

EXCHANGE FOR POLICIES

DISCUSSION ON REVISION OF LAW ON TECHNOLOGY TRANSFER APPROACH BASED ON COMPARISON TO LAW ON SCIENCE AND TECHNOLOGY

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Abstract:

Law on Technology Transfer enacted by 2006 had many new points in comparison to legal regulations and documents issued previously. Up to now, however, some points of Law on Technology Transfer are not found suitable and they need to be revised and amended including some contents related to Law on Science and Technology (S&T). Following the analysis made in Journal of Science and Technology Policy and Management (No. 1, Vol. 4, 2015), this paper presents some exchange of views for purpose to improve Law on Technology Transfer in near future

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Law on Technology Transfer enacted by 2006 had created an important legal space for activities of technology transfer. The Law was established on basis of inheritance of important documents in the field such as Resolution No. 10/LCT/HDNN dated 10th December 1998 by the State Council on technology transfer from overseas into Vietnam, Civil Code enacted by 1995 and amended by 2005. Law on Technology Transfer provided many regulations to govern the activities of technology transfer but its main concepts are oriented to govern the technology transfer from overseas to Vietnam. In context where the domestic technological level remains limited, Law on Technology Transfer opens the paths for technological innovations and helps enterprises enhance competitive potentials in order to fit international integration trends.

Since activities of technology transfer are related to many sectors and fields, they are found under governance of not only Law on Technology

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Transfer but some other related laws including Law on S&T (Law No. 29/2013/QH13). Law on S&T is the basic legal document for the sector of S&T which was amended and enacted by 2013. The content of the Law inherited regulations of Law on S&T enacted by 2000 but included many new regulations on mechanisms, policies of investment for science-technology, S&T organizations, S&T contracts and etc. which gradually gets improved and fits the socialist-oriented market mechanism in our country. The governing scopes of the above noted two Laws are basically different. The one of Law on S&T is stipulated as “Defining the status of organizations and individuals to carry out S&T activities; organizational aspects of S&T activities; measures to assure the development of S&T; State administration of S&T” (Article 1, Law on S&T). The one of Law on Technology Transfer is stipulated as “Defining the activities of technology transfer in Vietnam, from Vietnam to overseas and from overseas to Vietnam; rights and duties of organizations and individuals participating in activities of technology transfer; power authorities of State administration agencies; measures to encourage and to promote activities of technology transfer” (Article 1, Law on Technology Transfer). Between these two Laws, however, exist some common points related specifically to technologies, essentially endogenous technologies generated from domestic processes of scientific research and technology development (R&D activities), commercialization of R&D results and etc. In addition to positive aspects of added regulations to support S&T development, there exist some points which are not found suitable and cause difficulties to implementation. Some of them are actually presented in the following considerations.

1. Transfer of R&D results

Technology - one of the results of the process of S&T activities which is transferable under numerous forms [17]. Law on S&T and Law on Technology Transfer have the unanimous view to this notion, namely: “*Technology* is the solution, procedure and technical know-how, attached with tools and means or not, which are used to transfer sources to products” (Article 3.2, Law on Technology Transfer; Article 3.2, Law on S&T). The endogenous aspect of the notion “technology” and other points to be reviewed and amended were already discussed by the author in a previous paper [17]. Therefore, this topic would not be dealt with in this paper. However, there exists another point of view saying: “*Technology* as noted in Law on Technology Transfer is interpreted as the transferable technology which means the commercializable one; while *Technology* as noted in Law on S&T has to be interpreted in global senses of the word which includes the both commercializable and non-commercializable” [12]. In this regard,

the author of this paper has a quite opposite view to that and says that all technologies are culminations of human creative activities oriented to well defined targets. All of them have values and values of use. By this way, all of them are commercial goods and all have potentials to be commercializable [13]. Therefore, it is not needed to adjust the notion of technology as noted in these two Laws. However, the basic difference, if any between the two Laws, found in practical implementation is: the “*Technology*”, as noted in Law on Technology Transfer, is interpreted as the completed one ready for application implementation in all aspects, particularly in activities of production and business. During the appraisal activities of technologies transferred in investment projects, the point of permanent interest by appraisal experts is the “completeness of technologies”. It means to know where these technologies were practically applied. The completeness of systems and capacities to respond of technologies are found in central focus of attention when the projects with these technologies start commercial operation. The “*Technology*”, as noted in Law on S&T, is considered and evaluated on basis of assigned S&T tasks. The main indicators for consideration and evaluation include the novelty, effectiveness and practical applicability of technologies. Therefore, the “*Technology*”, as noted in Law on S&T, is interpreted as the one in the stage of research which, even having been formed, remains confined in laboratories and is not yet largely applied in practice. As it is seen, there exists a gap between the scopes of definition to govern the notion “*technology*” in the two Laws. From this remark of difference, we could see the need to push technologies generated in laboratories (governed mainly by Law on S&T) to practical application in production and business activities through investment projects, technology transaction contracts (governed mainly by Law on Technology Transfer). In some countries such as US, Japan, China, Korea, in addition to Law on S&T and Law on Technology Transfer, they have Law on Promotion of Technology Transfer to link the governing scopes of the two Laws. In China, in addition to that, they have, for example, Law on Invention, Law on Copyrights, Law on Anti-Unfair Competition, Rules for Protection of Software (enacted by 1984), Law on S&T Progress (enacted by 1993), Law on Corporation (enacted by 1994). By 1996, China had enacted Law on Promotion of Shift of S&T Achievements which governs, in details, rights and duties of the Government and the owner(s) of S&T achievements, enterprises, intermediate broking organizations and financial investing organizations to link the commercialization of technologies. These measures target the establishment of policy systems to encourage cooperation between industries, universities and research organizations to promote the shift of technologies generated in laboratories to practical application through

policies: limited imports of important technologies which can be developed domestically, lists of banned transfer technologies and limited transfer technologies which consume much material, energy and heavily pollute. In Korea, in addition to the available laws related to S&T and technology transfer, such as Law on Incentive S&T Development, Law on Incentive Technology Development, Law on Incentive Software Development and Law on Incentive Promotion of Inventions, finally, Law on Promotion of Technology Transfer had been enacted by 2000. The main content of this Law is to establish a system for propagation and transfer of research results which include the establishment and operation of the Korean Center of Technology Transfer and its local organizations for technology transfer, specialization of technology evaluating organizations, establishment of technology transfer groups with exclusive rights within public research organizations, incubators of private organizations in field of technology transfer and business. All of these measures target the faster promotion of S&T achievement into practice.

Actually, in connection to this field, Vietnam has Law on S&T and Law on Technology Transfer which deal with only the policies to assign the rights to ownership and use of State-budget-funded R&D results [17]. This aspect remains also a gap between the two Laws. Namely, Law on Technology Transfer stipulated: “The contract conclusion is conducted through ***committed terms and conditions made in writing form or other forms of values equivalent to writing form***, such as mail, telex, fax, data message and other forms in conformity to legal regulations” (Article 14.1, Law on Technology Transfer). The concrete scope of contents of Contract of Technology Transfer is regulated by Article 15, Law on Technology Transfer, Resolution No. 133/2008/ND-CP, Resolution No. 103/2011/ND-CP guiding the implementation of Law on Technology Transfer. From other side, Circular No. 15/2014/TT-BKHCN dated 13th June 2014 (guiding the implementation of Law on S&T, Resolution No. 08) stipulates in details the formality and procedure of assignment of rights to ownership and use of State-budget-funded R&D results. These documents guide to implement the act of technology transfer by an administrative decision and an attached agreement of assignment of rights. In this case, even admitting the equivalent power of an agreement of technology transfer and a contract of technology transfer, as governed by Law on Technology Transfer and sub-law documents (Resolution No. 133, Resolution No. 103 noted above), we can see that the contents of agreement document do not reflect the necessary requirements of a contract of technology transfer, namely price, payment mode (if any), time terms of validity of the contract, plan and schedule of technology transfer, duties and fines against infringement of

contracts, institutions and applied rules for settlement of disputes and etc. They are minimal terms and conditions required for a technology-transfer-related civil contract which was not dealt with in Circular No. 15. More than that, Circular No. 15 wrongly includes the “label” and “trade name” among research results (Article 3.1, Circular No. 15). The wrong inclusion of the objects which are not research results leads to a wrong interpretation of research results and technologies to be transferred. It also may cause big impacts to State interests since the applied incentive taxes could turn to be “luxury gifts” for enterprises, could wrongly target beneficiaries and could not stimulate activities of innovations by enterprises. Here, it is worth to remind that the “label” and “trade name” only are objects of IP rights which may or may not be attached to research results during the process of transfer. The regulations, as stipulated in Circular No. 15, could lead to consequences that once organizations or individuals have established their businesses, then they have their trade names which could be interpreted as research results. On basis of that they are eligible to apply for the status of S&T based business which is legally allowed in conformity to existing regulations. Following this logic reasoning, by 2020 Vietnam would have not only 5,000 S&T based enterprises, as put among objectives of strategical development of S&T for 2015-2020 period, but many times much more. With these figures, Vietnam would be ranked among leading nations of the world but still remains among developing countries with under-developed level of technologies. Therefore, Law on Technology Transfer needs to have articles to govern the suitable format of contracts of technology transfer on basis of view and consideration of technologies generated from R&D activities. In addition to that, as governed by Law on Technology Transfer, only those contracts of technology transfer, which are classified as to have transfer limiting terms and conditions, have to be registered at State competent agencies. This regulation offers a mechanism to facilitate the process of technology transfer through investment projects. It is necessary, however, to add some specific requirements to contracts of technology transfer which deal with State-budget-generated technologies. This type of technologies need to be compulsorily registered at State competent agencies. This requirement would let the implementation of rights to control and to govern properly the State budget expenditures for R&D and to avoid the great losses from collections for State budgets. In China and Korea, contracts of technology transfer, particularly the ones to be transferred in investment projects, are those objects which have to be compulsorily registered for management purpose.

Another aspect, Law on Technology Transfer does not deal with the completeness of technologies in the process of commercialization of

technologies. The miss of this regulation leads to the following consequences:

- *For technologies transferred from overseas to Vietnam:* since we do not have legal documents to govern the completeness of technologies, foreign partners easily transfer to Vietnamese enterprises non-integrated technologies or insert intentionally the purchase of other equipment (not required by technologies) we can manufacture domestically. This situation leads to the waste or ineffective use of technologies. At the same time, we do not have the legal regulations to facilitate the fast application of imported technologies. This causes certain difficulties to attract the introduction of new technologies in Vietnam (particularly the technology transfer through FDI projects). Another problem which may delay the introduction of new technologies is that existing technologies and products produced by these technologies available in markets have to meet certain established norms and standards, while new technologies could not have immediately suitable norms and standards to fit [15].
- *For technologies generated domestically:* Law on Technology Transfer misses mechanisms to encourage the implementation and application of domestically generated technologies (particularly for first time participation entities). Therefore, the new technologies which are generated domestically are difficult to be applied and implemented.

2. Intermediate organizations in science and technology markets

Another gap between Law on Technology Transfer and Law on S&T is found in the way to distinguish clearly technology transfer service organizations and science-technology service organizations. Then they give overlapping regulations towards these two types of organizations. Namely, Law on Technology Transfer stipulates: “Activities of technology transfer include technology transfer and technology transfer services” (Article 3.16, Law on Technology Transfer) where it defines: “Technology transfer services are activities to support the search, conclusion and implementation of contracts of technology transfer” (Article 3.12, Law on Technology Transfer). Technology transfer services, as stipulated actually in Law on Technology Transfer, include: (1) Technology transfer brokering; (2) Technology transfer consulting; (3) Technology evaluation; (4) Technology valuation; (5) Technology Expertise; and (6) Technology transfer promotion (Article 28.1, Law on Technology Transfer). At the same time, “Technology transfer promotion is activities to push up, to create and to search opportunities for technology transfer; to provide services of advertisement, show and introduction of technologies; to organize markets, faires, exhibitions of technologies and technology transaction centers”

(Article 3.21, Law on Technology Transfer). Law on S&T stipulates: “S&T services include activities of technical service and support for scientific research and technological development; activities related to intellectual properties, technology transfer, standards, technical norms, metrology, quality of products and goods, safety of radiation, atomic and nuclear energy; services of information, consulting, training, propagation and application of S&T achievements in socio-economic fields” (Article 3.10, Law on S&T). So, the definition of scopes of S&T services already includes the forms of technology transfer services. It is needed to note that Law on S&T does not deal with the notion “Intermediate organizations of S&T markets”, but Resolution No. 08/2014/ND-CP makes appear the notion “Intermediate organizations of S&T markets”, where “the forms of intermediate organizations of S&T markets include: (1) Technology incubators, business incubators; (2) Centers of technology transaction, markets of technology-equipment; (3) Organizations of service of evaluation, valuation, expertise and consulting of technology transfer; (4) Centers of promotion and supports for activities of technology transfer; (5) Other organizations of S&T service related to S&T markets” (Article 47, Resolution No. 08). In reality, “Intermediate organizations of S&T markets” dealt with the above noted Resolution No. 08, are organizations of technology transfer services. It is required that the guiding regulations for organizations of technology transfer services need to be based on Law on Technology Transfer but not Law on S&T. The not-well-based introduction of the notion “intermediate organizations of S&T markets” leads to a “chaotic” situation of implementation guiding documents for the same concrete object. The author of this paper considers that “the intermediate organizations of S&T markets” are a “folk” way to talk about the S&T markets which include many components such as institutional elements, providers, suppliers and organizations of S&T services, and keep the intermediate positions during sale-purchase transactions. It shows well that the construction of legal documents to guide the implementation process needs to follow unified rules and the names of related organizations need to be attached to their original nature. This would create a unified platform of legal documents. The not-well-based introduction of notions leads only to break down the systems of previously established regulations.

3. Technology appraisal

According to Law on Technology Transfer, there exist multiple forms of technology transfer, namely: (1) Separate contracts of technology transfer; (2) Components of technology transfer in investment projects; (3) Contracts of trade franchising; (4) Contracts of transfer of industrial property rights;

and (5) Contracts of purchase of machine-equipment and attached technology transfer. These forms of technology transfer are governed by various laws including Law on Technology Transfer, Law on Investment, Law on Intellectual Property and Law on Trade. Among them, Law on Technology Transfer governs the aspects of incentive transfer technologies, limited transfer technologies, banned transfer technologies, contracts of technology transfer and technology transfer services. Law on Investment allows to make the capital contribution by provision of technologies in investment projects, and defines the roles of State agencies in appraisal of contributed technologies in investment projects. Law on Intellectual Property governs the establishment and transfer of rights towards technology related IP objects. Law on Trade governs the form of trade franchising. Actually, we have three groups of State management agencies involved into the above noted fields of technology transfer. Namely: (1) Group of agencies to be related to investment activities (Board of management of industrial zones, production-export zones; provincial Departments of Planning-Investment, etc.); (2) Group of organizations to carry out State management functions in field of technologies (provincial Departments of Science-Technology and S&T management organizations of district level); (3) Group of organizations to control trade activities (provincial Departments of Industry-Trade). However, Law on Technology Transfer does not have any article to govern the roles of State management agencies in appraisal/examination of technologies in any way: from overseas to Vietnam, from Vietnam to overseas and inside Vietnam [14]. This measure is required to prevent the wrong flow of investment source for limited/banned technologies in Vietnam. More than that, actually the power to license investment activities is given to local administrations including People's Committees of province and district levels. However, Circular No. 10/2009/TT-BKHHCN provides only guidelines for appraisal of technologies for the projects licensed by provincial People's Committees, Board of Management of industrial zones, production-export zones, high tech zones and economic zones, as governed by Article 37, Article 38 and Article 39 of Resolution No. 108/2006/ND-CP dated 22nd September 2006 by the Government which provides regulations and guidelines in details for implementation of some articles of Law on Investment. And it is not enough. With these regulations there exist many holes to make pass limited transfer/banned technologies into Vietnam through investment projects under power of approval by People's Committees of district level, contracts of trade franchising, contracts of sale-purchase of machine-equipment with attached technology transfer in local levels [14, 15]. Therefore, it is necessary to add and to define liabilities of People's Committees of province and district

levels and the roles of hub organizations in charge of unified management functions for transferred technologies.

4. Other matters to be reviewed and amended next in Law on Technology Transfer

First, for purpose of management of technology transfer in Vietnam, three lists of categories of technologies were issued (incentive transfer technologies, limited transfer technologies and banned transfer technologies) and implemented by Resolution No. 133 and Resolution No. 120 (Resolution No. 120 substitutes Article 5.1. of Resolution No. 133 from the date of 1st February 2015). Actually, the Prime Minister keeps the power issuing these three lists. Law on Investment, however, stipulates basically to provide People's Committees of provinces/cities with the power to license investment projects (except particular categories of projects to be assigned to the power of the Prime Minister). Above of all, local governments understand most clearly which technologies fit their needs and provide driving forces for local socio-economic development. It happens that a technology is found to be incentive for transfer in a locality but turns out to be limited/banned for transfer in other localities. This depends on specific features of natural conditions, culture, traditions and technological level of every locality. Therefore, it is advised to define the power of the Prime Minister to set up the principles to identify categories of incentive transfer technologies, limited transfer technologies and banned transfer technologies. Then, local People's Committees would issue the concrete lists of related technologies. This scheme would flexibly streamline the investment licensing process in Vietnam.

Second, the transfer pricing applied in activities of technology transfer is a large and hot topic recently, particularly after the issue of Law on Technology Transfer and the removal of control of prices in contracts of technology transfer. FDI projects usually are conducted with certain technology transfer as contribution of investment capitals made between mother companies abroad and branch companies in Vietnam. In the procedure of capital contributions by technologies in investment projects, mother companies provide lists of prices very much higher than actual prices and then branch companies transfer these volumes to their mother companies in form of amortizations. By these moves they make a game of true benefits/false losses to avoid paying annual corporate income taxes. Therefore, it is highly necessary to establish the post-checking mechanism for prices of technology transfer after the issuance of investment licenses to cope with this fraud.

5. Proposals and recommendations

On basis of the above analysis, the Board of preparation for review of Law on Technology Transfer should consider the problems to make suitable revisions and amendments. The most attention here is to identify clearly the content of the targeted scope of revisions of Law on Technology Transfer and Law on S&T as well as common and interconnected provisions of the two Laws. The gaps between them should be suitably adjusted to improve the legal background for technology transfer. The revision of the Law will give contributions to make S&T become the direct driving force for future development./.

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