

Consideration on Technology Transfer by Overseas Employment of a Natural Person in an Export Control Perspective

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1. Introduction

In recent years, there have been cases in which retirees from the domestic nuclear industry are employed for foreign entities. It is difficult to consider technology transfer by overseas employment of a natural person as a general intangible technology transfer (ITT) because it has different characteristics from conventional labor dispatch. Therefore, it may not be appropriate to apply it existing export control system. This study summarizes the characteristics of technology transfer by overseas employment of a natural person, and confirms whether it is included within the scope of technology transfer defined under domestic laws and international agreements. The appropriateness of export controls was also evaluated.

2. Intangible Technology Transfer (ITT) Controls

With the increasing development of transportation and communication technologies, the subject of international trade have expanded from goods to services. Intangible technology is difficult to control, as it has no form and is transferred in a variety of ways. Therefore, the control of intangible technology transfer(ITT) is one of the major issues that the international export control regimes have been paying attention to. In the Republic of Korea, the control of intangible transfer of strategic technology was legislated by amending the Foreign Trade Act in 2014, and intangible 'technical supports' through face-to-face contact, verbal transmission, and service offer such as a guidance, training, meeting, joint research, and maintenance are also controlled.

3. Characteristics of technology transfer through individual employment abroad

Although the transfer of technology by 'employment' is intangible, it has different characteristics from the general form of ITT.

First, the source of the transferred technology is not clear. In general, the employee acquires the technology from the employer through pre-training and staff handover in advance, and then provides labor to utilize

it. In other words, the technology transferred by the employee is a combination of the technology acquired from the employer and the technology already owned by the employee such as know-how and labor. Therefore, it is difficult to identify the source of transferred technology. It is also difficult because the employee is an unaffiliated individual. It is possible to make some estimates based on the individual's academic history and work experience, but the clarification is difficult. If the technology owned by the individual was acquired from a third country, it becomes even more complicated to identify the source.

Second, it is difficult to specify the expected scope of technology transfer. It is possible to estimate the approximate related fields, but the specific scope is difficult to determine. Also, the possibility of the change of job task cannot be ruled out

Third, the scope and level of technology is limited because it is transferred by an independent individual. The transferred technology is usually the know-how, knowledge, labor, etc. owned by a natural person, which is relatively low in scope and level compared to that transferred by a corporation.

4. Technology transfer as defined by national laws and international agreements

1) Foreign Trade Act

According to Article 2(3) of the Enforcement Decree of the Foreign Trade Act, the exportation is classified as 1) movement of goods, 2) provision of services, and 3) delivery of electronic form goods. The technology transfer by overseas employment of a natural person can be related to the '2) provision of services'. However, Article 3 of the Enforcement Decree of the Foreign Trade Act stipulates that the service provider is a "person who engages in(manage) a business," and a natural person does not correspond to this category. In other words, the overseas employment of a natural person cannot be interpreted as an exportation under the Enforcement Decree of the Foreign Trade Act.

Article 2(3) of the Enforcement Decree of the Foreign Trade Act
<p>3. The term "exportation" means any of the following transactions:</p> <p>(a) Moving goods from the domestic area to a foreign country for sale, exchange, lease, loan, gifting, etc. (including sale of mineral resources gathered or marine products captured by Korean vessels in a foreign country to another foreign country);</p> <p>(b) Selling goods produced (referring to manufacturing, processing, assembling, repairing, recycling, or altering; hereinafter the same shall apply) in the domestic area, to a foreigner in a bonded store referred to in Article 196 of the Customs Act;</p> <p>(c) Delivering goods from a foreign country to another foreign country for consideration which shall meet requirements determined and publicly notified by the Minister of Trade, Industry and Energy;</p> <p>(d) <u>Providing services under Article 3 by a resident as defined in Article 3 (1) 14 of the Foreign Exchange Transactions Act (hereinafter referred to as "resident") to a nonresident under Article 3 (1) 15 of the said Act (hereinafter referred to as "nonresident") by means determined and publicly notified by the Minister of Trade, Industry and Energy;</u></p> <p>(e) Delivering intangible goods in an electronic form under Article 4 by a resident to a nonresident by means of electronic transmission via an information and communications network or any other means determined and publicly notified by the Minister of Trade, Industry and Energy;</p>

Article 3 of the Enforcement Decree of the Foreign Trade Act
<p>Article 3 (Scope of Services) "Services prescribed by Presidential Decree" in subparagraph 1 (b) of Article 2 of the Foreign Trade Act (hereinafter referred to as the "Act") means any of the following services: <Amended on Feb. 29, 2008; Mar. 23, 2013></p> <p>1. Services provided by <u>a person who engages in(manage) a type of business</u> set forth in any of the following items: ...</p> <p>2. Transferring a right to a patent, utility model, design, trademark, copyright, neighboring copy right, program copyright, or layout design of a semiconductor integrated circuit protected by domestic statutes and treaties to which the Republic of Korea is a party, instituting an exclusive license for the afore-said right, or granting a non-exclusive license therefor.</p>

2) WTO Agreements

According to paragraph 2 of Article 1 of Part I of the General Agreement on Trade in Services (GATS) of the World Trade Organization (WTO), trade in services are classified four types. The technology transfer overseas employment of a natural person is related to paragraph 2(d). In the paragraph 2(d), the scope of the transfer is limited by using the term "presence", and it may be intended to dispatches and business trips. Article 3(1) of the Korean Foreign Trade Management Regulations similarly defines 'supply of services', which is believed to have been borrowed from the WTO.

Paragraph 2 of Article 1 of Part I of WTO Agreement	Article 3(1) of Foreign Trade Management Regulations
<p>2. For the purposes of this Agreement, trade in services is defined as the supply of a service:</p> <p>(a) from the territory of one Member into the territory of any other Member;</p> <p>(b) in the territory of one Member to the service consumer of any other Member;</p> <p>(c) by a service supplier of one Member, through commercial presence in the territory of any other Member;</p> <p>(d) <u>by a service supplier of one Member, through presence of natural persons of a Member in the territory of any other Member.</u></p>	<p>Article 3 (Provision of Services) ① "Provision of services in the manner prescribed by the Minister of Trade, Industry and Energy" pursuant to subparagraph (3) of Article 2 of this Act means provision of services in accordance with any of the following methods.</p> <p>1.provision of services by cross-border movement of services</p> <p>2.provision by domestic consumption by non-residents</p> <p>3.provision by a resident's commercial presence abroad</p> <p><u>4.by the movement of a resident to a foreign country.</u></p>

Furthermore, the Annex on the GATS specifies that the employment is excluded from the scope of the Agreement. In other words, the WTO considers the employment of individuals not to be trade in services.

Annex on WTO Agreement
<p><Annex on Movement of Natural Persons Supplying Services under the Agreement></p> <p>1. This Annex applies to measures affecting natural persons who are service suppliers of a Member, and natural persons of a Member who are employed by a service supplier of a Member, in respect of the supply of a service.</p> <p><u>2. The Agreement shall not apply to measures affecting natural persons seeking access to the employment market of a Member, nor shall it apply to measures regarding citizenship, residence or employment on a permanent basis.</u></p>

5. Review on export control aspects

Based on the above review, it could be interpreted that the technology transfer by overseas employment of a natural person does not constitute an export as defined by domestic laws and international agreements. Therefore, it is difficult to control the overseas employment of a natural person in a view of nuclear nonproliferation, as it is excluded from the category of 'export' under the current Foreign Trade Act. In addition, considering the characteristics of overseas employment mentioned in Section 2, it is difficult to apply general export control procedures such as Government to Government Assurance (GTGA) and export licenses. It is required to establish an additional legal basis and a specialized policy for the control of the overseas employment in the aspect of nuclear nonproliferation.

However, it has been controlled in the security field. The reckless technology leakage could be prevented through other laws which were enacted to prevent the leakage of national technology, such as the Unfair Competition Prevention and Trade Secret Protection Act and Act on Prevention of Divulgence and Protection of Industrial Technology.

6. Conclusions

The technology transfer by overseas employment of a natural person has different characteristics from the commonly defined ITT. Considering these characteristics, it is confirmed that domestic laws and international agreements do not consider an individual's employment as an export. Therefore, it is difficult to consider an individual's overseas employment activities as being subject to nuclear nonproliferation controls under current domestic laws. It is required to establish an additional legal basis and a specialized policy for the control of the overseas employment in the aspect of nuclear nonproliferation. However, export control (e.g. export license, catch-all control) may be required in special cases such as transferring technology that has a clear source. For a regulated person, it is recommended to seek advice from the regulatory agency (NSSC, KINAC), if it is difficult to make clear decision regarding the need for control.

As an overseas expansion such as overseas dispatch, study abroad, and overseas employment increases in the nuclear field appears, it is also important to promote awareness of the nuclear industry, academia, and research on the importance of ITT control. Continuous communication between regulators and regulated parties is required through outreach activities on domestic export control and ITT control policy.

REFERENCES

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