

A study on effective implementation and management of Strategic items Export controls at KAERI

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1. Introduction

Strategic items Import and Export controls are necessary to prevent countries of concern or terrorist groups from acquiring materials, equipment, parts and technologies necessary for the development and production of strategic weapons. Accordingly KAERI has complied with the legal implementation of tangible and intangible technologies, goods, and software to prevent the illegal transfer of strategic items.

In particular in the case of technology, it is recommended that, if intellectual property rights are owned by the Korea Atomic Energy Research Institute, an application for classification should be made in relation to all technical documents or projects. In addition to depending on the exporting region, the export license approval period will be longer, and depending on the export region of strategic items. It may take a long time due to the government guarantee required for the export license.

2. Types of Export licenses mainly used by KAERI

Division	country
1 Area of "A"	Argentina, Australia, Austria, Bulgaria, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Netherlands, New Zealand, Norway, Ukraine, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, UK, USA (28 countries)
2 Area of "A"	Japan
1 Area of "B"	Areas excluding Area 1 of "A" and Area 2 of "B"
2 Area of "B" (UN designated countries of concern for export)	Central African Republic, North Korea (limited to re-export via a third country), Democratic Republic of Congo, Iraq, Lebanon, Libya, Somalia, South Sudan, Sudan, Syria,

Table 1. ROK's Strategic items Export Country of Division's Strategic items Export Country of Division

According to the 28th Amendment to Import and Export Notification, Area 1 of "A" (28 countries including the US, France, Germany) and Area 2 of "A" are Japan. Area 1 of "B" refers to the area excluding area 1 of "A", area 2 of "A", and area 2 of "B". Area 2 of "B" is (Central African Republic, North Korea (restriction of re-export through third countries), Democratic Republic of Congo, Iraq, and Lebanon, Libya, Somalia, South Sudan, Sudan, Syria, and Yemen). Details are shown in Table 1.

The classification of export areas is based on the final destination. But even if the final destination is area 1 "A", if it passes through area 2 of "A", area 1 "B" or area 2 "B", Permission is obtained from the relevant ministries for the transfer of items and technologies that are strategic item and technology. As mentioned above, government guarantees from the government of the import country are essential for the export of nuclear-only products. It is considered that strategic goods are exported to each area. Types of Export License include Export License Application on Technology Export of Nuclear Plant, Situational License, Brokering License, Transit License Application, Transshipment License Application, etc. In KAERI, export licensing has mainly application through export license and License Application on Technology Export of Nuclear Plant.

However, if it is a nuclear-weapon country, it is subject to exemption from government guarantees. A nuclear weapons state is a country that officially possesses nuclear weapons under Treaty on the Non-Proliferation of Nuclear Weapons(NPT). Export license is identify and approve items, quantities, end users and intended uses of goods and technologies.

3. Implementation of License Application on Technology Export of Nuclear Plant for KAERI's efficient project process

It is very difficult to get both Classification and Export licensing procedures followed when the applicant has to apply for a large number of judgments. The Nuclear Safety and Security Commission(NSSC) approves License Application on Technology Export of Nuclear Plant for specific projects, it has enabling efficient business operation during the project period. License Application on Technology Export of Nuclear Plant is to permit the Trigger list Items related technologies during the project period. License Application on Technology Export of Nuclear Plant requires follow-up management, and after obtaining an export license, classification is made on the technology to be transferred, and a quarterly report on the transfer performance is required.

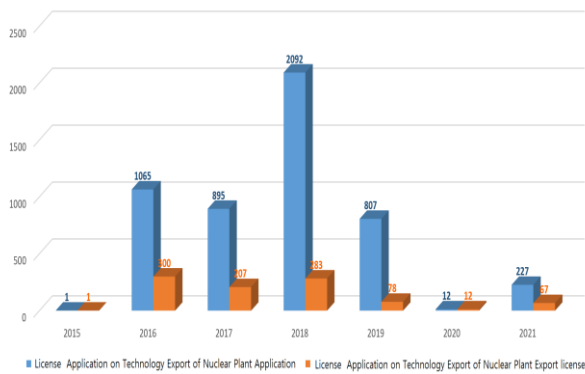


Figure 1. Number of approved Application and Export licenses according to License

4. License Application on Technology Export of Nuclear Plant process and follow-up management

For the Quarterly report, the list of technology transfers corresponding to strategic items are submitted within 15 days after the end of each quarter, and is reported using a separate transfer history quarterly report form. Two weeks before the end of March, at the end of June, at the end of September, and at the end of December, a guide was sent for the report on the 15th of the following month, and the management of follow-up reports was thoroughly implemented.

The Fig.1 shows the transfer details of technical data for projects approved as License Application on Technology Export of Nuclear Plant from 2018 to 2021. If the application went through both Classification and Export license approval process, it would have been difficult for the project to proceed smoothly. The reason for the low number of judgments in 2020 is that Export licenses were issued to transfer technology to other countries, but the export license approval was delayed due to government guarantees, so the number of judgments is significantly less.

The number of applications continues to increase due to the approval of more than two License Application on Technology Export of Nuclear Plant in 2021. In 2022, a new business is expected to be added. In this way, when Project manager applies for a large number of application requests for License Application on Technology Export of Nuclear Plant, it is possible to apply for the export license as a project in an efficient and simplified process according to a specific form.

However, it is not possible to determine whether or not to implement by the selection of the operator because the current operator cannot make a choice and obtain approval as a nuclear plant technology export license. If a procedure and plan for approval through consultation before approval for nuclear plant technology export license are prepared by collecting opinions of business operators, it will be of great help in helping applicants understand.

5. Conclusion

Currently KAERI is exploring whether the technology being transferred is a strategic item, so that it can be safely transferred overseas. And an application method is being sought so that the applicant's research can proceed smoothly. In the past, when applying for export control of strategic items, the application was made by filling out an Export license application. The simplification of document submission was applied by recording the necessary information in the system within KECS.

In 2021, KAERI introduced a new Import and Export management system for smooth application and management, and this system is the KAERI Import/Export Control System (KECS). In the past, files and histories were separately organized and recorded in DADAMS, but with the establishment of the KECS system, transfer histories of technologies and documents can be managed more systematically.

In the future continuous maintenance is required to improve the user-friendliness of the system through continuous feedback between applicants and system administrators. So it is expected that KAERI will be able to efficiently utilize and manage the export controls of strategic items through the system upgrade.

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