HOKKAIDO
UNIVERSITY

Intangible Technology Transfer and Trade Secrets

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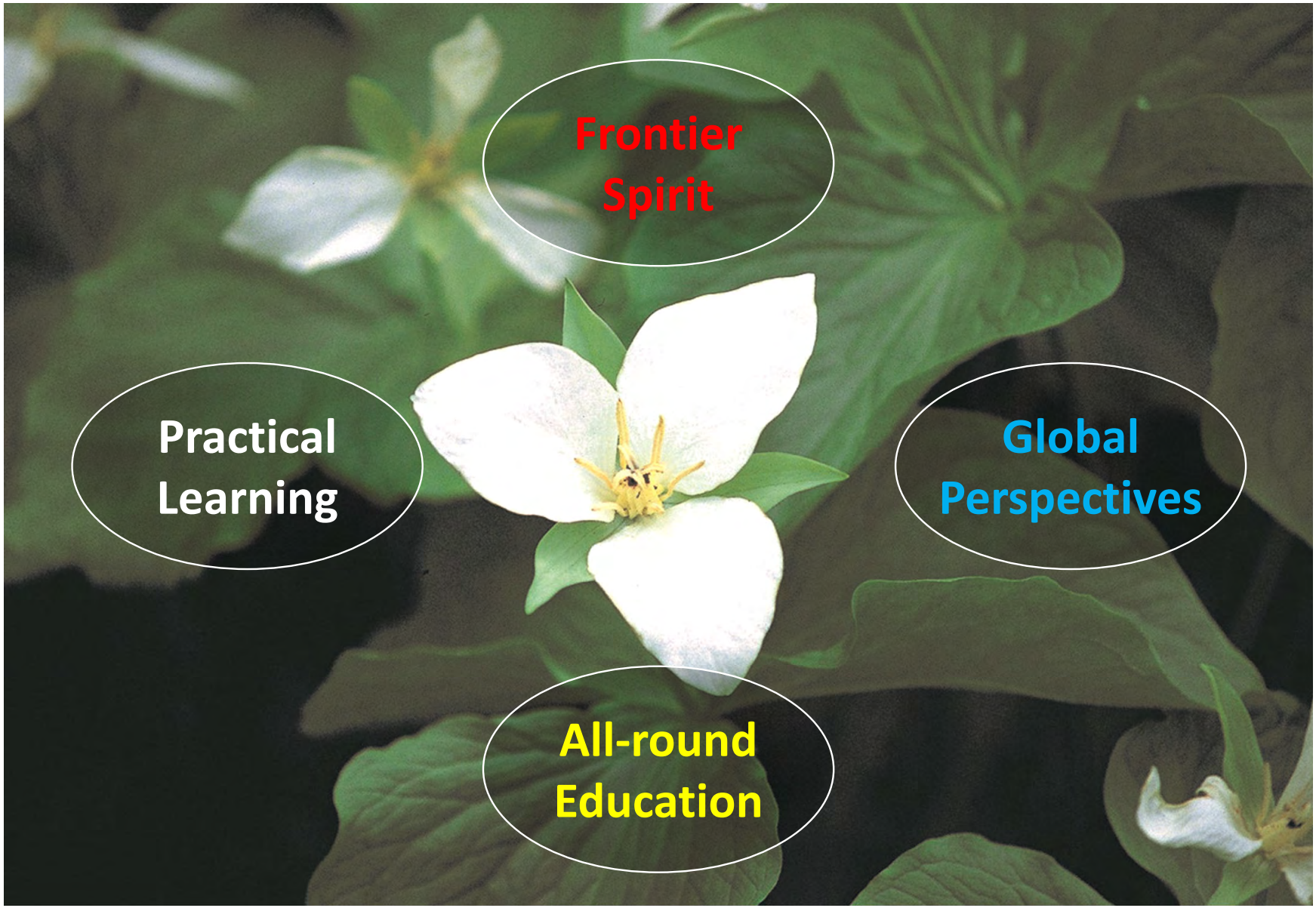
Sapporo Agricultural College Farm No. 2

1. Hokkaido University

Basic Philosophies of Hokkaido University (HU)



HU main campus resides in Sapproro, Hokkaido

Data as of June 2020

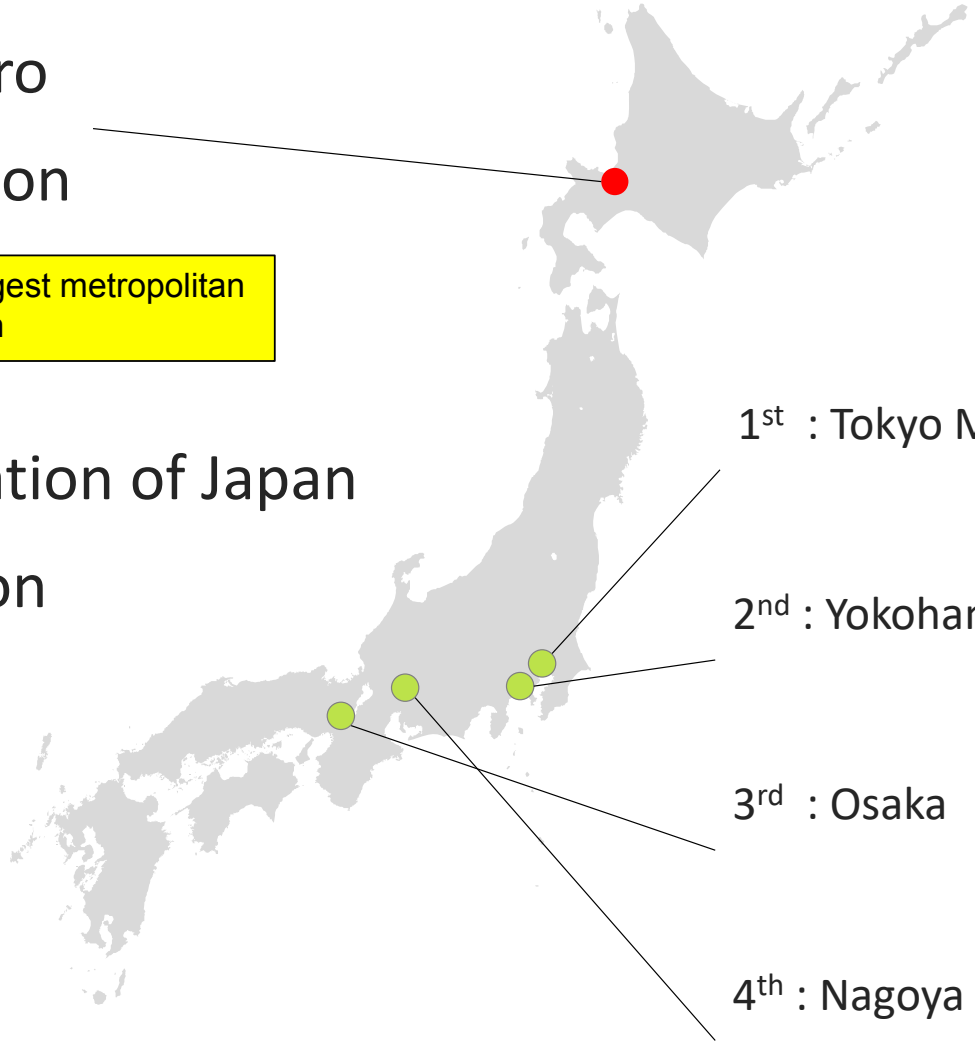
5th : Sapporo

1.97 million

One of the largest metropolitan areas in Japan

The population of Japan

126 million



1st : Tokyo Metropolitan Dist.

9.69 million

2nd : Yokohama

3.76 million

3rd : Osaka

2.75 million

4th : Nagoya

2.33 million

Basic Data of HU

Data as of May 2020
*July 2020

Organizations *

12 Undergraduate Schools
21 Graduate Schools
25 Research Institutes / Centers

Budget

2020 FY	ca. 103.7 billion JPY (ca. 943 million USD)

Staff

Executives & Vice Presidents	8
Academic	1,985
Admin./Technical	1,924
Total	**3,917**

Acreage

Sapporo Campus	1.8 km^2
Hakodate Campus	0.1 km^2
Other	658.3 km^2
Total	**660.2 km^2**

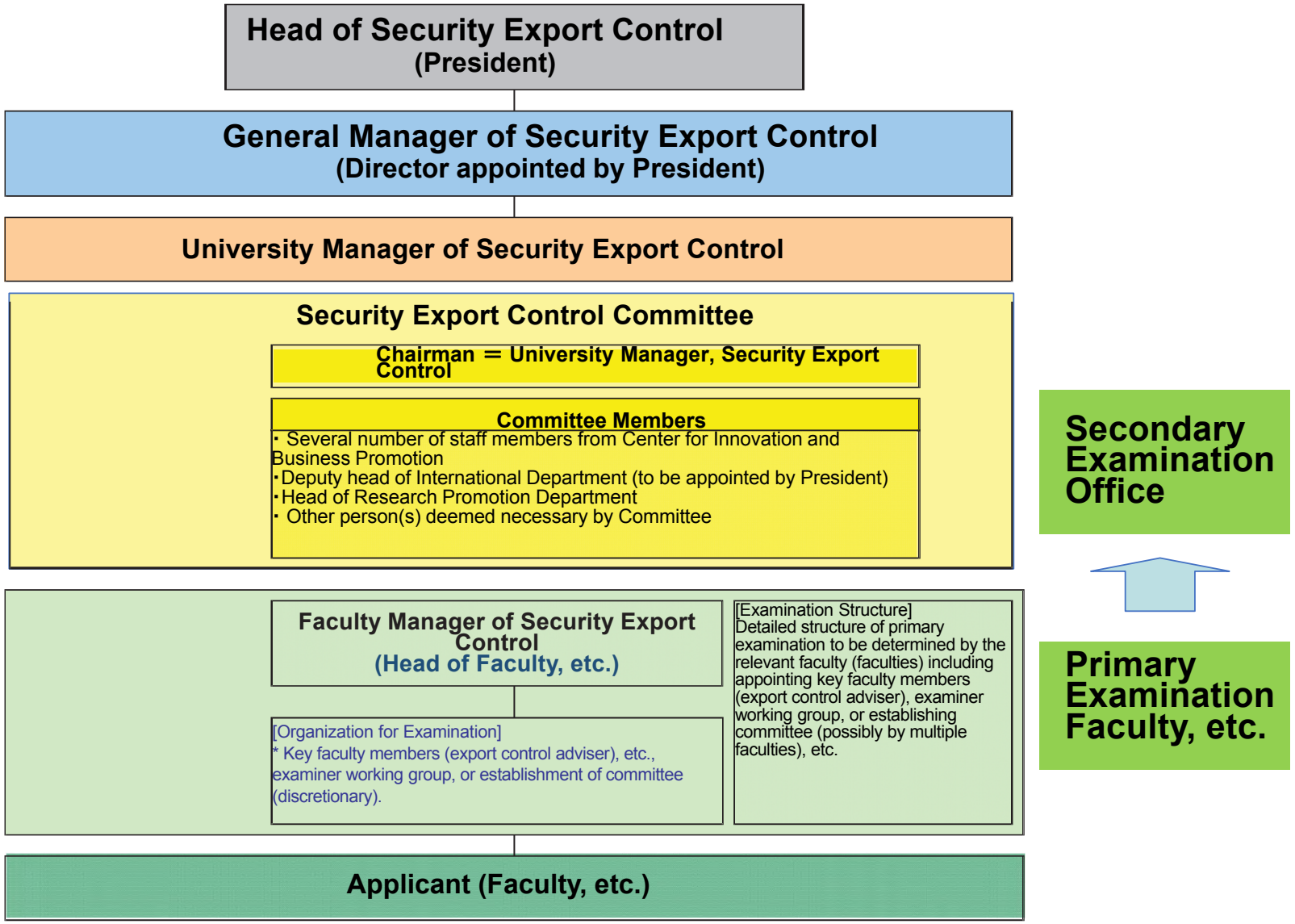
1% of Sapporo City Residents

Students

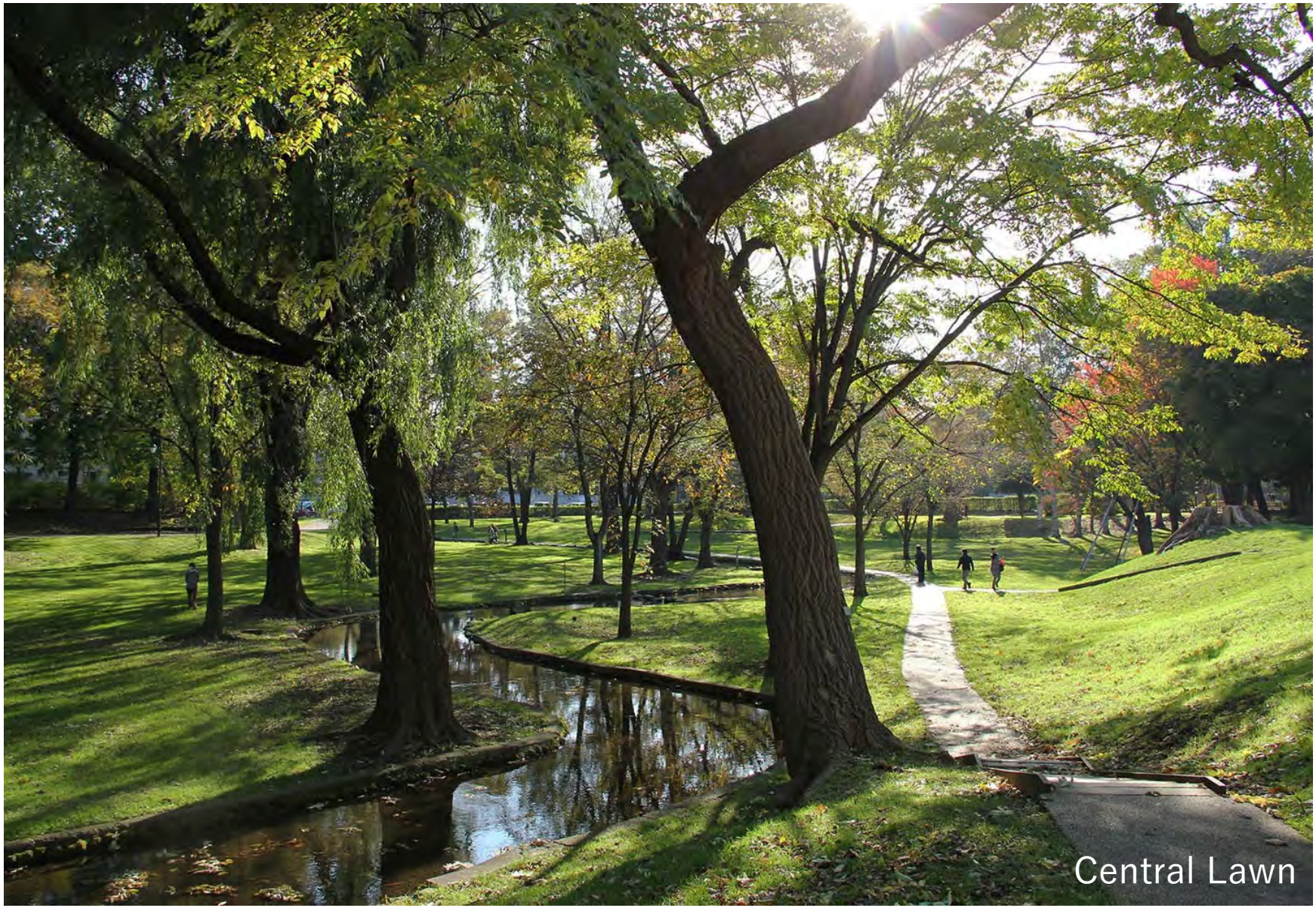
Undergraduate	11,462
Graduate	6,579
Other	65
Total	**18,106**

Overseas students 2,094

Security Export Control Organization of HU



2. ITT for Academia



ITT for Academia

- **ITT (Intangible Technology Transfer)**
  Security Export Control deals with goods and technologies
  As for technology, it is intangible, not-aging and easy to transfer
  Unauthorized ITT, including know-how, should be prohibited
  especially for universities dealing with cutting edge technologies
- **Academic Freedom vs. ITT**
  Find balance between openness and security
  Critical to defend important values such as free speech, academic freedom and research integrity on top of regulatory compliance
  Drawing clear lines between what is controlled and what should be openly shared and publicly accessible at the outset of the research is critical to international security
- **Research fields so diverse**
  WA（all categories）: all sort of engineering
  NSG : nuclear engineering
  MTCR : space engineering
  AG: pharmacy, veterinary

Despite of critical task, not enough manpower assigned in reality!

- **As for sensitive cases such as transfer of controlled technologies, face-to-face meetings held directly at the office of faculty** **MOST IMPORTANT AND EFFECTIVE!**
- **Faculty Development (FD) is done every year for faculty members dealing with sensitive technologies such as Graduate School of Space Engineering, etc.**

  List control and Catch-all (CA) rules

  How to understand Combined Matrix Tables

  Relationship between the Foreign End Users List and highly concerned goods.
- **Checking and correction of reporting from faculties**
- **Application for Individual Validated License and management of Bulk License**
- **University-wide audit**

  Identify issues by university-wide audit and implement **PDCA** cycle.

  Presentation on amendments to law and regulations as well.

3. Tools for ITT

Tools surrounding ITT

List Control

Combined Matrix
https://www.meti.go.jp/policy/anpo/matrix_intro.html

Catch-all Control

Foreign End User List
https://www.meti.go.jp/policy/anpo/law05.html#user-list
The Commodity Watch List for WMD/Conventional Weapon Catch-All

Faculty Development

Faculty Development（FD) inside HU
Due to Civid-19, FD is done by online

ICP of HU

Internal Compliance Program of HU
https://www.hokudai.ac.jp/jimuk/reiki/reiki_honbun/u010RG00000727.html

Advisor for voluntary security export control project by METI

Guidance for the Control of Sensitive Technologies

Self assessment Check List

Guideline for Classification

4. Expansion of Security Export Control

Expansion of Security Export Control

- Emerging Technology/Foundational Technology

  14 fields of Emerging Technology

(1)Biotechnology	(8)Logistics technology
(2)Artificial intelligence (AI)	(9)Additive manufacturing
(3)PNT technology	(10)Robotics
(4)Microprocessor technology	(11)Brain-computer interfaces
(5)Advanced computing technology	(12)Hypersonics
(6)Data analytics technology	(13)Advanced Materials
(7)Quantum information and sensing technology	(14)Advanced surveillance technologies

- The concept of Economic Security introduced
- Human Rights to be included in addition to the control of traditional WMD and conventional weapons

- CISTEC* Journal : the useful tool to follow the trends mentioned above

  https://www.cistec.or.jp/journal/journal.html

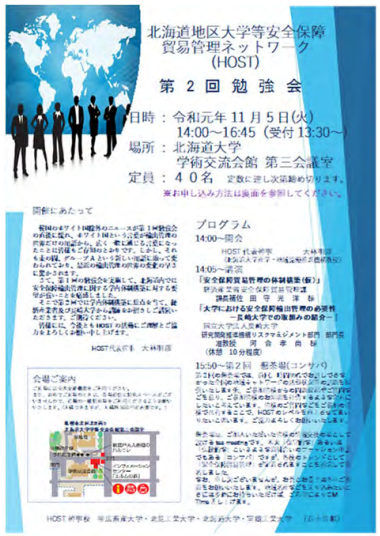
*Center for Information on Security Trade Controls

Various Activities

(i) Regional initiative to promote security trade control for academia

There are several initiatives in Japan

Hokkaido area is unique in inclusion of technical colleges



(ii) Export Control Day for Academia

Annual event for universities across the nation, concerning security export control, originated in 2013

https://efa.ken-shin.net/

(iii) Interaction with foreign universities for sharing information

5. Trade Secrets

Trade Secrets

In the context of technology outflow, trade secrets also constitute integral part of risk management in universities. Though the major part of trade secrets comes from domestic companies at present, the trend of globalization accelerates the necessity of adequate control of trade secrets with global companies.

Comparatively new compared with Security Export Control

To promote joint research with companies, the adequate control of trade secrets indispensable for protecting their IPR

Governing law different:

- **Foreign Exchange and Foreign Trade Act (Security Export Control)**
- **Unfair Competition Prevention Act (trade secrets)**

In universities, the same organization tend to deal with both functions

NDA: first step

Three level classification

Informed consent for students

Thank you for your attention.

Beautiful Seasonal Scenes from the Campus