

# **Cybersecurity Policy for Industry Sector in Japan**

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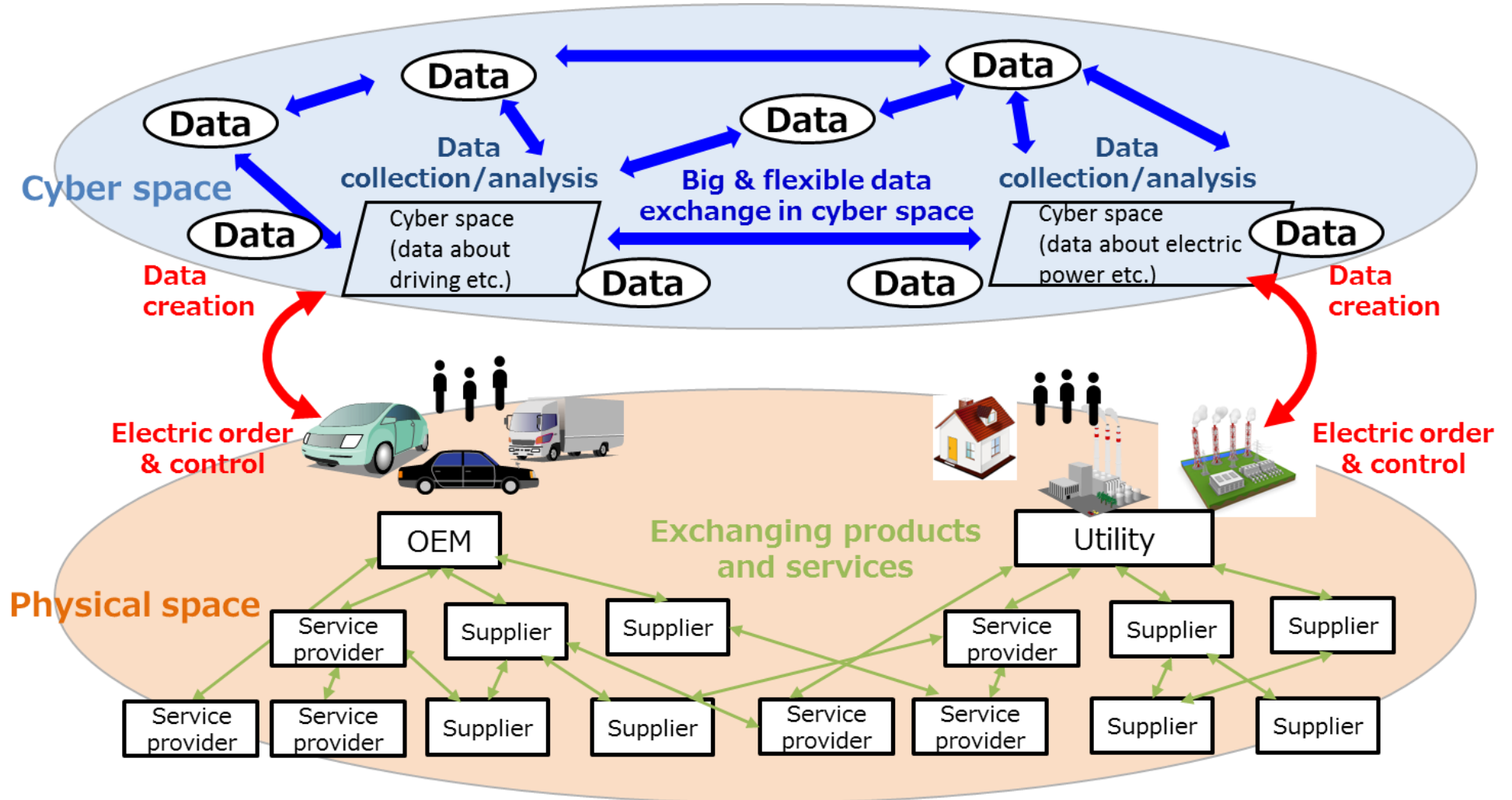
**Japan External Trade Organization**

# 1. The Cyber/Physical Security Framework

2. HR development for Industrial Control System (ICS) cybersecurity
3. Capacity building for securing global supply chain
4. Cybersecurity supporters for SMEs
5. Collaboration Platform

# Risks in Cyber/Physical Integrated Society (Society 5.0)

*Cyber threats which give serious damages on products and their services are expanding in whole supply chains*



# The Cyber/Physical Security Framework

~for value creation process in Society5.0's supply chain ~

*METI gives **the second draft of the cyber/physical security framework** to manage supply chain risks for secured products and services*

*Proposing **"Three-Layer Approach"** to articulate risks in supply chains and take appropriate measures, including labeling, in the new FW*

## The Third Layer (Data circulation)

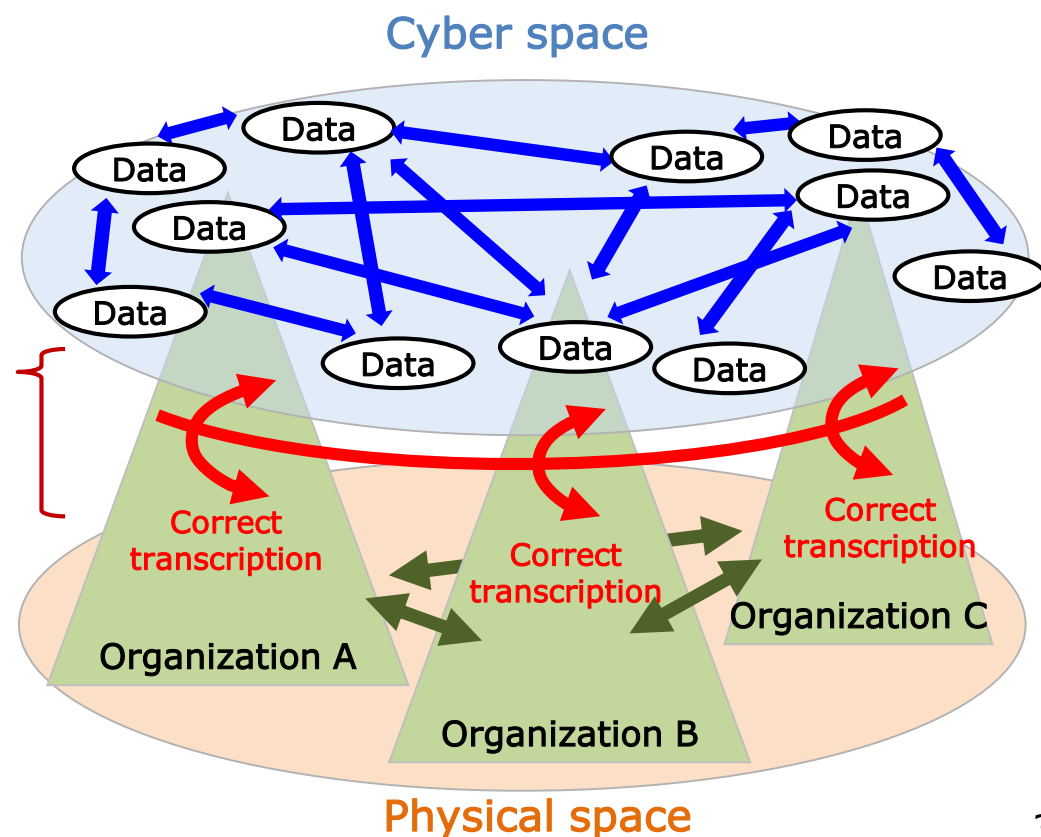
- Trustworthiness of data is a key for secured products and services

## The Second Layer (Cyber to physical/Physical to cyber)

- Trustworthiness of function for "correct transcription" between cyber/physical space, which is IoT system's essence, is a key

## The First Layer (Connection between Organizations)

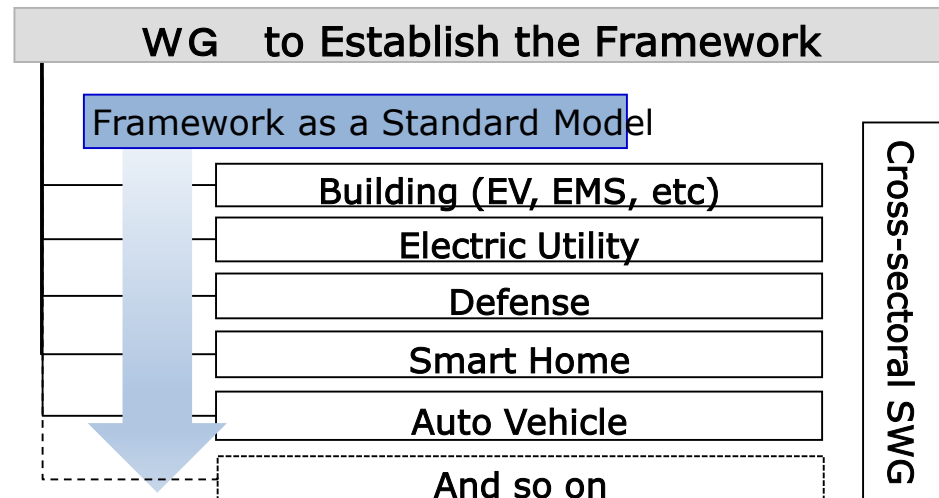
- Trustworthiness of organization's management is a key for secured products and services



# Activities related to the CPS Framework

## Sector by Sector Approach

- *Developing sector specific measures industry by industry with the framework as a Standard Model*
- *Building Sector Cyber/Physical Security Guideline  $\beta$  version has already publicized*



## International Harmonization

- *Many debates, presentations, and feedbacks about the Framework*

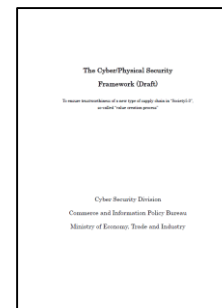


Reference: US Chamber of Commerce HP

- *Correspondence tables to ISO/IEC 27001, NIST CSF and SP800-171*
- *Public comments of the draft is not only in Japanese but also in English*

**Now on the 2<sup>nd</sup> public comment period! (Jan. 9 – Feb. 28)**

<http://www.meti.go.jp/press/2018/01/20190109001/20190109001-3.pdf>



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# Industrial Cyber Security Center of Excellence (ICSCoE)

ICSCoE was established in Apr. 2017



**IPA**

Industrial Cyber Security  
Center of Excellence (ICSCoE)

- Center of Excellence with expertise on IT and OT (Operation Technology) cybersecurity
- Education for both IT and OT security
- Assess the security and reliability of the Industrial Control Systems and plan measures by utilizing mock-up plants
- Investigate and analyze cyber attacks

**Cultivate leaders of  
industrial cybersecurity**



Mock-up plants



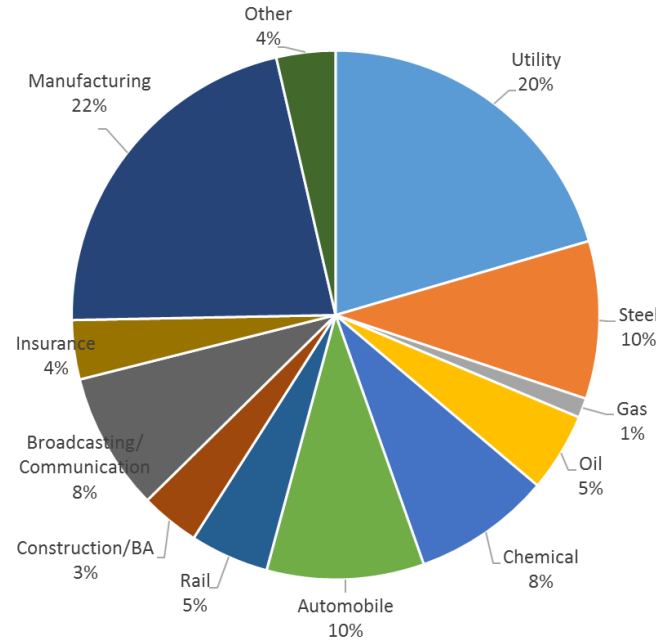
Manufacturing facility



Utility facility

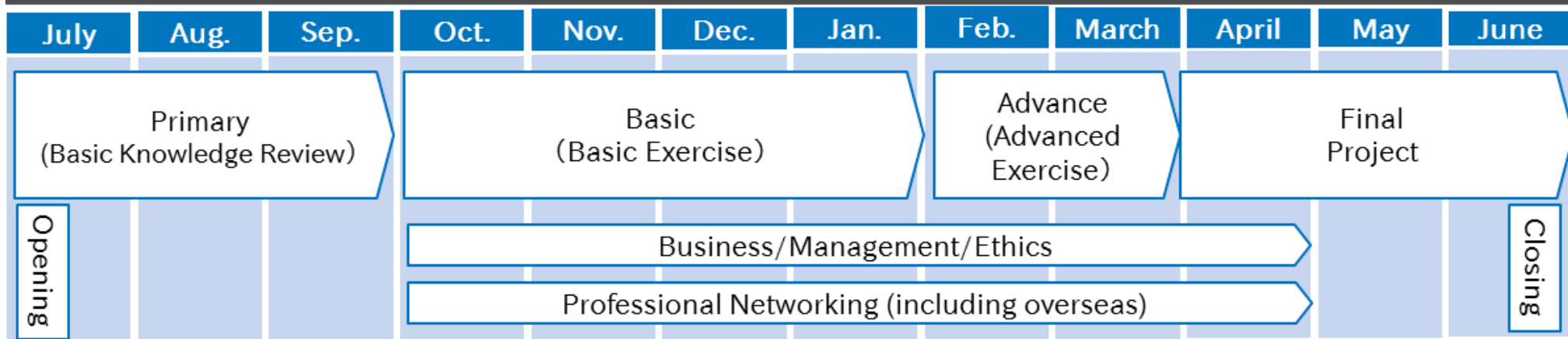
# ICSCoE One-year Core HR Development Program

- 2<sup>nd</sup> year students' background companies (on the right)
- Students are funded by both the government and the companies
- Students will go back to the companies as a core HR for IT/OT cybersecurity



Industry	Count
Utility	17
Steel	8
Gas	1
Oil	4
Chemical	7
Automobile	4
Rail	8
Construction/BA	3
Broadcasting/Communication	7
Insurance	3
Manufacturing	18
Other	3
<b>Total</b>	<b>83</b>

## Annual Schedule





- 1. The Cyber/Physical Security Framework**
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# Japan & US Joint Training for ICS Cybersecurity

- Date: Sep. 10 – 14, 2018 (will be held annually)
- Location: Tokyo
- Contents: 5 days training for ICS cybersecurity
- Participants:

- ASEAN10 countries, Australia, India, NZ, South Korea, Taiwan 36 students
- IPA ICSCoE Core HR development program 83
- DHS/NCCIC 5 lecturers, and etc.



Speech of Yoichi Muto, Former State Minister of METI (Fuji TV)



Speech of U.S. Ambassador Hagerty (Twitter)



Participated Countries

# Japan & US Joint Training for ICS Cybersecurity

■ Sep. 10-11, 2018

■ Sep. 12-14, 2018 (3 groups with 3 venues)



Fundamentals of OT security  
101, 201 Training (NCCIC)



Hands-on training with ICS  
J202 Training (ICSCoE)



Practice sharing, etc.  
(DHS/METI/US & JP  
Enterprises)

- ICSCoE and DHS/NCCIC-ICS conducted a joint training for Asian countries
- Japan & US provided lectures and hands-on training for 5 days.

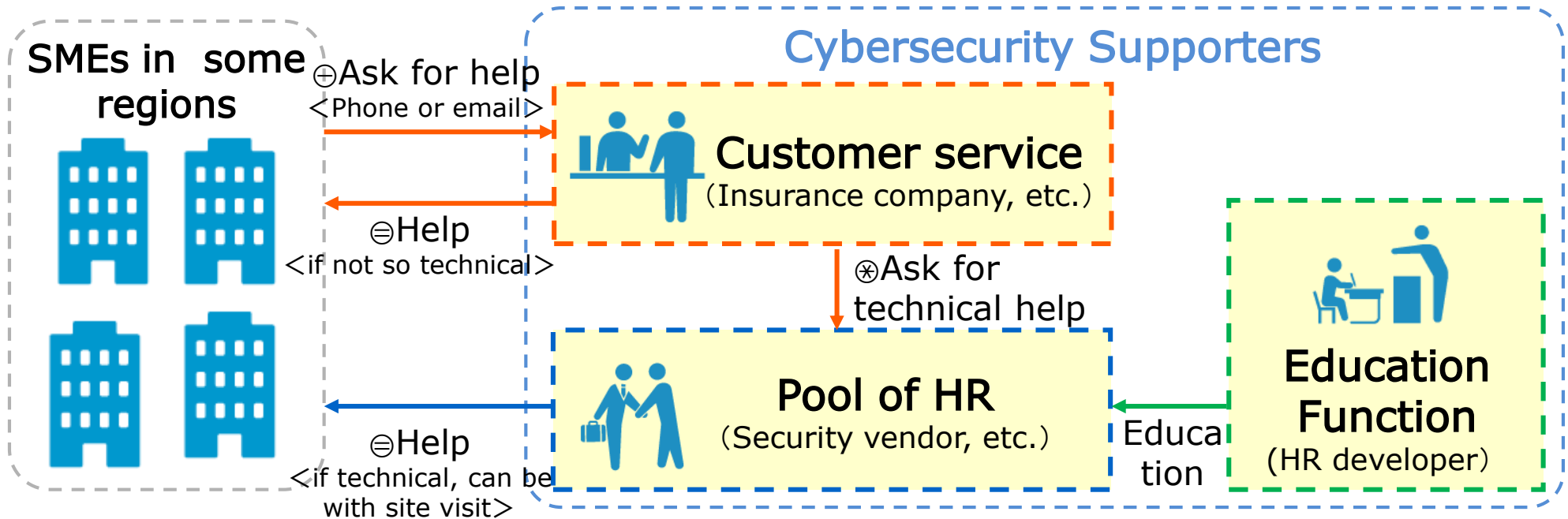


Lecture with mock-up plants (ICSCoE)

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# Establish “Cybersecurity Supporters” for SMEs

## Image of the Feasibility Study (FS) from Next Year

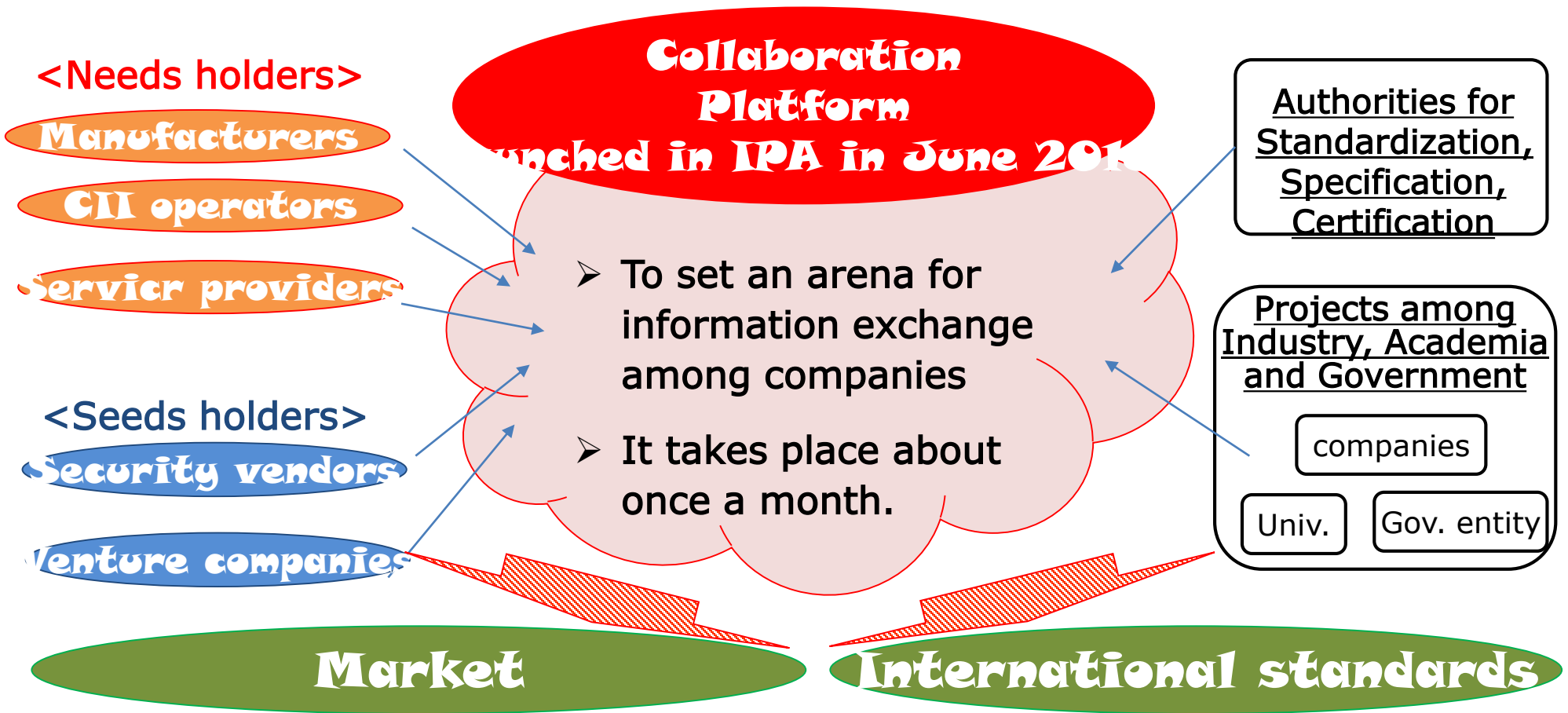


Through this FS, we will study:

- 1) the threat situation surrounding SMEs;
- 2) the required tools and skills for supporting SMEs; and
- 3) the ideal system for promptly and efficiently support SMEs.

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# “Collaboration Platform” to match needs and seeds



Presentation



Group Discussion

- Around once in a month
- Foreign entities can also join!

[https://www.ipa.go.jp/security/announce/collapla\\_index.html](https://www.ipa.go.jp/security/announce/collapla_index.html)



**METI**

*Ministry of Economy, Trade and Industry*

**Thank You!**