OVERVIEW OF CONTRACTUAL AGREEMENTS FOR THE TRANSFER OF TECHNOLOGY

I. Introduction

1. Simply put, technology transfer is the process by which a technology, expertise, know-how or facilities developed by one individual, enterprise or organization is transferred to another individual, enterprise or organization. Effective technology transfer results in commercialization of a new product or service or in the improvement of an existing product or process.

2. Depending on the nature of technology and the capacity of the recipient, the process of technology transfer may be simple and straightforward but usually is iterative, collaborative, and fairly complex. In the latter case, it may require the users to acquire new information and skills and change old habits and ways of doing things. It may even require changes in the technology being transferred, to improve the chances of "fit" and optimal performance in the new situation. Technology transfer may happen from country to country, from industry to industry, or from research laboratory to an existing or new business. It may be facilitated by financial or other types of assistance and support that may be provided by government or other agencies at national, regional, local or institutional levels.

3. This article deals with issues such as how is technology transferred; what are the main types of legal contracts for the transfer of technology and what will determine the type of agreement that is entered into by the two parties involved in the technology transfer.

II. Technology Transfer in Today's Economy

4. The creation or absorption of new technology has become a vital component for companies to improve or maintain their competitive position in the market place. Companies operating in sectors where competition takes place on the basis of price alone, such as the extraction or commercialization of raw materials, may rely on new technologies to improve their efficiency in the extraction of raw materials by improving their productive processes or acquiring new machinery and equipment. They may also use new technology to better commercialize their products or to improve their management structure, control and communication.

5. In other sectors, where the market evolves incessantly as new products with new functions or designs appear on a regular basis, companies are forced to innovate by acquiring or developing new technologies. Technological innovation is therefore a crucial element of the competitive strategy of any enterprise, big or small, high-tech or low-tech. The ongoing integration of domestic and international markets through continuing deregulation and liberalization of markets has enhanced competitive pressure for all firms, and especially increased the technological needs of small enterprises worldwide while also improving their access to new technologies and capital goods.

6. Small and Medium-sized Enterprises (SMEs) have to decide whether to develop technology in-house or to obtain it from others. While investing in technology creation may be expensive and risky, as there are many uncertainties linked to the innovation process, it has the advantage of preventing technological dependence on other companies and enables the

company to enhance its technological capability and to innovate according to its own specific needs. In a large number of cases, firms, including SMEs (especially high-tech SMEs) will rely on both (in-house innovation as well as on technology purchased from others) as necessary machinery is bought from large firms to make technical improvements to the company's products, processes and/or services.

III. Negotiating Technology Transfer Agreements

7. The sale and purchase of the exclusive rights to a patented technology or of the permission to use a given technology or know-how, takes place through legal relationships between the owner of the exclusive rights or the supplier of the know-how, called the "transferor", and the person or legal entity which acquires those rights or that permission or receives that know-how, called the "transferee."

8. The nature of the relationship between the two parties and the type of agreement that will result from a technology transfer negotiation will depend on a number of factors including some of the following:

- The complexity and the level of development of the technology that is to be acquired;
- The actual needs of the recipient;
- The technological capacity of the transferee and ability to use and/or adapt the technology being purchased;
- The relevance, availability and cost effectiveness of alternative technologies,
- The price to be paid (in cash or kind) by the recipient,
- Other proposed terms and conditions for transfer, such as support offered during and after transfer in absorbing and adapting the new technology, or rights over improvements or adaptations made by the recipient,
- The negotiating power of both parties (which will, in turn, depend on variables such as size, technological sector, demand for the technology, number of competitors, etc.)
- The type of relationship envisaged between the two parties (e.g. long-term, short-term or one-off purchase of products/services.)
- Issues concerning product liability, indemnity, warranty, etc,
- Whether technical support and training for use of new technology and related equipment is required.

9. Many of the above factors will influence the ability to negotiate a mutually beneficial agreement by the two parties. In many cases the external context (e.g. laws, competitive context, demand, etc.) will be crucial in determining the outcome the negotiations. The characteristics of each party will also play a role (e.g. size, technological capacity, etc.). On the whole, as a company develops and improves its technological capacity, its ability to absorb new technology also increases as does its negotiating power and capacity to manage technology developed by others, elsewhere. As a result, companies with the capacity to effectively integrate new technology developed by others may require less assistance from the transferor to incorporate the new technology and learn how to use it properly.

10. Technology transfer agreements may involve different players, including large multinationals, small enterprises, public sector bodies or any other entity or individual seeking to acquire or sell new technology or technological information. What is crucial is that both parties perceive the agreement as beneficial to their company and/or institution. Neither must feel that the other party has obtained a better deal and/or that the agreement is unfair. The

secret to the success of technology transfer agreements is that each party perceives the other as a partner in a fruitful collaborative process.

11. In many circumstances, strategic alliances between companies may include a technology transfer agreement, and are generally useful for allowing a business to meet its objectives, while maintaining the flexibility to adapt quickly to technological developments, as appropriate. Well-constructed strategic alliances help partners pool expertise, enter new markets, share financial risks and get products and services to market faster. Strategic alliances can be tricky. Partnerships foster mutual benefits, but the alliances exist only as long as they are advantageous to both parties. Yet, in recent years, the concept of gaining a marketplace advantage by teaming up with another company whose products or services fit well with ones own is being adopted by an increasing number of businesses. In many situations, a strategic alliance may be a prelude, that is, a sort of a trial phase before committing, to a longer-term relationship of a joint venture or an eventual merger or acquisition. In each of these situations, however, both sides to safeguard their respective interests must adequately address the intellectual property issues.

IV. Main Technology Transfer Agreements

12. The legal relationship between transferor and transferee is essentially contractual in nature, which means that the transferor of the technology consents to transfer and the transferee consents to acquire the rights, the permission or the know-how in question. There are various methods and legal arrangements through which technology may be transferred or acquired, and the following overview briefly outlines the main ones.

1. The Sale or Assignment of IP Rights

13. The first legal method is the sale by the owner of all his or its exclusive rights to, say, a patented invention and the purchase of those rights by another person or legal entity. When its owner to another person or legal entity transfers all the exclusive rights to a patented invention, without any restriction in time or any other condition, it is said that an "**assignment**" of such rights has taken place. Similar principles and characteristics apply to the assignment of other objects of industrial property (e.g. trademarks and industrial designs) and copyright.

2. License or License Contract

14. The second legal method is through a license, that is, the permission by the owner of a patented invention to another person or legal entity to perform, in the country and for the duration of the patent rights, one or more of the "acts" which are covered by the exclusive rights to the patented invention in that country. When that permission is given, a "license" has been granted. It may be recalled that those "acts" are the "making or using of a product that includes the invention, the making of products by a process that includes the invention or the use of the process that includes the invention."

15. The license is usually granted subject to certain conditions, which will be set out in the written document by which the license is granted to the licensee. The licensee of will obviously relate one of the conditions to the payment money or some other consideration in return for the license that is granted. Another condition might be that the invention will be used by the licensee only for the manufacture of products destined for a specific use, as, for

example, the manufacture of a pharmaceutical product for use by humans but not for use on animals. Yet another condition might be that the licensee is allowed to use the invention only in specified factories or sell the product embodying the invention only in specified geographical areas.

16. In a number of countries, the patent law may require that an instrument of assignment of patent rights or a license contract be presented to the patent office for registration. By the act of registration, the Government recognises the assignee or the licensee as the transferee or holder of the rights transferred by the assignment or of the rights conferred by the license.

2. Know-How Contract

17. The third of the three principal legal methods for the transfer and acquisition of technology concerns know-how. It is possible to include provisions concerning know-how in a document that is separate from a license contract. It is also possible to include such provisions in a license contract.

18. The know-how may be communicated in a tangible form. Documents, photographs, blueprints, computer cards, and microfilm, among others, are illustrations of tangible forms. Examples of know-how that could be transmitted in such forms are architectural plans of factory buildings, diagrams of the layout of the equipment in the factory, drawings or blueprints of machines, lists of spare parts, manuals or instructions for the operation of machines or the assembly of components, lists and specifications of new materials, labor and machine time calculations, process flow charts, packaging and storing instructions, reports on stability and environmental aspects, and job descriptions for technical and professional personnel. Such know-how in tangible form is sometimes referred to as “technical information or data.”

19. The know-how might also be communicated in an intangible form. Examples would be an engineer of the supplier of the know-how explaining a process to an engineer of the recipient or the manufacturing engineer of the recipient witnessing a production line in the enterprise of the supplier. Another example would be training in the factory of the recipient, or at the enterprise of the supplier, of personnel of the recipient.

20. The possibility that the know-how to be communicated by the supplier to the recipient might be disclosed, accidentally or otherwise, to third persons, is a very real concern to the supplier of the know-how. The provisions concerning know-how in the contract will thus cover various measures to safeguard against the disclosure of the know-how to unauthorized persons.

4. Franchise

21. Commercial transfer of technology may also take place in connection with the system of franchising of goods and services. A franchise or distributorship is a business arrangement whereby the reputation, technical information and expertise of one party are combined with the investment of another party for the purpose of selling goods or rendering services directly to the consumer. The outlet for the marketing of such goods and services is usually based on a trademark or service mark or a trade name and a special décor (the “look”) or design of the premises. The license of such a mark or name by its owner is normally combined with the supply by that owner of know-how in some form, either technical information, technical

services, technical assistance or management services concerning production, marketing, maintenance and administration.

5. Acquisition of Equipment and their Capital Goods

22. The commercial transfer and acquisition of technology can take place with the sale purchase of equipment and other capital goods. Examples of capital equipment are machinery and tools needed for the manufacture of products or the application of a process. Sales and purchases of capital goods and their import into the country can be considered, in a sense, technology transfers transactions. Contracts covering the sale and purchase and the import of capital goods are sometimes associated with a license contract and/or a know-how contract. In certain instances, provisions concerning the sale and purchase and the import of capital goods may be found in the license contract or the know-how contract itself.

6. Consultancy Arrangements

23. The help of an individual consultant or a firm of consultants that will give advice and render other services concerning the planning for, and the actual acquisition of, a given technology can be useful, if not indispensable, for such enterprises, entities and governments that wish to acquire technology from enterprises in other countries. In such a business arrangement not only is help received in acquiring the technology but the experience gained and the lessons learned in engaging and working with the individual consultant or firm of consultants will be valuable knowledge that can serve to better carry out future projects.

7. Joint Venture Agreements

24. A joint venture is a form of alliance between two separate companies. There are two fundamental forms of joint venture, the equity joint venture and the contractual venture. The equity joint venture is an arrangement whereby a separate legal entity is created in accordance with the agreement of two or more parties. The contractual joint venture might be used where the establishment of a separate legal entity is not needed or where it is not possible to create such an entity. The different legal methods for the commercial transfer and acquisition of technology can be used in either form of joint venture arrangement.

8. The Turn-Key Project

25. In certain instances, two or more of the business arrangements, and hence the legal methods that they reflect, can be combined in such a way as to entrust the planning, construction and operation of a factory to a single technology supplier, or to a very limited number of technology suppliers. Thus, the “turn-key project” may involve a comprehensive arrangement of certain of the legal methods, whereby one party undertakes to hand over to his client—the technology recipient—an entire industrial plant that is capable of operating in accordance with agreed performance standards. More usually, the turnkey project involves the undertaking by one party to supply to the client the design for the industrial plant and the technical information on its operation.

V. Concluding Remarks

In conclusion, there are various types of contractual relationships through which technology may be transferred. Businesses and institutions will need to evaluate on a case-by case basis

which type of relationship will be more suitable and negotiate the specific terms to be included in the agreement. A number of market factors as well as factors that are internal to the recipient or specific to the technology in question will influence what type of agreement is reached between the two parties. In terms of intellectual property, it is important to bear in mind that intellectual property rights represent a pro-competitive monopoly and their owner should not exercise his right by abusing his monopoly, for example by imposing anti-competitive obligations on the licensee. The negotiation of a technology transfer contract may be a complex process and require parties to be flexible and willing to search for an agreement that will be beneficial to both parties.