

Study on the Export and Import Control of Strategic Items at KAERI

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1. Introduction

Strategic items include conventional and Weapons of Mass Destruction(WMD), missiles as a means of transfer, and items that may be used in the development, manufacture, use, or storage of these weapons.

Items management system was implemented through the Enforcement Decree of the Foreign Trade Act in 1987, and strategic items were first stipulated in that came into effect in 1993. According to the relevant laws, There are Foreign Trade Act and Nuclear Safety Act.

Export control is carried out by each ministry in accordance with the that specifies export licenses and detailed examination procedures based on the Foreign Trade Act and the Nuclear Safety Act, etc.

Refers to a system to prevent in advance such strategic items from being transferred to a terrorist sponsoring country or terrorist organization and used for a purpose of illegal transfer.

In this regard, KAERI is applying for export control strategic items permission by dividing into two ministries in the Nuclear Control Office, and this paper will deal with the application for Trigger list items.

2. Status of Strategic Items Export and Import control at KAERI

Since the revision of the Foreign Trade Act in 2014, export controls on intangible technology transfer have been strengthened and It is penalty for illegal transfer has increased recently. In order to raise the awareness of export control, strategic material export control management is being conducted through strategic technology management, export control exceptions, and CP(Compliance Program) operation.

In December 2018, KAERI received an 'AA' grade and became the first government-funded CP certified company.

The strategic items judging institution is divided two places. It is the Korea Institute of Nuclear Nonproliferation and Control(KINAC) and (Korean Security Agency of Trade and Industry(KOSTI). Before applying to these two Places, an application must be made through Nuclear Materials and Technology Control Team.

In 2021, KAERI's Nuclear Materials and Technology Control Team introduced the new export and import control system for smooth support and management. It is KAERI Export and import Control System(KECS). This system is export and import control of strategic items at KAERI, and the applicant and the person in charge are able to control and follow up the progress in real time continuously.

Also, Nuclear Materials and Technology Control Team is conducting its own training to rethink researchers' awareness, and is preparing for online training through the use of experts. The training course will be operated by uploading to KLMS managed by the Nuclear Education Center.

3. Application process of Strategic Items Export and import control

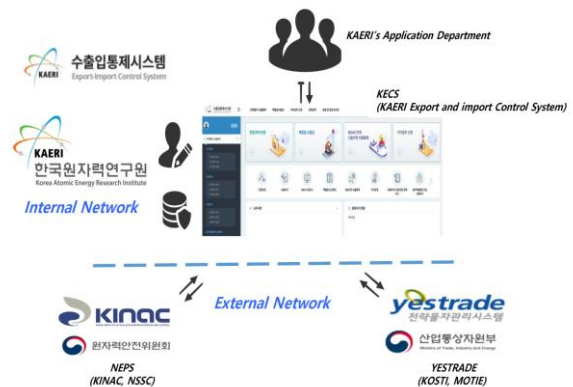


Figure 1. Application process of Strategic Items Export and Import control at KAERI

The strategic materials judging institution is divided two places. It is the Korea Institute of Nuclear Nonproliferation and Control(KINAC) and (Korean Security Agency of Trade and Industry(KOSTI).

The Nuclear Material and Technology Control Team reviews application file through the KECS and is in charge of communication with the application department.

KECS is a system to apply to YESTRADE and NEPS using this system. After receiving and reviewing the judgment documents through KECS from the internal network, the files are transferred to the external network and it is applied in two ministries.

At this time, nuclear-exclusive products are reviewed by KINAC and applied for through the Nuclear Export and imPort System(NEPS), which is approved by NSSC. In addition, dual-use items are judged through KOSTI and YESTRADE, which is approved by MOTIE. The review period is based on 15 days excluding public holidays, and may be delayed if there are insufficient content in the data.

Nuclear Materials and Technology Control Team is in charge of the overall implementation of export controls on strategic goods and technologies at KAERI, as shown in Fig. 2. The Application departments send export control-related data to the Nuclear Materials and Technology Control Team, which makes a self-classification or classification by Korean Security agency of Trade and Industry(KOSTI) or Korea Institute of Nuclear nonproliferation And Control(KINAC) as to whether or not the item for export consists of strategic goods or technologies. In the case of strategic items or strategic technologies, export license must be obtained. The export license or classification results is then notify to the application.

4. Progress of Strategic Materials Export control

As mentioned above, the application process within the Atomic Energy Research Institute for nuclear power products is shown in Fig.2.

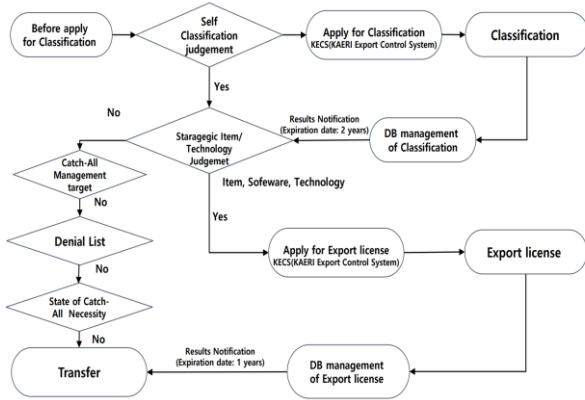


Figure 2 KAERI's Application Progress Diagram

When an export or import of a substance or technology occurs, the first thing to do is to contact Nuclear Materials and Technology Control Team.

After guiding the application documents, the application is made through Nuclear Materials and Technology Control Team's final reviews. To the next, the review is completed in the internal network, the data is transferred to the external network and the application is made.

Then, an application is made to the NEPS, and data can be supplemented in this process. Through this progress, When the judgment is completed through this process, the result is notified. Application data and issued documents are managed by date, and the export/import control history is stored in a DB.

The purpose was to simplify the application procedure while proceeding with the nuclear plant export license. In particular, it was difficult to apply for the software separately. In this regard, it seems that institutional improvement is necessary.

Technical documents regarding the export were increased by the license Application on Technology Export of Nuclear Plants to King Abdullah City for Atomic & Renewable Energy(KACARE)Joint Research and Micro Modular Reactor (MMR).

The number of license Application on Technology Export of Nuclear Plants are expected to increase further in the future, and follow-up management through quarterly reports is expected to be systematic.

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5. Conclusion and Future Works

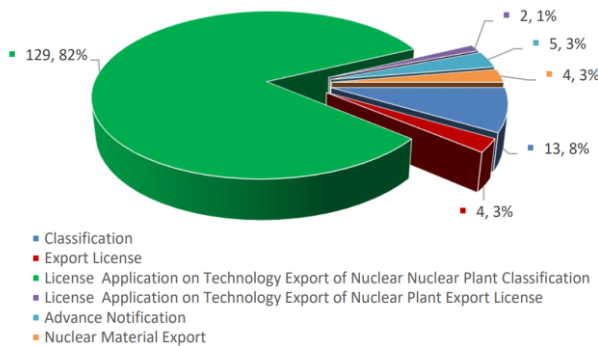


Figure 3. Status of Export-Import Control at KAERI by 2021

KAERI has technically supported the examination of 131 classification, 7 export licenses, and 4 nuclear material export and import approvals related to the implementation of export and import controls.

For the management of the export and import control system and the operation of the CP, it is necessary to organize the procedures within KAERI, and it seems that the maintenance of functional improvement is urgent to solve the errors of the export and import control system.