

But your research could be diverted for use in weapons of mass destruction.

If it is diverted ...

1 Nuclear engineering or radioactive material chemistry
 Research on Uranium-235 excitation schemes using dye laser beams (isotope separation, application of isotopes, uranium enrichment)
 Could be diverted for use in designing uranium enrichment equipment for making nuclear weapons materials [No. 2 (31)].

2 Structural mechanics and material engineering
 Research on process for manufacturing carbon-fiber-reinforced carbon composite (high temperature-resistant material)
 Could be diverted for use in nozzle of rocket motor for missile propulsion [No. 4 (15)].

3 Biochemistry
 Research on anthrax (anthrax bacteria)
 Could be diverted to biological weapons use, such as enabling anthrax bacteria spores to be dispersed in aerosol form, plotting outbreak of pulmonary anthrax [No. 3-2 (1)].

4 Semiconductor engineering and information science
 Research on high-resolution infrared imaging system (photoelectric properties, image processing, image recognition)
 Could be diverted to conventional weapons use, such as night navigation system for nighttime warfare [No. 10 (2)].

See here for detailed information

- ① Security export control website
 Search for "Ministry of Economy, Trade and Industry Security Export Control"
<http://www.meti.go.jp/policy/anpo/englishpage.html>
- ② Q&A for universities and research institutions
 Answers to questions often asked by people from universities and research institutions
<http://www.meti.go.jp/policy/anpo/daigakuqanda/daigakuqanda.pdf> (Japanese)
- ③ Information about seminar on security export control
<http://www.meti.go.jp/policy/anpo/seminar00.html> (Japanese)

Contact points for inquiries.

■ Trade Control Department, Trade and Economic Cooperation Bureau, The Ministry of Economy, Trade and Industry
 Inquiries about the security export control system and interpretation of the FEFTA
 Security Export Control Administration Division — ☎03-3501-2800
 Inquiries about license application and classification
 Security Export Licensing Division — ☎03-3501-2801
 Inquiries about the Compliance Requirements for Exporters and the Internal Compliance Programs Reporting illegal exports, etc.
 Security Export Inspection Office — ☎03-3501-2841
 General inquiries about security export control
 Security Export Control Information Counter — ☎03-3501-3679

■ Consultations in universities and research institutions

*Use this space to enter contact points such as information desks or representatives in universities and research institutions.

Note: Numbers in [] correspond to those on Appended Table, 1 Export-Trade Control Order. See the security export control website for details.

Professor! Just a minute!

That important research might be used in WMD, leading to tragedy somewhere in the world.



Attention

International exchanges are valuable, but ...

Even if, the purpose is for education and research,
 ① **When thinking of exporting goods subject to control**
 ② **When thinking of transferring technology subject to control**
 a license must be obtained from the Minister of Economy, Trade and Industry as stipulated in the Foreign Exchange and Foreign Trade Act (FEFTA).

The awareness and actions of each individual are important for enabling research to be carried out with peace of mind.

Not only those persons directly committing illegal actions but also corporations are subject to punishment under the FEFTA. In case of violation of the Act, the result could put the organization at great risk.



<http://www.meti.go.jp/policy/anpo/englishpage.html>

You thought your own research has nothing to do with weapons development ...

For example ...

1 Nuclear engineering or radioactive material chemistry
 Research on Uranium-235 excitation schemes using dye laser beams (isotope separation, application of isotopes, uranium enrichment)
 Multiple dye laser beams are irradiated, causing selective excitation of ²³⁵U among U isotopes for photoionization. The recovered ions are collected using an electrode plate, enriching ²³⁵U.

2 Structural mechanics and material engineering
 Research on process for manufacturing carbon-fiber-reinforced carbon composite (high temperature-resistant material)
 Using carbon fiber for reinforcement, composite materials are created with advanced dynamic properties and functional performance.

3 Biochemistry
 Research on anthrax (anthrax bacteria)
 Research is conducted on anthrax bacteria spores to study the pathogenicity of anthrax bacteria, vaccines, and anthrax diagnosis methods.

4 Semiconductor engineering and information science
 Research on high-resolution infrared imaging system (photoelectric properties, image processing, image recognition)
 An image recognition device is studied using an image reinforcing tube applying gallium arsenide for high-resolution near infrared light.

Source: Japan Society for Intellectual Production
 Security Export Control Guidelines for Researchers in Universities and Other Institutions of Higher Education

Are you aware of anything like this?

- Even hand-made carried items, or old-type materials and equipment or those provided for free, are “goods,” and hand-carrying them is also “export.”
- Research guidance to foreign researchers or international students, even if conducted inside Japan, may amount to transfer of technology subject to control.

- Examples of technologies and academic fields necessary special care in security export control**
- Atomic technology (nucleus reactions, neutronics)
 - Precision machinery techniques, precision fabrication techniques, precision measurement techniques
 - Automatic control technology, robotics technology
 - Chemistry, biochemistry (especially chemical substances harmful to humans, or antidotes to toxic substances)
 - Biology including biotechnology and medicine (viruses, bacteria, toxins)
 - Aerospace technology, high-performance engine technology
 - Programs designed for design, manufacture, or use of restricted goods

- ⚠ A wide range of academic fields are subject to control, even if they are not leading-edge areas.**
- Not only academic fields such as atomic energy, mechanical engineering, and life sciences, but natural science fields in general including general science, agriculture, and medicine have the potential for use in ways that are a security concern.

Typical occasions for technology transfer or export to foreign countries often seen in universities and research institutions

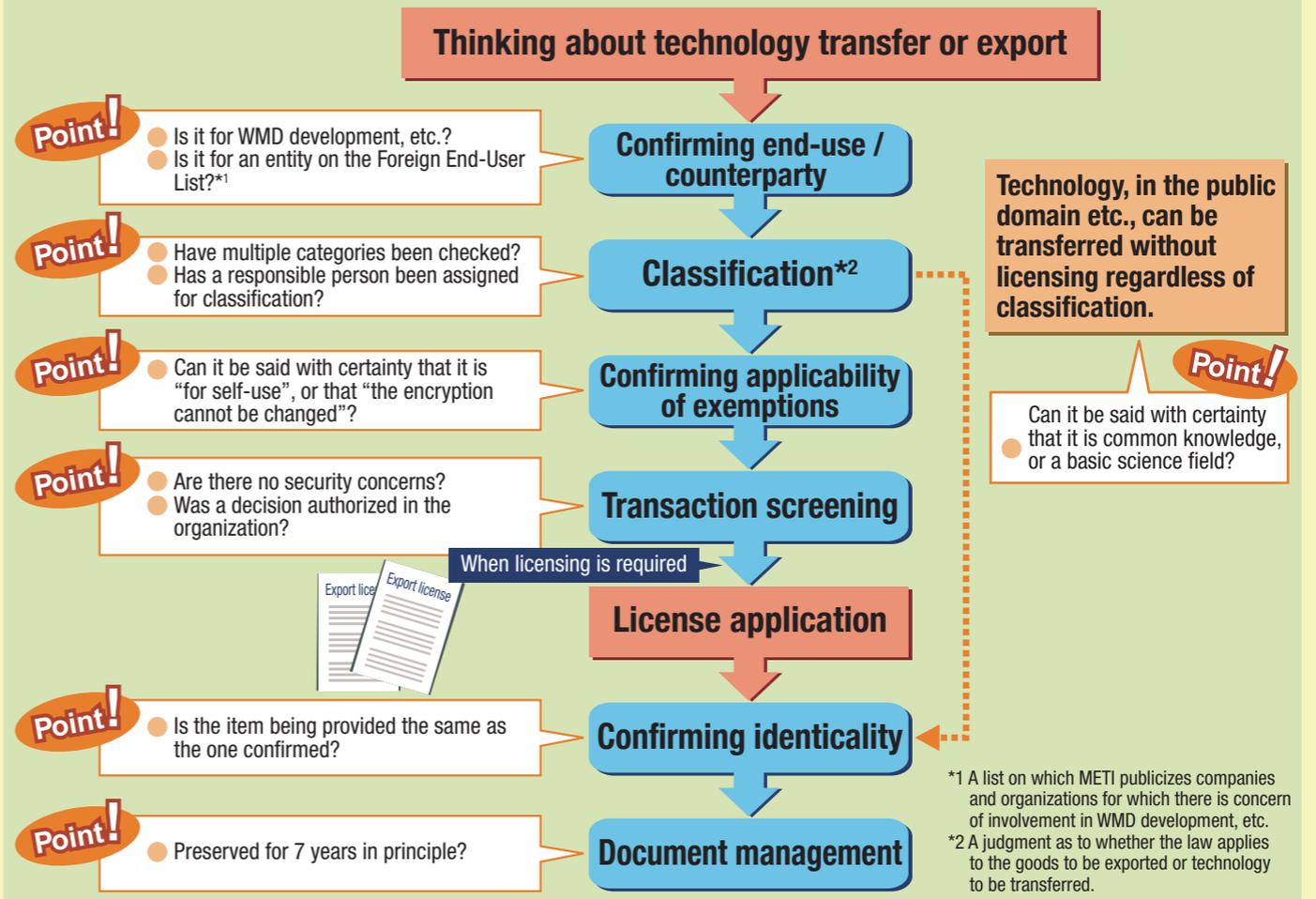
Main occasions	Specific examples
Research guidance or exchange with international students or foreign researchers	Lending or test-producing lab equipment Providing technical information by email, USB memory, telephone or FAX University classes, conferences, meetings Research guidance, technical guidance
Joint research with foreign universities or companies	Lending lab equipment Providing technical information by email, USB memory, telephone or FAX Conferences, meetings
Sending or taking along research samples, etc. for the purpose of academic research	Sending samples or carrying them with you Carrying research materials or equipment you made
Facility tours for visitors from overseas	Giving research facility tours, describing research Describing processes, distributing explanatory materials, describing test instruments
Non-public lecture events or exhibits attended by researchers or others from overseas	Oral presentations of technical information Panel displays of technical information

What is security export control that requires control in these kinds of situations?

Transfer of technology or export of goods that may hinder the maintenance of international peace and security must be checked in advance, avoiding actions of concern. Security export control is an undertaking necessary so that you, your family and friends, your university or research institution, and the people of Japan and the world can live in safety and with peace of mind.

Typical flow of control procedures in universities and research institutions

To continue conducting research with peace of mind



Compliance Requirements for Exporters

Standards stipulated in the FEFTA since fiscal 2010 that must be complied with by those continually transferring technology or exporting. Persons or organizations dealing with technology or materials and equipment that can be diverted to usages of concern must act in compliance with these standards, even if they are a research institution.

- Point!**
- Assigning a responsible person for classification
 - Making known internally the latest version of the FEFTA (compliance guidance)
 - ★ Those dealing with sensitive goods or technologies must set up specific control procedures, etc.