companies referred to above are among those having the highest technological standard, it may be concluded that the foreign technological requirements of the small and medium companies have not been provided for.

252 Despite the fact that Portugal is essentially an importer of technology, 35 agreements to supply technology to foreign countries were signed in the last four years. This means that Portugal's technology is now on an international standard in certain sectors such as pharmaceutical products; rolling stock; shipbuilding and repair; oil refining; air transport and engineering and other technical services.

Spain

Criteria for technology importation:

"For the purposes of the provisions of Article 5 of Decree 2343 of 1973, the Ministry of Industry or the Ministry competent to deal with the matter shall make a comprehensive evaluation of the situation of the sector and of the features of the process and the product for which the technology covered by the contract is to be used, in relation to the rights and obligations which the parties assume under the contract."

In this comprehensive evaluation, provisions of the following types shall be among those regarded as unfavorable terms or aspects of the contract:

1. Provisions which prohibit, impose conditions on, or limit the use of the recipient's own technology or the acquisition of technology from other sources, or the use of nonpatented special knowledge on the expiry of the contract, or which impose conditions on or limit research, innovation and technological development by the recipient.

2. Provisions for the obligatory transfer of the patents, improvements or innovations introduced or developed by the recipient after acquiring the technology covered by the contract.

3. Provisions for the transfer of technology in

packages which include unnecessary parts or components or in respect of which there is proved to exist an available domestic supply of equivalent quality and reliability; provided that such parts or components are technically separable from the other considerations covered by the contract.

4. Provisions for the transfer of technology which is wholly or partially obsolete, insufficiently competitive or deficient for other similar reasons or by reasons of an obligatory standardization or typification of quality incompatible with the standards established by Spanish law, unless the product is intended primarily for markets in which such standards and qualities are required.

5. Provisions prohibiting, imposing excessive geographical restrictions on, or not expressly authorizing in respect of specific areas, the export of goods produced by the recipient, and provisions obliging the acquisition of raw materials or components and other intermediate goods or equipment from the transferer or supplier specified in the contract.

6. Provisions establishing minimum levels of activity or limiting the freedom of the recipient to determine features of production in respect of levels, model, competitive articles, prices and terms or entitling the supplier to fix unilaterally the prices of the goods produced by the recipient.

7. Provisions imposing conditions favorable to the interests of the supplier on the sale in the domestic market of goods produced by the recipient, and obliging the recipient to form an exclusive relation with the supplier or to use brands registered by the supplier in Spain.

8. Provisions obliging the recipient to sell, under conditions contrary to the interest of the Spanish economy, to the supplier or to specified third parties goods produced with the assistance of the transferred technology.

9. Provisions giving the supplier a right, not acquired previously by other means, to intervene in, control or impose conditions on the business management of the recipient or his strategy of expansion or diversification.

10. Provisions requiring payments appreciably higher than that normally charged in the market in similar situations, or minimal co-part services when the payments are based on fees proportional to the various levels of activity.

11. Provisions establishing payments in the form of fees proper to the level of production without deduction of the value of product components imported and incorporated in the production process to which the acquired technology is applied, or without excluding invoicing lines of goods not affected by the acquired technology.

12. Provisions establishing payments based on fees above the line of activity of the recipient, where he is a subsidiary of the supplier and his share of the supplier's authorized capital exceeds 50% or where the supplier of the technology has furnished raw materials or intermediate products used in the process in quantities exceeding 30% of the total cost of the product, or where the recipient of an advisory or project developing enterprise and process technology not transferred for activities in which the process is continuous.

13. Provisions "overpricing" (charging a difference between the prices agreed on in the contract and those charged on the international market by the supplier or his principal competitors) for supplies, materials and equipment associated with the process of technology transfer and obtained from the transferor or from suppliers specified in the contract.

14. Provisions fixing an unsuitable duration, either too short or too long, for the contract or its direct consequences, or providing an automatic extension of the contract and fixing payments for a period longer than the life of the patents involved.

15. Provisions stipulating that where the contract has been drawn up in a language other than Spanish the foreign-language version should prevail in its interpretation.

OTHER COUNTRIES

Nigeria

The Decree No. 70¹ of September 24, 1979, lists the restriction provisions that will keep the technology agreements from being approved and subsequently registered.

Article 2, Section 6—The Director shall not register any contract or agreement where he is satisfied that it falls within any of the following specifications, that is to say:

(a) Where its purpose is the transfer of technology freely available in Nigeria.

(b) Where the price or other valuable consideration therefore is not commensurate with the technology acquired or to be acquired.

(c) Where provisions are included therein which permit the supplier to regulate or intervene directly or indirectly in the administration of any undertaking belonging to the transferee of the technology and are, in his opinion, unnecessary for the due implementation or execution of such contract or agreement.

(d) Where there is an onerous or gratuitous obligation on the transferee of the technology to assign to the transferor or any other person designated by the transferor patents, trademarks, technical information, innovations or improvements obtained by such transferee with no assistance from the transferor or such person;

(e) Where limitations are imposed on technological research or development by the transferee.

(f) Where there is an obligation therein to acquire equipment, tools, parts or raw materials exclusively from the transferor or any other person or given source;

(g) Where it is provided that the exportation of the transferee's products or services is prohibited or unreasonably restricted or where there is an obligation on such transferee to sell the products manufactured by it exclusively to the supplier of the technology concerned or any other person or source designated by the transferor.

(h) Where the use by the transferee of complementary technologies is prohibited.

(i) Where the transferee is required to use permanently or for any unconscionable period personnel designated by the supplier of the technology.

(j) Where the volume of production is limited for sale and where resale prices are, in contravention of the Price Control Decree 1977 or any other enactment relating to prices, imposed for domestic consumption or for exportation.

(k) Where the transferee is required to appoint the supplier of technology as the exclusive sales agent or representative in Nigeria or elsewhere.

(l) Where the contract or agreement is expressed to exceed a period of 10 years or other unreasonable term where this is less than 10 years.

(m) Where the consent of the transferor is required before any modification to products, processes or plant can be effected by the transferee.

(n) Where an obligation is imposed on the transferee to introduce unnecessary design changes.

(o) Where the transferor, by means of quality controls or prescription of standards, seeks to impose unnecessary and onerous obligations on the transferee.

(p) Where there is provision for payment in full by the transferee for transferred technology which remains unexploited by him.

(q) Where there is a requirement for the acceptance by the transferee of additional technology or other matter, such as consultancy services, international subcontracting, turnkey projects and similar package arrangements, not required by the transferee for or in connection with the principal purpose for which technology is to be or has been acquired by him.

(r) Where the transferee is obliged to submit to foreign jurisdiction in any controversy arising for decision concerning the interpretation or enforcement in Nigeria of any such contract or agreement or any provisions thereof.

(3) Notwithstanding the foregoing provisions of this section, in any case where the council is satisfied that it would be in the national interest so to do, it may direct the director to issue a certificate to an applicant notwithstanding any divergence between the terms and conditions of a contract or agreement and the specifications laid down in subsection (2) above.

(4) Where the parties, on the direction or advice of the director, subsequent to a refusal by the director to issue a certificate or registration, make required adjustments in respect of any contract or agreement or terms and conditions thereof, the director may issue the requisite certificate of registration.

Stipulation

Other basic stipulations of the law governing the inflow of foreign technology in Nigeria:

Effects of registration—Section 7: For the purposes of the Exchange Control Act 1962 and subject to section 8 of this Decree, no payment shall be made in Nigeria to the credit of any person outside Nigeria by or on the authority of the Federal Ministry of Finance, the Central Bank of Nigeria or any licensed bank in Nigeria in respect of any payments due under a contract or agreement mentioned in section 4 (d) of this Decree, unless a certificate of registration issued under this Decree is presented by the party or parties con-

1. Published by Authority of the Federal Military Government of Nigeria and printed by the Ministry of Information.

cerned together with a copy of the contract or agreement certified by the National Office in that behalf.

Cancellation of registration—Section 8: (1) Where the director is satisfied that any contract or agreement has, subsequent to the registration thereof, been amended or modified in contravention of the provision of this decree, he shall give notice in writing to the parties concerned of his intention to cancel the certificate of registration and the provisions of Section 9 of this decree relating to appeals shall apply to any such notice as if it were a notice to reject an application for registration.

(2) Where no appeal is lodged as provided under subsection (1) above, the director shall with the approval of the council cancel the certificate of the party concerned.

Appeals, etc.—Section 9: (1) Any person aggrieved by the proposal of the director to reject an application for registration may, within 60 days after the date of

notice of intention to reject the application is given to him, lodge with the secretary a notice of appeal to the council.

(2) The notice of appeal shall be in writing setting out the grounds on which it is made and the secretary shall lay it before the meeting of the council next holding after the notice of appeal was lodged with him.

(3) Where an appeal is allowed the council shall cause the director to issue a certificate of registration in that behalf and where an appeal is disallowed the aggrieved party shall, subject to the applicable rules of court, have a right of further appeal to the Federal Revenue Court.

(4) Appeals shall lie from decisions of the Federal Revenue Court under this section in the same manner and to the same extent as appeals from the decisions of the court in civil proceedings given by that court sitting at first instance.