

Challenges of intangible technology transfer in Academia: Japanese University

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Change in Environment Surrounding Academia in Japan

Reorganization of national university as independent administrative institutions(2004)

★ The Japanese academic researchers in the concerned field such as nuclear power or aerospace, have been managing export control by themselves since before. however **systematic security trade control** have been required even in the academia.
→ METI have started outreach seminar for academia. (2006~)

“Plan for 300,000 Exchange Students” has been established by Japanese government(2008)

★ The decrease of the 18-year-old population in Japan and the requirement for the internationalization of university

The enforcement of the standard for export control system. (2010)

★ The organization, even university, which has relation to abroad is required to have a system to comply with security trade control in Japan.
The construction of security trade control system in Japanese university has been accelerated since 2010.

What is the problem for security trade control in academia? (1)

Security trade control in university need to cover very wide academic field

The specific academic fields which should be payed attention from the point of view of security trade control

- ① Nuclear power
 - ② Aerospace
 - ③ Chemistry
 - ④ Biology
 - ⑤ Precision engineering (Including control engineering, electronics, mechanical engineering)
 - ⑥ Information technology (including telecommunication, software)
- Also, the security trade control system should cover other academic fields.

However, for the security trade control stuff, It is impossible to grasp all of the research projects in the university.

It is important to raise a researcher's awareness for self control!!

What is the problem for security trade control in academia? (2)

The situations which need security trade control in academia

- ① Export of research equipment, chemical substances, and microorganisms
- ② Sponsored research or collaborative research involving foreign governments or overseas companies
- ③ Technical guidance to companies based overseas
- ④ The acceptance of foreign researchers and international students

Generally, each administrative proceedings mentioned above will be carried out by different department in Japanese university

To construct the security trade control system in the academia. it is indispensable to change the awareness of administration stuff in the university.

What is the problem for the security trade control in academia? (3)

To change the awareness of faculty members in the university is crucial issue for the security trade control in academia.

Most of academic researchers in Japanese universities think that their research projects have no relation to the development of weapons, even though problem of “dual-use” will be still remained.

The organization of administration office is hierarchical , and administration staff tend to prefer routine work.

(They have an originality of organization which can not accept new service.)

Awareness-Raising Activities of Security Trade Control in Academia

METI have made effort for outreach activities to academia(holding seminar for academia, establishing guidance, and so on). On the other hand, what kind of activities have been done in academia independently?

- Two guidelines by Japan Society for Intellectual production.(2009)
 - (1) Guidelines for academic institutions
 - (2) Guidelines for academic researchers
- A one day forum, “Export Control Day for Academia”, has been held by academia annually(2012~). More than 200 people attended and shared their best practice and challenges.
- The request about the export control to the government (2014)

The request for comprehensive revision of export control system for academia in Japan(2014)

The destination and the sender of this request

To METI, MEXT, MOFA

From Center for Information of security trade control(CISTEC)

Japan society for intellectual production(J-sip)

Intellectual Property Association of Japan

University Consortium for International Intellectual

Property Coordination (USIP)

Export control day for academia executive committee

This proposal demands the improvement of 20 issues related export control system in Japan.

Export control is managed by METI, MEXT is in charge of university, and MOFA also have relation to this matter.

This situation indicates the complexity of the situation of Japan in this issue.

The point of this request

- 1 The matter related to education and study in academia
 - (1) Complete exemption of application for the Foreign Exchange and Foreign Trade Act should be allowed for the undergraduate education in faculty
 - (2) It should be clarified that the “use” of listed instruments in the universities would be non-regulated.
- 2 To clarify the definition of the field of basic science research
- 3 The clarification of role sharing between university and government for the acceptance of foreign students
- 4 Provision of information and management tool which merit the management of export control in the university

Complete exemption of application for the law should be allowed for the undergraduate education in faculty

Under the basis of existing laws and regulations, the provision of information for unspecified people is only exception of the application of the export control law.

Thus, the provision of information to specified people such as students or researchers is not exception of the application of the law.

The education which is carried out by commercially available textbook is only the exception of application of export control law.

It is necessary to clarify the pattern of exception which is not applied for the Foreign Exchange and Foreign Trade Act in undergraduate education.

It should be clarified that the “use” of listed instruments in the universities would be non-regulated

- If the use of various instruments by foreign students is regulated, it is very difficult for university to comply with the Foreign Exchange and Foreign Trade Act.



In 2014, after the submission of this request. METI has indicated that the “use” of instruments in the university or research institute was non-regulated.

The definition of the field of basic science research should be clarified

According to the Foreign Exchange and Foreign Trade Act , transactions through which technology is provided for basic scientific research is not regulated.

However **the definition of the “basic scientific research” is ambiguous**. Apparently, security trade control divisions in the Japanese universities are sometimes confusing.

The clarification of appropriate role sharing between university and government for the acceptance of foreign students

- At the present stage, Japanese universities take full responsibility to determine whether security trade controls may be applied or not toward foreign students, when they decide to accept students from abroad,
 - 1 We expect that government should determine whether security trade controls may be applied or not toward government-sponsored exchange students.
 - 2 Practical information about the acceptance of foreign students should be provided from the point of view of the Foreign Exchange and Foreign Trade Act

Provision of useful information and management tool which merit the management of export control in the university

- ① The system of the Foreign Exchange and Foreign Trade Act is complicated, the judgment is not so easy.
- ② There is the considerable variation of response capability for security trade control in Japanese universities.



(1) The provision of management tool for export control
(2) The provision of concrete information about concerning technical field and harmful activities toward Japan.

The effect of this request at the present stage

- 1 The use of instruments in the universities have been regarded as non-regulated matter since 2014.
- 2 METI made a table which contains both listed items and technologies, which is useful for security trade control system in university.

We recognize that Japanese government have made effort to some extent toward this request.

*The number of universities which have
established the security trade system in
Japan*

0/292(2005)→126/292(2015)

(The data is provided by MEXT)

Thank you for your attention!!