

# Guidelines For Technology In Malaysia

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*Specific laws nation encourages foreign investment, but guidelines must be closely followed*

Technology can be classified into hardware and software. Hardware is mainly machinery, equipment and instruments. Software is computer factoring processes, formulas, or formulations, product designs, plant engineering designs, know-how, operating conditions, test-rig-ups and data. Malaysia imports most of its hardware and software for its new industries and for the modernization of existing facilities. An average of US\$80 million per year was paid for the "soft" technologies between 1970-1980.

In 1985, the payment was estimated at US\$74 million. These were technology payments by companies that had entered into technology transfer agreements approved by the Ministry of Trade and Industry (MTI).

Presently, companies with a shareholders' fund of RM2.5 million or more and employing 75 workers or more are classified as large-scale industries and are required to obtain manufacturing licenses from the MTI if they venture into manufacturing activity. All technology transfer agreements entered into between this category of companies and other parties must obtain prior approval from the MTI before signing.<sup>1</sup>

Guidelines for such technology transfer agreements are drawn up by the MTI to ensure that such agreements do not contain unfair terms and conditions. No MTI approval is necessary for technology transfer agreements involving companies with shareholders' fund of less than RM2.5 million or 75 workers. Such companies are classified as small and medium-scale industries.

## INCENTIVES FOR INVESTMENTS AND TECHNOLOGY TRANSFER

Foreign investment is seen as a major force in Malaysia's industrialization programs. The investment may be in the form of capital or technology or both. Attractive incentives are provided under the Promotion of Investment Act 1966 to encourage foreign and domestic capital and technology investments in the manufacturing, agricultural and tourism industries. These investment incentives include pioneer status, investment tax allowance, abatement of adjusted income, export allowances, double-deductions for provision of exports, and industrial building allowance for hotels.

Additional incentives were introduced recently in amendments to the Income Tax Act of 1967 to encourage technology transfer and to upgrade technology capability. These include double deduction allowance for R&D expenses, industrial building allowance for buildings used for the purpose of training and double tax deduction for costs incurred in training programs approved by the Ministry of Labor.

## TECHNOLOGY TRANSFER AGREEMENTS

Several other agencies are also involved in various aspects of technology transfer. These are the Ministry of Finance, the Malaysian Industrial Development Authority (MIDA) and the Standards and Industrial Research Institute of Malaysia (SIRIM). The agencies and their functions are briefly as follows:

### Ministry of Trade and Industry

The Ministry is jointly responsible with Ministry of Finance in ap-

proving applications for incentives under the Promotion of Investment Act and issues the letter of approval after decision by the Minister. The Technology Transfer Unit of the Industry Division issues approved letters on technology transfer agreements and execution of the agreements. The Patent Registration Office deals with patent applications and registration.

### Ministry of Finance

The Tax Division is responsible for the examination and approval of the exemption of the 10% withholding tax and of the tax deductions on R&D and training expenses. The Ministry is also jointly responsible with the MTI in approving applications for investment incentives.

### MIDA

Applications to enjoy the investment incentives provided by the Promotion of Investment Act is evaluated by the Licensing Action Committee, which makes recommendations to the MTI and the Ministry of Finance. MIDA also issues the manufacturing license after an evaluation of the project is carried out by its Industrial Division appropriate for the project.

### SIRIM

The Patent Information and Documentation Center examines and advises the Patent Registration Office of the MTI on patent applications. It provides information on patents, stores U.S. and Malaysian

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patent documents and logs of the details of patents of other countries. SEMI's Technology Transfer Advisory Service undertakes search, evaluation, negotiations and management of technology transfer services for the manufacturing industry. It also assists the MITI and the Ministry of Finance in evaluating requests for exemption from the 15% withholding tax.

There is in addition to the above agencies a National Coordinating Council for Industrial Technology Transfer to the Ministry of Science, Technology and the Environment, which deals with overall policy on industrial technology.

The guidelines on technology transfer agreements set by the MITI cover the following:

1. Full description of technological content, quality of products, technical assistance and services and anticipated production.
2. Rate of royalty payment, rate allowed is 1-5% of net sales.
3. Period of agreement — normally five years in the first instance.
4. Provision of training for personnel of the local company.
5. Confidentiality of information and data.
6. Evaluation of guarantees on production capacity, product quality and specifications, etc.
7. Territorial sale limitation.
8. A withholding tax of 15% on technology payments — to be borne by the foreign technology suppliers. Suppliers from countries with a Double Taxation Agreement with Malaysia can obtain exemption from the Ministry of Finance.

8. Governing Laws for technology transfer — Malaysian Laws apply and arbitration proceedings are to be conducted in Malaysia according to the Malaysian Arbitration Act 1952 (revised 1980) and UNICTRAL arbitration rules of the Regional Center for Arbitration, Kuala Lumpur.

Item (1) above is normally the main content of the technology transfer agreement. The rate of royalty payment is subject to negotiation between the transferee and transferee. A varying royalty is preferred to lump-sum payment. Where the technology involved is not highly sophisticated, the rate allowed is usually around 2% of net sale. The period of agreement may be renewed after the initial five-year term, subject to a written approval from the MITI, the like of any patent, where applicable, being taken into consideration. The confidentiality of information and data contained in the agreement is normally confined to the duration of the agreement period.

The provision of adequate training is usually an important item in the agreement. So are the guarantees on production capacity, product quality and related subjects.

The agreement normally covers contracted sale within Malaysia. Any territorial sale restriction outside Malaysia are explicitly spelled out.

For companies in countries with Double Taxation Agreements with Malaysia the withholding tax of 15% on technology payments is normally waived provided the technology concerned is new in Malaysia,

there is evidence to the satisfaction of the Ministry of Finance that there is effective technology transfer, and that the technology contributes positively to industrial development of Malaysia.

In approving agreements, the MITI is quite flexible. Certain cases of difficulties in following the guidelines are given special consideration.

There are no specific regulations on the legal liabilities in technology transfer. Legal liabilities are a matter between the transferee and transferee.

The types of technology transfer agreements that have been processed and approved by the MITI include joint venture, technical assistance/ service, know-how, licensing/patent, trademark, management and turn-key. A brief summary of the breakdown of the agreements approved for 1975, 1980, 1985 and 1990 are given in Table 1.

The agreements signed in 1990 were almost double that of 1975. Since then the number of agreements signed has stabilised at around 100 per year. These agreements were signed with companies from more than 20 countries, with Japan, United Kingdom, U.S.A. and West Germany in the lead.

The types of manufacturing activities are quite diversified. Metal, electrical/electronics, chemical, transport equipment and food sector developments are considered investment worthy. Table 2 shows the agreements signed by selected industries for 1975, 1980, 1985 and 1990. Some of these agreements are

**BREAKDOWN OF TECHNOLOGY TRANSFER AGREEMENTS FOR 1975, 1980, 1985 AND 1990**

Types of Agreements	Number of Agreements Approved by MITI			
	1975	1980	1985	1990
Joint Venture	0	10	9	19
Technical Assistance	27	57	66	87
Licensing/Patent	1	4	14	27
Know-how	—	—	5	5
Management*	10	15	4	10
Service	10	6	1	1
Trade Mark	—	—	1	0
Turnkey/Engineering	—	1	—	1
Other	—	15	10	9
<b>Total</b>	<b>58</b>	<b>118</b>	<b>116</b>	<b>123</b>

Source: Ministry of Trade & Industry, Malaysia

\* including franchising

Table 1

**BREAKDOWN OF THE AGREEMENTS SIGNED BY INDUSTRIES**

Type of Industry	Number of Agreements Signed			
	1975	1980	1985	1990
Rubber (Latex & Fabricated Metal Products)	0	11	11	23
Electrical/Electronics	17	19	20	13
Chemical (including Pharmaceutical)	3	11	16	11
Food	4	14	10	0
Textile	0	0	1	1
Rubber	0	0	4	12
Transport Products	4	—	—	0
Plastics	1	1	—	0

Source: Ministry of Trade & Industry, Malaysia

Table 2

between the foreign parent company and their Malaysian subsidiaries.

There are no regulations restricting the repatriation of payments. A resident of Malaysia is permitted to remit, pay or transfer any sum of money to any nonresident. However, if an individual resident, payment or transfer is in excess of M\$10,000 or its equivalent in foreign currency, a form (called RPT/P) is required to be completed by the resident and approved by an Authorized Bank.

An Authorized Bank is a licensed bank authorized by the Controller of Foreign Exchange to act as a depository and dealer in foreign currency. Payment may be related to manufacturing projects involving technology transfer activities or an import of capital goods or dividends and profits, professional fees or royalties. The payment of the last two items is subject to the 15% withholding tax mentioned earlier.

There have been both good and bad experiences in the practice of technology transfer in Malaysia. Good experiences are from companies that are making profits and their production are running smoothly with satisfactory performance.

The reverse is true for the bad experience. One of the major problems faced by both the technology transferees and transferors is the failure to strike a clear understanding of each other's requirements when they go through the technology negotiation process. In most cases they fail to match each other's needs.

Among the numerous problems faced by the local transferees are lack of knowledge in technology acquisition process, poor technology evaluation, incorrect economic perception of technology, poor negotiating skills and lack of proper skills acquisition programs.

Most of the local companies do not make "comparative shopping" or extensive technology search and evaluation before they sign the technology transfer. Contacts are made with technology suppliers on the recommendations of consultants or business associates. After visiting the production facilities of the suppliers, they quickly enter a

deal without examining other options. Most of the time a "low price" is the main decision-making criterion.

Evaluations based on comparison of the "technical features" of processes, product quality, production efficiencies, quality control, maintenance cost, raw materials, energy cost, etc. are seldom made. On the other hand, there are entrepreneurs who put their trust on reputable foreigners. This method has worked well and has resulted in satisfactory technology transfer.

Incorrect economic projections of technologies are cases where the hardware purchased, which may be quite sophisticated, are underutilized when production starts and local manpower takes more time to master the operating and maintenance skills.

Poor negotiations is a common weakness among the Malaysian business community. Very often an entrepreneur who has great potential for a product in the local market, makes light of technology negotiations in his eagerness to buy technology and get production started. The technology licensors take advantage of the situation by imposing restrictions such as on supply of raw materials, sales territories, secrecy of formulations, and so on. These unnecessary restrictions will be realized a few years later and end up in tough negotiations for "relaxation" of the restrictions which inevitably lead to violation of the period of agreements and those payments for "new" information.

For comparatively small projects costing a few million ringgits, where the process is not so sophisticated, technical skills, merely operating skills are easily acquired within a short time. For big turn-key projects costing hundreds of millions ringgits, where the process is quite complicated, technical skills acquisition are quite slow, basically due to the fact that workers with experience in similar industries are not available. The work force has to be trained abroad.

In this case, the local partners or farmers are very dependent on the technology suppliers. This is also partly due to the lack of proper fer-

mulation of a comprehensive technology transfer (training) program with clearly specified time frame for acquisition of skills such as start-up and shut-down operations, maintenance of sophisticated equipments and instruments, commissioning, planning and scheduling of process operations, diagnosing of process problems and so on.

All in all, technology transferees from foreign countries enjoy many advantages such as industrial incentives, lower labor wages and lower price of local raw materials, since they are technically sound and their international markets networking are established, most foreign and joint-venture companies operate quite successfully. They are able to use local manpower as an efficient resource for the export market. This is quite notable in the electrical and electronics industry and the rubber (latex) products industry. For them, Malaysia offers profitable, efficient manufacturing base.

For the small- and medium-scale industry, technology is usually transferred in the form of machinery and equipment where production know-how is supplied by the machinery and equipment suppliers, raw materials suppliers as well as through their own processing knowledge from previous experience. This sector caters mainly for the domestic market. The products manufactured are quite simple. The technologies are largely from Taiwan, Hong Kong, Republic of Korea and Japan.

Malaysian investors bring investments in its industrial activities in the form of capital or technology or both. Incentive measures are provided to encourage investment in several sectors.

Most technologies in use in Malaysian industries are of foreign origin. Technology transfer agreements require prior approval by appropriate authority before signing. Comprehensive guidelines on such agreements are shown up.

The legal aspects of technology transfer are largely governed by the Malaysian Automation Act 1982 (revised 1985). Regulations on the repatriation of payments are not restrictive.