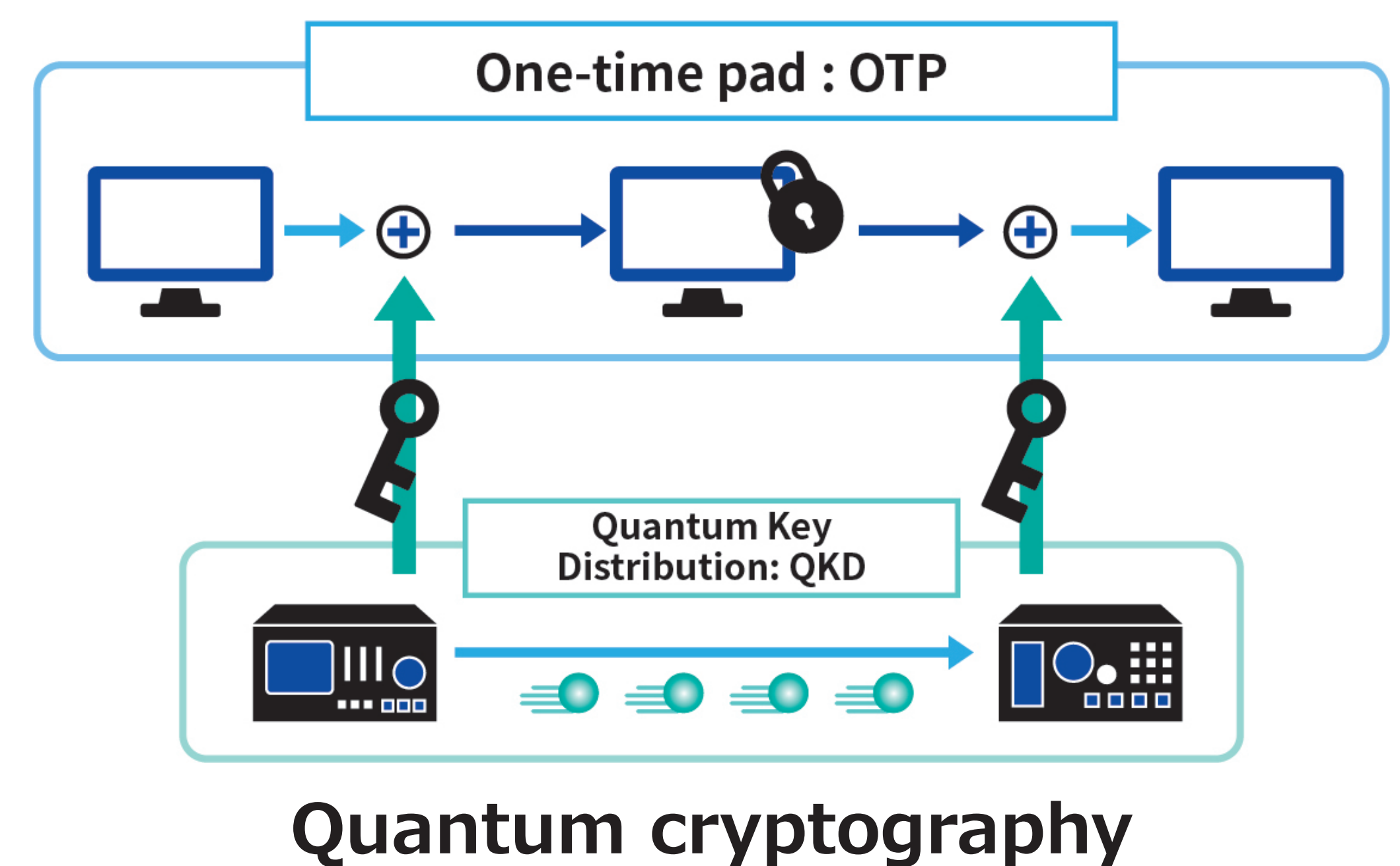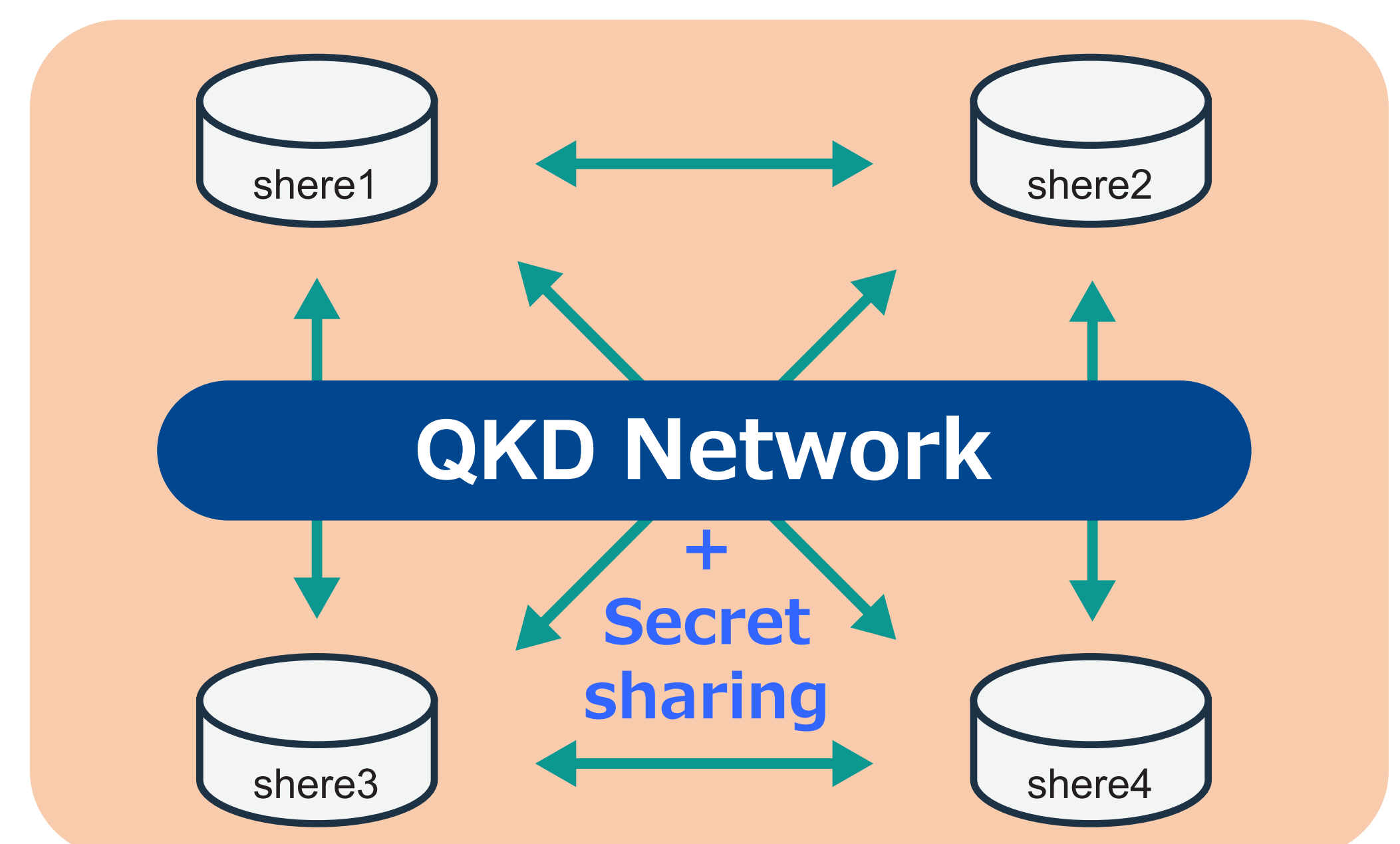# 1. Our missions

○ Creation of quantum security

Modern cryptography may be easily decrypted with new computing technology. Therefore, we research and develop "Quantum cryptography", which can't be decrypted by any computer.

We work on developing a new fusion field called "Quantum security field", which combines Quantum ICT field with peripheral technologies.
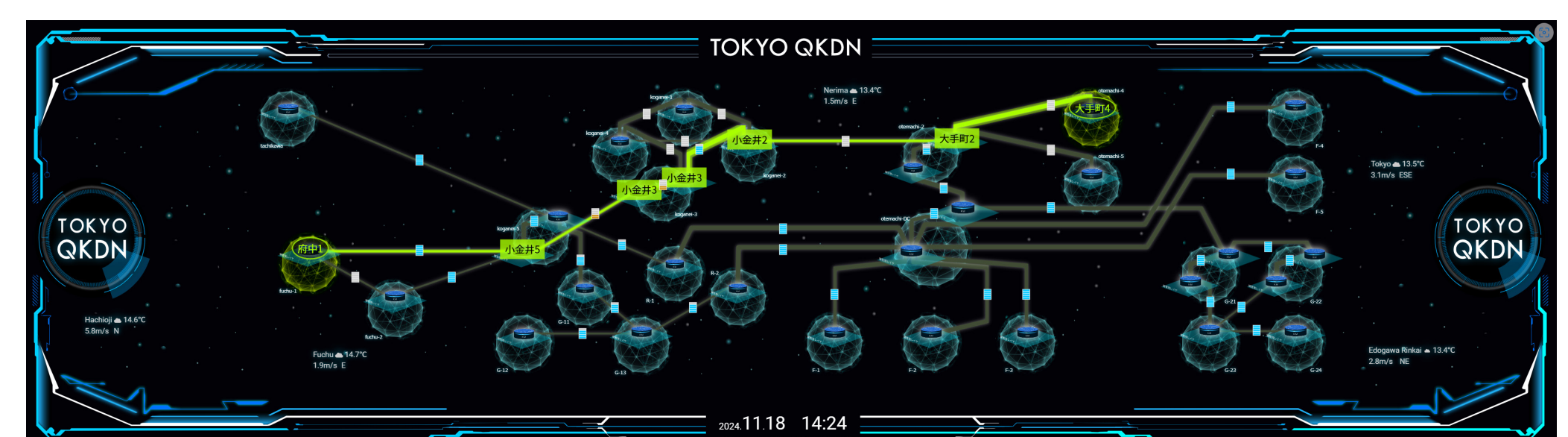
For example, we developed "Quantum secure cloud", a combination of quantum cryptography and secret sharing. We conduct experiments on this with companies that handle important information.
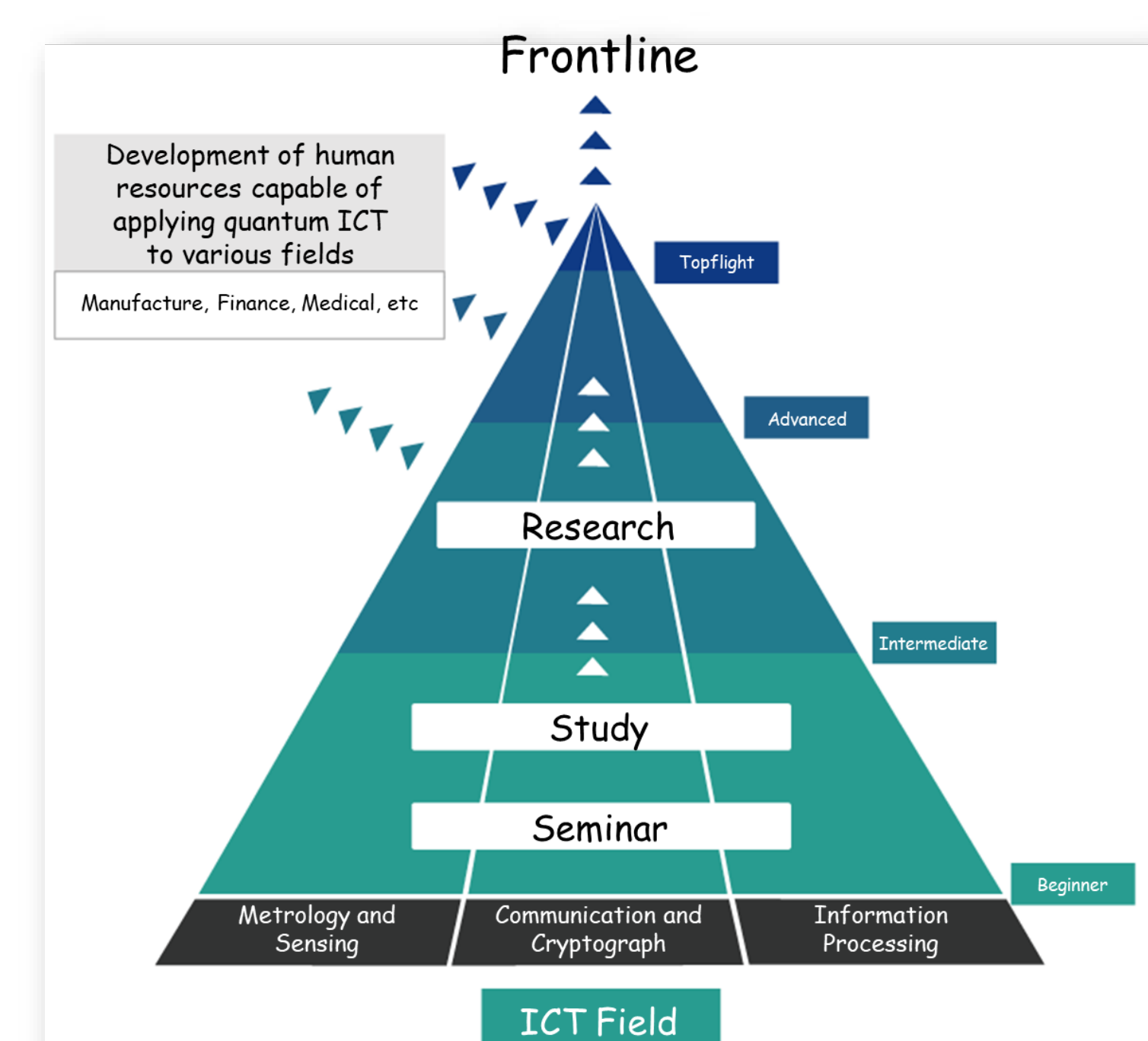
2. Objectives

① Industry-Academia-Government collaboration

We establish an environment for industry, academia and government to collaborate in quantum cryptography and satellite quantum communications.

- Extending Tokyo QKD Network
- Using Tokyo QKD Network as open testbeds

② Human resources development

We provide practical programs to train future Quantum ICT human resources.

- NICT Quantum Camp
- Young Researchers Lab
- Internships for students and graduated people

③ Dissemination to society

We work on standardization and establishment of evaluation/certification scheme for earlier dissemination of quantum security.

- Standard documents of QKDN and QKD modules
- Evaluation/certification systems for QKD

④ Outreach activities

We continue publicizing our missions and achievements through organizing events and participating in exhibitions.

- NICT OPEN HOUSE 2024
- CEATEC 2024

Quantum cryptography

Quantum secure cloud

Monitor of Tokyo QKD Network

Structure of training

	2021	2022	2023	2024	2025
PP (EAL4+)	Write	Evaluation / Certification			
PP (EAL2)	Write	Evaluation / Certification			
EMD (EAL4+)	Write				
EMD (EAL2)	Write				
Test environment		research / examination	Construction		
TOE				Evaluation / Certification	

Standardization schedule

CEATEC 2024