

# **A Study on Electronic Bidding System**

July 8, 2016

Japan Construction Information Center  
(JACIC), Tokyo, JAPAN  
Manager, Hiroyuki Ishiwata

---

# Contents (Electronic Bidding)

---

- Introduction
  - Method
  - Result
  - Discussion
  - Conclusion
  - Future Works
-

---

---

# Introduction

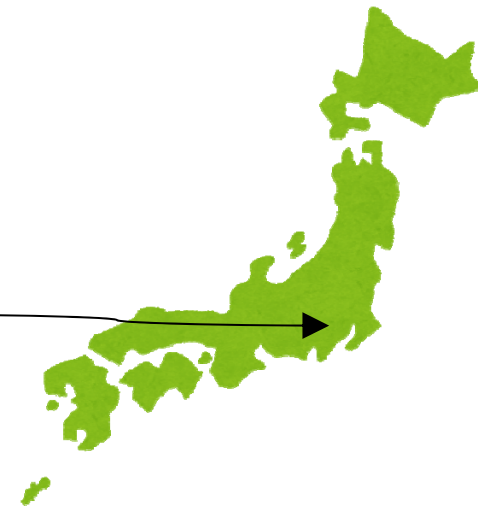
---

# Introduction (About JACIC)

---

- Japan Construction Information Center (JACIC)
- General Foundation (Apr. 2012)
- Purpose:
  - Support Facilitation of Public Procurement Japanese Government promote with ICT technology

JACIC  
Akasaka, Minato-ku, Tokyo, JAPAN



# Introduction (Business of JACIC)

---

- Improve productivity for construction sector with construction information system
  - Support Government and Local Government
  - Information sharing
  - Cooperate with Industry, government and academia
  - Promotion of innovation through ITC technology
  - Promotion of academic technology
-

# Introduction (Business of JACIC)

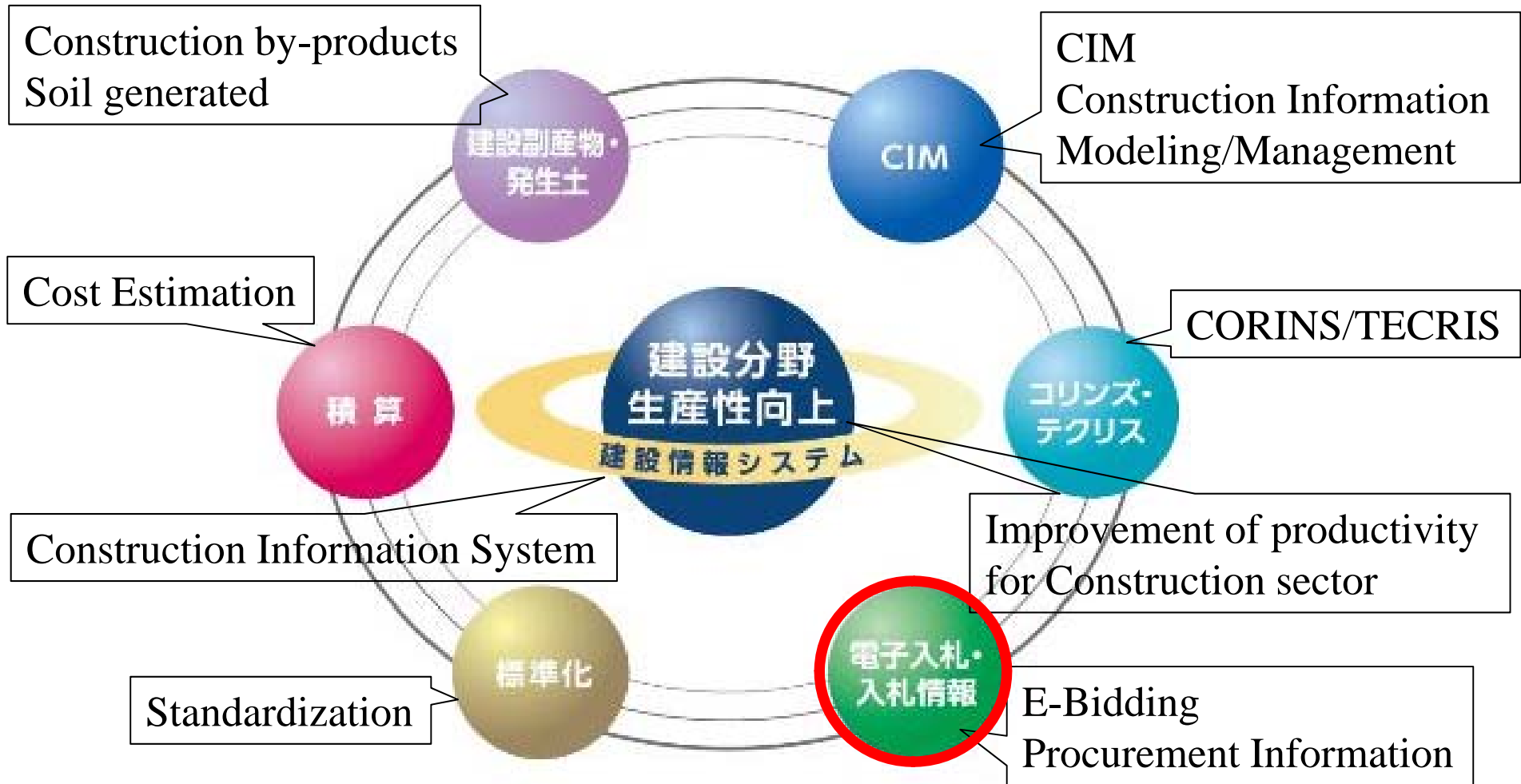


Figure: model diagram of JACIC business

# Introduction (Background of E-bidding)

---

- Basic Concept of Construction CALS\* Development (Construction Ministry, Apr. 1996)
- Act for Promoting Proper Tendering and Contracting for Public Works (Nov. 2000 )
- E-Japan Strategy (Jan. 2001)

\* CALS:

Computer-aided Acquisition and Logistic Support(1987)

⇒ Continuous Acquisition and Life-Cycle Support(1993)

⇒ Commerce At Light Speed(1997)

---

# Introduction (Background of E-bidding)

---

- CALS/EC Local Promotion Action Program (MLIT, Jun. 2001)
- E-Bidding System of MLIT was published at no charge (MLIT, Jun. 2001)

\* MLIT:

Ministry of Land, Infrastructure, Transport and Tourism

---



# Introduction (good point of e-bidding)

---

- Make bidding-process effective
  - Reduce costs of purchaser and supplier
  - Increase competitiveness and transparency
  - Increase bidding opportunities
-

---

---

# **Method for introduction of e-bidding**

---

# Method

---

- Establish “Electronic Bidding Core System\* Development Consortium”
- Develop “Electronic Bidding Core System” (EBCS)
- Support Core System Users

\* Core System:  
Name of Package Software which JACIC developed

---

# Method (Consortium)

---

- Electronic Bidding Core System Development Consortium (JACIC, Jul. 2001)
- Purpose
  - Support small purchasers\* for smooth introduction of e-bidding system
  - Consider specifications of EBCS
  - Consider how to increase market-share of EBCS

\* Local Government, Public Company, etc.

---

# Method (Consortium)

---

## ■ Activities of Consortium

- Consider specifications of EBCS
- Validate EBCS
- Consider how to increase market-share of EBCS

## ■ Development of Software

- Based on considerations of consortium, JACIC and SCOPE\* carry out design and development of EBCS

\* SCOPE: General Foundation Service Center of Port Engineering

---

# Method (Consortium)

---

## ■ Members (Jun. 2016)

- Full Member (IT Vendor, 5 Co.)
  - Supporting Member (IT Vendor, construction consultancy company, Certificate Authority, 17 Co.)
  - Special Member (Public Organization, 240 Org.)
-

# Method (Consortium)

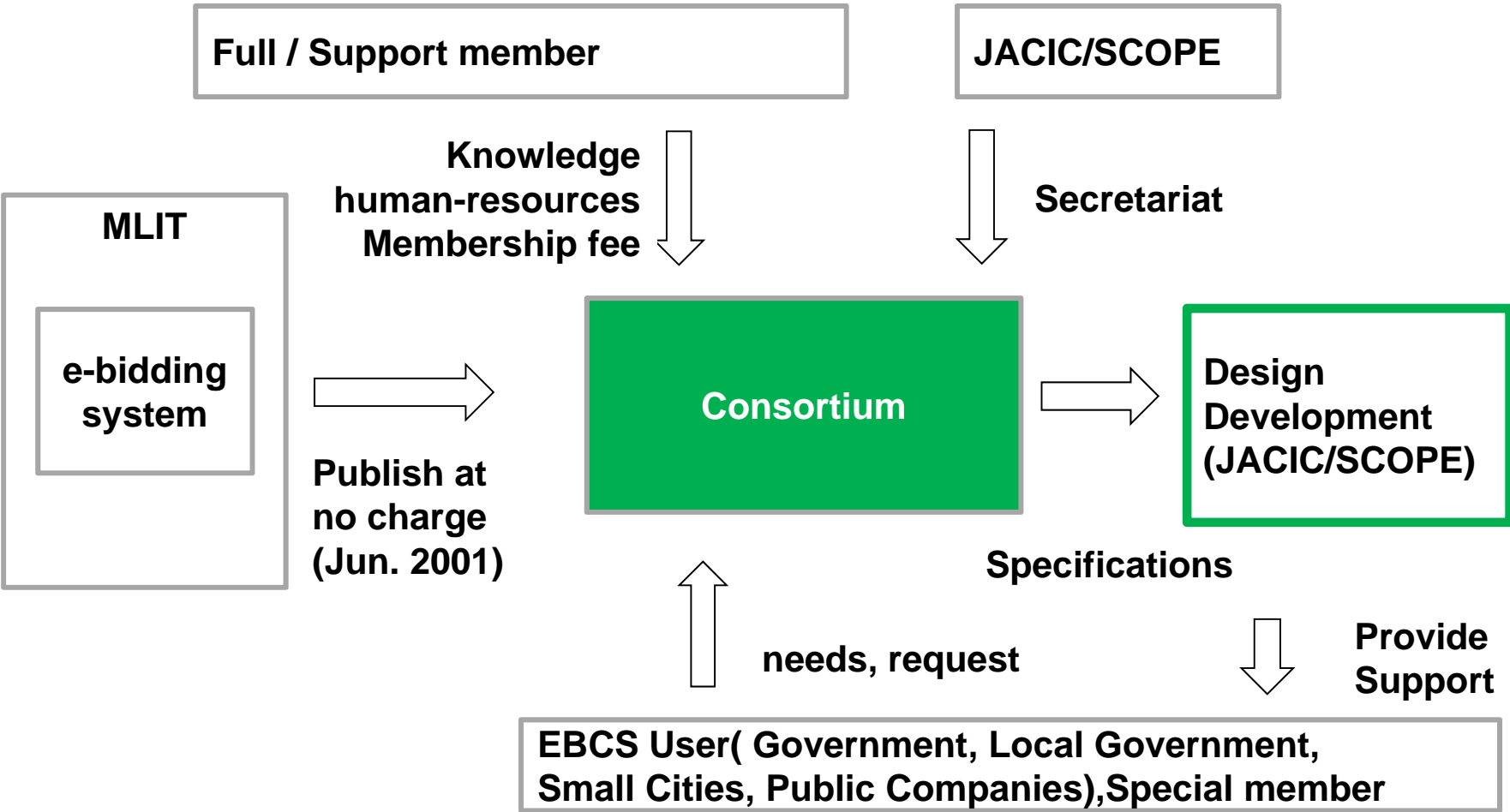


Figure: Relationship of EBCS Development Consortium

# Method (EBCS)

---

## ■ Electronic Bidding Core System (EBCS)

- Package Software for e-bidding system which JACIC and SCOPE has developed
- Base on specifications of MLIT\* e-bidding system
- Provide versatile functions for adapting any Public Purchasers (easy to customize)
- Provide internet function, (e.g. registration of ordering project, notice of winning bidder)
- Secure safety and reliability with PKI\* which government provide

\*MLIT: Ministry of Land, Infrastructure, Transport and Tourism

\*\*PKI: Public Key Infrastructure

---

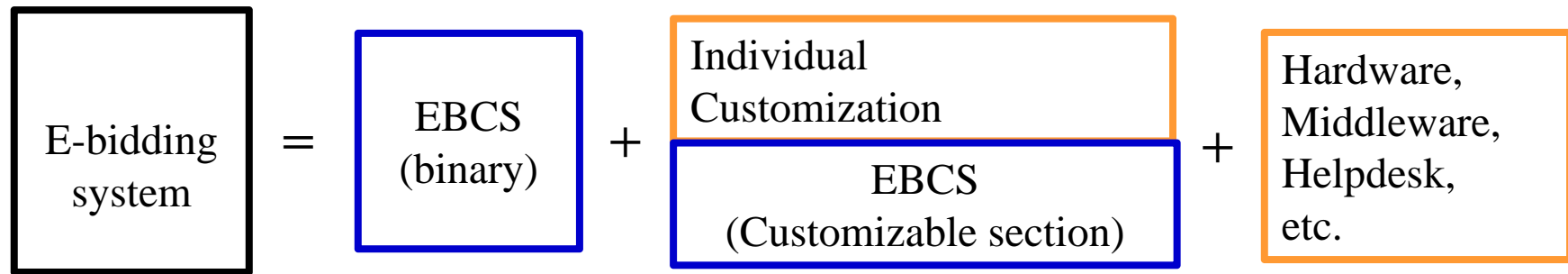


# Method (EBCS)

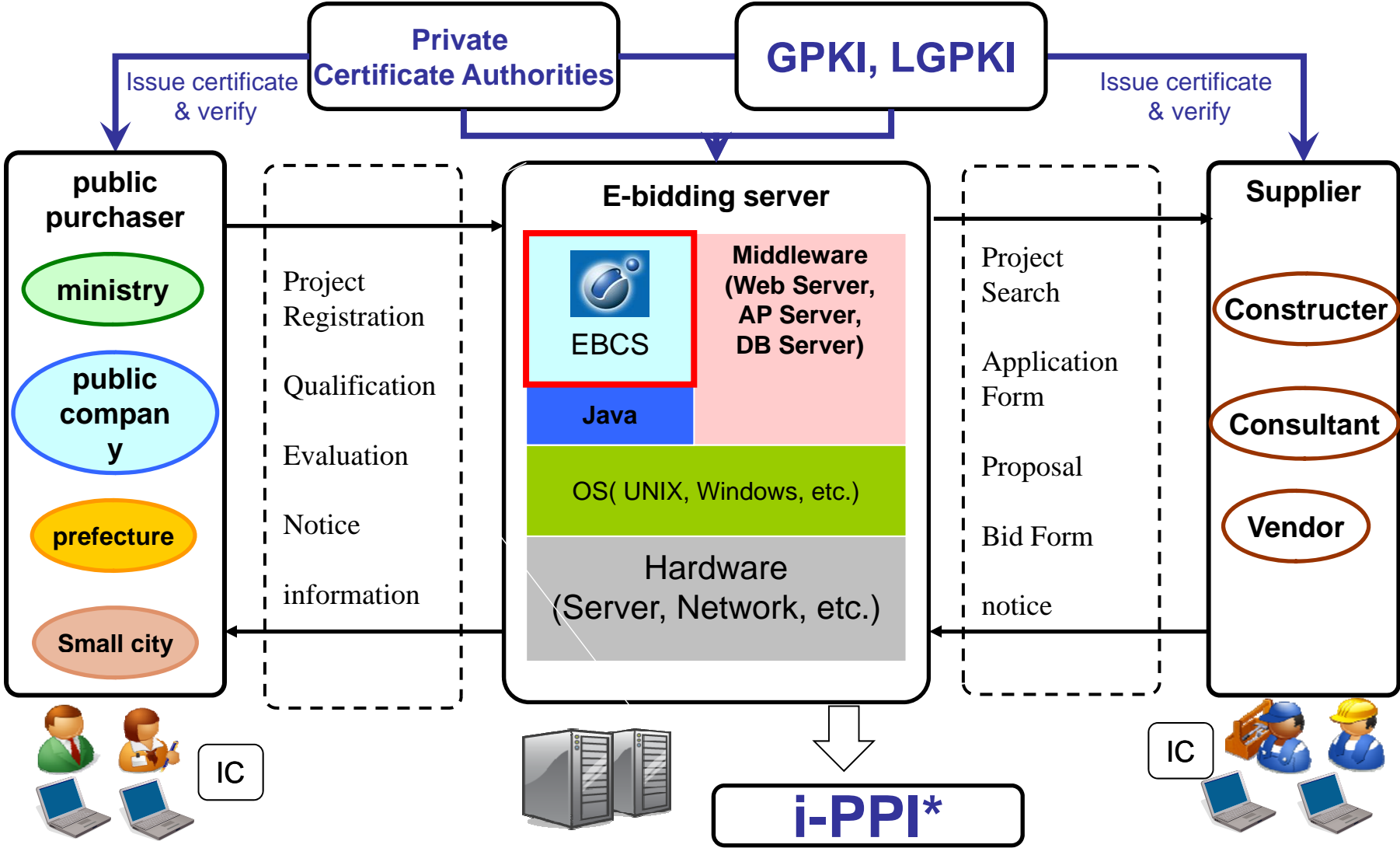
---

- e-bidding system for practical use

- each public purchaser have to build e-bidding system individually for practical use



# Method (EBCS)



\*i-PPI: Integrated Public works Procurement Information service (JACIC)

# Method (EBCS Version)

---

- Version 1 (Jun. 2002)
  - Version 2 (Oct. 2002)
  - Version 3 (Jun. 2003)
  - Version 4 (Jun. 2004)
  - Version 4.1 (Mar. 2005)
  - Version 4.2 (Jul. 2006)
  - Version 5 (Jul. 2007)
  - Version 5.1 (May. 2009)
  - Version 5.2 (Jul. 2012)
  - Version 5.3 (Jul. 2013)
  - **Version 6 (Mar. 2016)**
-

# Method (User Support)

---

## ■ Highly Public Organizations

- Ministry
  - Local Government
  - Public Corporation
  - Motorway company
  - Cooperative Association
  - Railway company,
  - private universities
  - public highly ordering institutions such as hospitals
-

# Method (User Support)

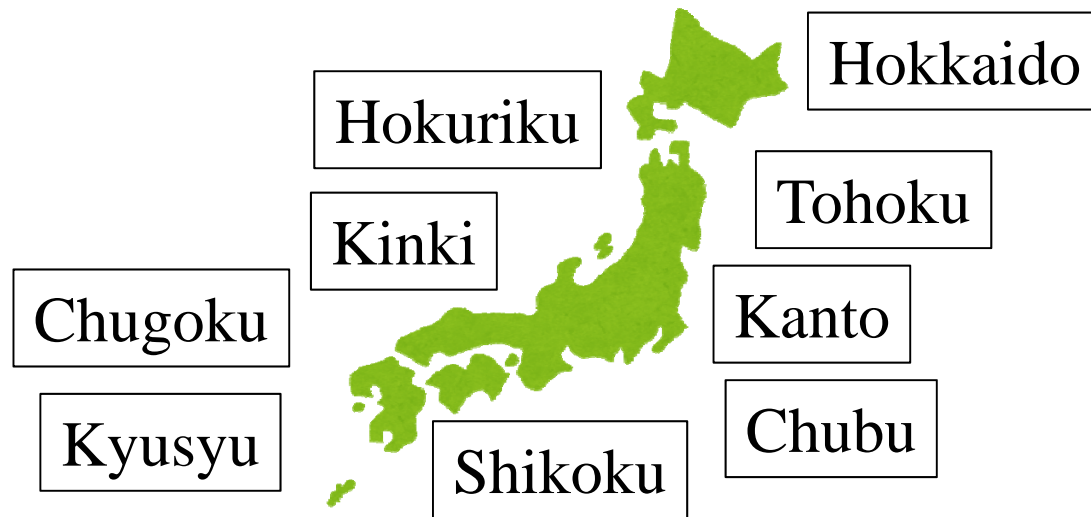
---

- Single Use
  - Shared Use
    - Prefecture Initiative
    - Council of small cities
  - On-Premises
  - ASP/Cloud
-

# Method (User Support)

---

- User and Special Member Conference(Annually)
- Regional User Conference(Annually)



- Service Center (Inquiry service by e-mail, Provision of information by the website )
-

---

---

# Conclusion

---





# Conclusion

---

- Adoption of Many organization
  - Sufficient features and performance
  - User hearing and feedback system
  - JACIC considers this project has been successful
-

---

---

# **Future Works**

---

# Future Works

---

- Improvement of EBCS feature in accordance with change of Social Situation
  - Improvement of Structure of EBCS system in accordance with IT Environment
  - Expansion of e-bidding to small cities
-

---

---

**Thank You Very Much  
for Your Listening.**

---

---