

How to Control the Intangible Transfer of Technology Related to the Trigger List Items

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1. Introduction

The advent of new technology has expanded the range of possible technology transfers through various electronic devices, including telephone and internet. As technology related to the Trigger List items defined by the Nuclear Suppliers Group (NSG) Guideline proliferates verbally or by means of electronics, the international community is paying more attention to combat the Intangible Transfer of Technology (ITT) to countries of concern. According to the recommendations of the Wassenaar Arrangement (WA), each nuclear supplier carries the full responsibility for establishing an effective measures to control the ITT. This paper is designed to explore how to control the ITT by utilizing various measures such as adopting a step-by-step approach, implementing Export License of Technology for Nuclear Project, and making a list of reliable countries. In addition, taking a mandatory education course on export control is explored as a way of complementing the existing control mechanism and raising awareness of the ITT.

2. Intangible Transfer of Technology

2.1 Current Status

According to a survey on fifteen organizations dealing with technology related to nuclear energy, about 67% of respondents stated that they have experiences in transferring nuclear-related technology to a foreign country. In addition, about 20% of those that replied have recruited foreigners, and approximately 50% of respondents answered that they have concluded a Memorandum of Understandings (MOU) with organizations overseas. Even though this survey was carried out targeting practitioners in field, only 60% of respondents are aware of the ITT. Based on these findings, it can be incurred that an effective control mechanisms are needed to prevent unintended transfer of nuclear-related technology.

2.2 Definition of ITT

The ITT has been controlled under the legal framework of the Foreign Trade Act and the Minister's Regulations on Export and Import of Strategic Items in the Republic of Korea. According to these regulations, the ITT occurring from a local resident to a foreign national and from the territory of the ROK to a foreign country is regarded as against the law. However, these Act and Minister's Regulations rather focused on dual-use items and has a limit to fully distinguish and cover the unique feature of controlling the Trigger List (TL) items, such as GTGA mandatory for TL exporting. Hence, it is requisite to devise effective and comprehensive measures tailored for the ITT for uses regarding TL.

3. How to Control the ITT

There are several factors that ITT control measures should take into account. First, the control of non-sensitive technology with relatively low propensity for proliferation could be eased in order to prevent excessive regulations. Second, export control procedures can be differentiated and subdivided by target countries. Third, the additional administrative onerousness generated by implementing the new regulation should be minimized. Lastly, raising awareness of personnel who is handling the ITT is also emphasized. These new control measures are expected to embrace all these aspects and maintain balance between easing regulatory burdens and strengthening the international nonproliferation regime.

3.1 Step-by-step Approach

The new ways to control the ITT should take a step-by-step approach. By identifying and clarifying the targets for the ITT, the process for issuing an export license could avoid unnecessary implementation. In addition, by differentiating the process of applying the license by the characteristics

of technology to be transferred or types of project or contract, this stepwise approach could reduce the administrative burden for both applicants and administrators. For instance, if an ITT is a part of a commercial contract, which is considered non-sensitive information, the licensing process could be simplified. Also, to clearly define each specific case that require a Governmental Assurance in advance could help applicants presume to estimate time for the whole application process.

3.2 *Export License of Technology for Nuclear Project*

The conditions mentioned above could be applied in more practical ways. For instance, if a transfer of technology is approved as an umbrella framework, the subordinated ITTs could be exempt from obligations to apply for additional licenses for each case. Second, if a large scale of project is planned and conducted, a comprehensive license for the entire project is issued once. Then the each technology transfer is identified by the government before the transfer actually occurs. This concept is so-called "Export License of Technology for Nuclear Project." According to this idea, a comprehensive license covering both tangible and intangible transfer of technology of an entire project is issued once. Then subordinated cases of the ITT under the issued license are considered being part of the authorized project.

3.3 *List of Reliable Countries*

Even though an identical technology is transferred in a same way, the possible consequences varies depending on the technology capabilities and the level of willingness to support the nonproliferation regime of the recipient country. For instance, transfers with destination to the Nuclear Weapons States by the Treaty on the Nuclear Nonproliferation (NPT) has exempted from obligation of requiring the Governmental Assurance. Other countries such as Sweden and Iran are treated in a same way despite of the stark contrast of their nonproliferation efforts. In this sense, it would make sense to categorize the recipient countries by their institutional, technical, and political attitude towards nonproliferation. By doing so, limited resources could be managed and distributed in a more effective and efficient way.

4. Complement measures

Minimizing the administrative burdens does not mean weakening the effectiveness of export controls. The new controls measures of the ITT could adopt education requirements and penalty clauses to complement the suggested control mechanism. First, the exemption of license application and the Export License of Technology for Nuclear Project can be complemented by setting up a mandatory education sessions to attend before applying the export license. Moreover, the penalty clauses applied to the violator for the ITT regulations could play a significant role as a deterrent against the illegal transfers. The implementation of these educational measures is inevitable in order to protect exporters from suffering any possible disadvantages caused by illegal transfers of technology in the international community.

5. Conclusion

The intangible technology controls has become an emerging issue in the area of export controls. This paper sought ways to control ITT by easing administrative burdens through a step-by-step approach, adopting a concept of Export License of Technology for Nuclear Project, establishing a list of reliable recipient countries. To this end, issuing a license and a governmental assurance and exemption of unnecessary documents were considered the best possible means to be implemented for the ITT controls. In addition, education was also highlighted so as to complement the control systems. At the moment, all these measures are supposed to be implemented in a mandatory manner. To develop more advanced control mechanism in the future, further research on ITT control measures on a voluntary basis should take into consideration.

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