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STRUCTURE AND TYPES OF TECHNOLOGY TRANSFER CONTRACTS

Introduction

Technology can be transferred through a multitude of contractual types and forms. Some forms are specifically tailored to be the vehicle for the transfer of technology, while the others may have this function as an ancillary feature. For example, a know-how license agreement, a patent license agreement, a trademark license agreement are typical transfer of technology agreements, while a sale of equipment contract, a turn-key contract, a technical assistance agreement, a distributorship agreement and many other similar agreements, have the transfer of technology elements either as a natural consequence of their principal purpose or as an additional distinct feature, ancillary to the main purpose of the agreement. A further feature of technology transfer agreements is that they often come in a "package" with other agreements.

In this presentation, we shall attempt to offer a classification of the main and of the incidental contractual forms which may serve as the vehicle for the transfer of technology and describe the "packages" of agreements which are most often used in international contracting practices. We shall also attempt to present the basic structure of the main types of transfer of technology agreements.

Classification of the types of agreements

When approaching the subject of classification of contractual forms which are either specifically created for the purpose of transferring technology from one contractual party to the other or which may have the transfer of technology as an ancillary activity together with the main objectives, we may mention the following groups of contracts:

- Transfer of technology agreements

- Foreign investment agreements
- Consultancy agreements
- Engineering agreements
- Commercial arrangements
- Co-production arrangements
- Counter-trade, buy-back, barter agreements and other special payments arrangements
- Different other business arrangements

Within the above basic groups of contracts we may found the following distinct types of contracts:

A. MAIN TRANSFER OF TECHNOLOGY AGREEMENTS

Licensing agreements

- Patent license agreement
- Trademark license agreement
- Know-how (license) agreement
- Copyright license agreement
- Franchise (license) agreement

B. INCIDENTAL TRANSFER OF TECHNOLOGY FORMS

Foreign investment agreements

- Fully foreign owned subsidiaries
- Joint venture agreements:
  - equity joint ventures
  - contractual joint ventures
- Concession agreements
- Production sharing agreements
- Risk service agreements
- Privatization

Consultancy agreements

- Pre-investment feasibility and basic engineering studies
- Professional consultancy agreements during the construction and in the operational phase of a plant, including provision of basic engineering services, design services, management assistance, etc.

Engineering agreements

- Sale and delivery of equipment agreements
- Sale and delivery of equipment and erection agreements
- Supervision of erection agreements
- Erection of equipment agreements
- Turn-key agreements
- Product in hand agreements
- Engineering agreements
- Technical assistance agreements
- Construction joint venture (consortium) agreements
- Sub-contracting agreements

Commercial arrangements

- Management agreements (construction or business management)
- Marketing arrangements (sale or supply of products)
- Agency agreements
- Commission agency agreements
- Distributorship agreements
- Sale raw materials, intermediate goods, parts, components, etc.

Industrial co-production agreements:

- Subcontracting
- Co-production
- Specialization

Special payment agreements:

- Barter agreements
- Counter-trade agreements
- Buy-back agreements
- Leasing

Other business arrangements:

- Tri-partite and multi-partite business arrangements

Main features of individual agreements

Transfer of technology and licensing agreements [1]/

The main feature of licensing agreements is that one party gives or sells technology as contained in a patent or in a trademark or in other rights and services to another party in return for royalties or some other form of remuneration. In commercial relations, the term "industrial property license" is often used to denote the industry related character of the subject matter. [2]/

Patent, trademark, franchise and know-how license agreements are today probably the most often used transfer of technology agreements. The main characteristics of each one of these contracts has been described in the "Glossary" at the end of this paper. Copyright is seldom used in industrial sphere, but it may be applied to designs, all printed materials, including printed technical information.

The structure of license agreements is often very similar and they usually follow the same pattern:

Licensor's principal commitments consist in his obligation to actually obtain and maintain the patent or the trademark in force. In cases of infringement it is the licensor' duty to defend it and to bear the costs of defense. Registration and renewal of patent and trademarks is usually the licensor' duty, including the costs of the same. If the patent is not granted or made invalid, the licensees should be entitled to terminate the agreement and to recover the costs.

Licensor are usually obliged to provide not only the patent or trademark, but also certain technical information and data necessary for successful working of the patent or the unpatented

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1/ From the legal point of view, "licensing" applies only to such arrangements where the owner of a legally created license allows someone else to use it. This is the case with patents, trademarks, utility models, industrial design and new plant variety and not to know-how. For the purposes of our presentation we shall use the notion "license" to cover all arrangements formed specifically for the purposes of transfer of technology.

2/ In business terminology, the term "industrial property license" is used to describe the permission to do certain acts conferred by law as regards patent of invention, an industrial design, a utility model, a plant variety, a trademark or a service mark. For more detailed definition of individual terms, see Glossary at the end of this paper.

technology. This may include services of technicians and other suitable specialists. If agreement involves sales and distribution, assistance by specialist are often provided on "as needed" basis.

Licensees' principal commitments consist in his obligation to work and to use the licensed technology. If he does not, licensor should have the right to terminate the license and/or to give the license to other parties in the same territory. Licensees are often asked to "grant back" or reveal all improvements and developments on the subject matter or even to assign the right to such improvements and developments to the owner. The licensees are also obliged to use their best efforts to further the product's sales in the territory.

If the agreement involves licensing of trademarks or franchising, licensees are obliged to maintain the licensor quality standards and licensor have the right to verify, control and ascertain whether these quality standards are strictly observed and maintained. In a patent agreement licensor are also likely to impose strict quality standards in order to protect their product's reputation.

Licensor are likely to request licensees to grant them return licenses on any invention, improvements and technical development which the licensees may develop (cross-licensing). There are agreements where there is no obligation to cross-licensing, and in such cases it is usual that the licensed technology is simply sold to the other party with a lump-sum payment and no royalties.

Royalty payments as a form of remuneration are usually contained in licensing agreements, although lump-sum or a combination of lump-sum and royalty is also possible. Royalty rates are usually based on net sales or gross sales prices. Definition of "net sale" or "gross sale" is important in order to exclude payment of royalty for inputs that are not a result of the licensed technology (like transportation costs, insurance charges, inputs from third parties etc.). There are also other basis for royalty calculations (profits, production units).

There are no rules how much the royalty payments should amount to, but between 2% and 6 % is usually considered as reasonable, depending on the value of the technology and on the estimated returns. Sometimes, agreements provide for renegotiation of royalty payments during the life of the agreement in order to take into account the changed market conditions.

In some cases technology is being transferred on a royalty-free basis. The compensation in such cases is hidden in some other

benefits, like for example in a cross-licensing obligation or in an active two-way flow of know-how, technical data or key service personnel.

Sometimes, royalty payments will not be sufficient for an increased input of the licensor and special service charges will also be provided for. If, for example, a licensor is obliged to supply special services in the way of technical aid or managerial assistance or similar input, royalty payments on the basis of the sale of the resultant product may not be sufficient to cover these increased expenses. The parties may, in such cases, provide technical services and payment for them in the transfer of technology contract itself or they may want to conclude a separate, ancillary contract.

Licensing as a way of doing business may have its advantages and disadvantages. As advantages of licensing one could point out the following:

- it allows a company to penetrate other market with relatively low capital outlays;
- income from licensing present an additional income for future research and a compensation for past R & D expenditures;
- it could be used as a test for foreign markets receptiveness for the licensed technology and for eventual future larger capital investments;
- cross-licensing facilitates flow of technology and may bring unexpected benefits;
- licensing may be used for various transfer pricing practices beneficial for money management.

As disadvantages of licensing, the following factors could be pointed out:

- every licensee is a potential competitor;
- licensing is marked by relatively low profitability since direct production and sale can bring higher profits;
- licensor may have difficulties in maintaining the wanted quality standards and quality controls which may damage the reputation of the licensor products;
- licensing has become more and more complicated through enactments of various governmental laws and regulations and through stricter approval procedures and less favorable hard currency transfers

Foreign investment agreements

Foreign investments are very often the main vehicle for transfer of technology. Nevertheless, we did not classify them among the "main" types of transfer of technology agreements because they sometimes do have other priorities. Investment agreements are not exclusively transfer of technology agreements and that is the reason that we have labeled them as "incidental" transfer of technology agreements. The fact is, that many governments allow direct foreign investments primarily because they expect an inflow of foreign technologies. Therefore, all kinds of investment arrangements are very likely to have a transfer of technology agreement as one of the ancillary agreement in the whole investment arrangement package.

In foreign investment agreements it is sometimes the case that technology may be contributed as equity. In such cases technology is "capitalized", i.e. a certain value is attached to it, and the valued amount is then invested as a capital participation of an "intangible asset".

Capitalization of technology in equity investments has its advantages and disadvantages. The main advantage is in the fact that the recipient of technology does not have to make any capital outlays for the technology at the outset of the business. In the second place if the foreign investment ends up as a failure, there will be no payment for the technology at the end of the investment relationship. However, if the foreign investment is a success, the payment for the technology may be higher then it would be under the usual royalty payment conditions. At the same time, the technology would be perpetuated as an investment and would not diminish with the passing of times as it may be the case with royalty payments. These two factors are the biggest disadvantages of capitalization of technologies.

Consultancy agreements

Consultancy agreements may be a vehicle for transfer of know-how. Consultants may be providing services and assistance by supplying basic engineering of an industrial plant or its machinery and equipment. Consultants may take over the obligation to train local personnel or take over the management of an enterprise and its industrial and commercial activities.

Engineering agreements

Commercial transfer of know-how and other technology may also take place through simple engineering agreements such as supply of

equipment, supply and installation of equipment, turn-key agreements, product in hand agreements and similar agreements. Equipment and machinery itself may embody technology and through the purchase of the equipment the buyer acquires also the technology necessary for the production of the intended products. This is also the case with the literature, manuals and other technical documentation accompanying the equipment. This is particularly evident in a "product-in-hand' arrangement, where the supplier is expected not only to complete the plant on a turn-key basis, but also to train the purchasers' personnel to be able to ,aster the supplied technology and to achieve the warranted output.

Commercial arrangements

There are various commercial arrangements which do not have another common denominator such as management agreements, various marketing arrangements, commission agencies, agencies, distributorship and franchising. In all such arrangements there could be transfer of technology elements and features. The goods may be durable (automobiles, home appliances) or consumable (beverages, food) or rental of consumer durable (automobiles, trucks, power equipment, hotel operations). The outlet for the marketing of such services may be based on a trademark or service mark, combined with technical information, technical services, quality control inspections, and is often coupled with special designs and special decor of the premises. The franchisee or the dealer may own or have a substantial investment in the premises but uses trademark or service mark or know-how of the franchisor or the distributor.

Industrial co-production arrangements

Industrial subcontracting, co-production and specialization are forms which may be specially conducive to contain some elements of transfer of technology. In all these forms there is a distribution of manufacturing tasks between two enterprises of which some may be more sophisticated than the other. The enterprise with lower technical efficiency will have to produce goods fit for the enterprise of a higher technical skills. An exchange of technology may be a natural phenomenon to happen in such arrangements and technical and management assistance would be a normal accompanying feature of such arrangements.

The same may be said also for arrangements based on the need

to have some special payment agreements, such as barter agreements, counter-trade agreements, buy-back agreements and leasing and with different other business arrangements.

Conclusion

The forms or types of contracts in which various business arrangements are being carried out are of a great significance for the legal analyses of contractual obligations of parties. The "label" or the name of an agreement which the parties have chosen themselves for their transaction, will have a certain importance for the arbitrators or the courts when judging the obligations which the parties have taken over. However, if they come to the conclusion that the parties have chosen a "wrong" name which does not reflects the true character of their relationship, the courts may re-qualify an agreement according to its true nature. Once the qualification of a relationship is done and an agreement has been properly named, whoever is in charge of passing judgment on the obligations of the parties, will have ample opportunity to compare the facts of each case and the rights and obligations of the parties in a concrete agreement with rich judicature, literature and legal writings which exists for that type of agreement.

G L O S S A R Y

A **"patent"** is a document, issued by a government office or a regional office acting for several countries, which describes an invention and creates a legal situation for exploitation of the patented invention only with the authorization of the owner of the patent. This protection is limited in time (generally between 14 and 20 years). A "patent license" is the agreement whereby the patent owner allows someone else to use the patented invention in return for an agreed remuneration. A patent owner may legally prohibit the use of the patented invention to anybody who does not receive a "license" from him to do so.

An **"invention"** means a solution to a specific problem in the field of technology. An invention may relate to a product or to a process. An invention is "patentable" if it is new, involves an inventive step and is industrially applicable.

A **"utility model"** means an invention protectable, upon application through registration by a government office, of the description, drawing or other picture or also by filing of a model, in accordance with requirements somewhat less strict than for "patentable" inventions (sometimes without an inventive step) but also protected for a shorter duration but with right similar to those under a patent.

An **"industrial design"** means in the field of industrial property, the ornamental aspect of a useful article, which is original or novel and is registered in a governmental office. A protected industrial design may not be copied or imitated without owner's approval. Protection is offered for a limited period of time (5 - 15 years). Industrial design may also be protected under copyright law and in this case the protection extends to preventing the copying or the reproduction of the industrial design.

A **"plant variety"** means a variety of species of plants (trees, shrubs, herbs, vegetables and flowers). A "new plant variety" is protected by law if it fulfills certain conditions (distinct difference from other types). Protection is given either under the patent law or under a special title of protection law.

A **"trademark"** or **"service mark"** means a sign which serves to distinguish the goods or the service of an industrial or commercial

enterprise, indicating thereby their origin and their certain permanent quality guarantee. The sign may consist of one or more distinctive words, letters, numbers, drawings, pictures etc. In principle, marks are protected through registration although there are countries where marks are protected even without registration. Actual use of the mark, or a declared intention of actual use of the mark, may be a condition for its protection. If a mark is protected, no physical or legal person, other than its owner, may use it. The protection of a mark is usually not limited to time, but is usually subject to periodical renewal of the registration (generally, every 5 - 10 years).

A **"license"** means, in the case of a right conferred by a patent, or by a protected utility model, industrial design, new plant variety or trademark ("industrial property"), the permission, given by the owner of that right ("licensor") to another person ("licensee"), to perform certain act which are covered by that right.

"Technology" means systematic knowledge for the manufacture of a product, the application of a process or rendering of a service, whether that knowledge be reflected in an invention, an industrial design, a utility model, or a new plant variety, or in technical information or skills, or in the services and assistance provided by experts for the design, installation, operation, or maintenance of an industrial plant or for the management of an industrial or commercial enterprise or its activities.

"Know-how" means technical information and skills concerning the use and application of industrial techniques (sometimes referred to as "technical know-how" or "technical information"). The technical information and skills may be described in documentation or furnished orally or through demonstration and training by engineers, technicians, specialists or other experts like consultants who provide technical assistance covering basic engineering of an industrial plant or its machinery and equipment, the installation, operation and maintenance of an industrial plant and the training of its personnel, or the management of an enterprise and its industrial and commercial activities. Such services may be rendered in the pre-investment or in the post-investment phase of a project, including technical, economic, financial and organizational studies and general planning.

"Franchise" agreement exists when the use of a trade mark or a service mark is authorized in conjunction with a service system. There will be an on-going relationship between the licensor and the

licensee the licensor will assist the licensee to market the product or to render the service through a national or international advertising, marketing, reservation system, training of personnel. At the same time there will be strict quality controls of the goods and/or services rendered. The simplest form of franchising is the product distribution franchise. A more complicated is the service distribution franchise also known as "business format franchise" (hotel chains, fast food restaurants, laundry service outlets, etc.) . It is said that franchising combines the best features of a large chain operation (owned and operated by a single enterprise) and of an independent small enterprise.

Sources: WIPO Licensing Guide for Developing Countries, Geneva 1977; UNIDO, Guidelines for Evaluation of Transfer of Technology Agreements, Development and Transfer of Technology Series, No. 12, New York 1979,