
**Japanese trust services
and
International Mutual Recognition
-Technical WG (IMRT-WG)**

September 3, 2019

**Keio University
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Contents

1. Japanese Trust Services

2. International Mutual Recognition -Technical WG

e-Signature Act and Act on JPKI Services

●e-Signature Act

- Act on Electronic Signatures and Certification Business
- Code of Civil Procedure Article 228.1

Private documents shall prove its creation to be authentic.

Electronic Signature

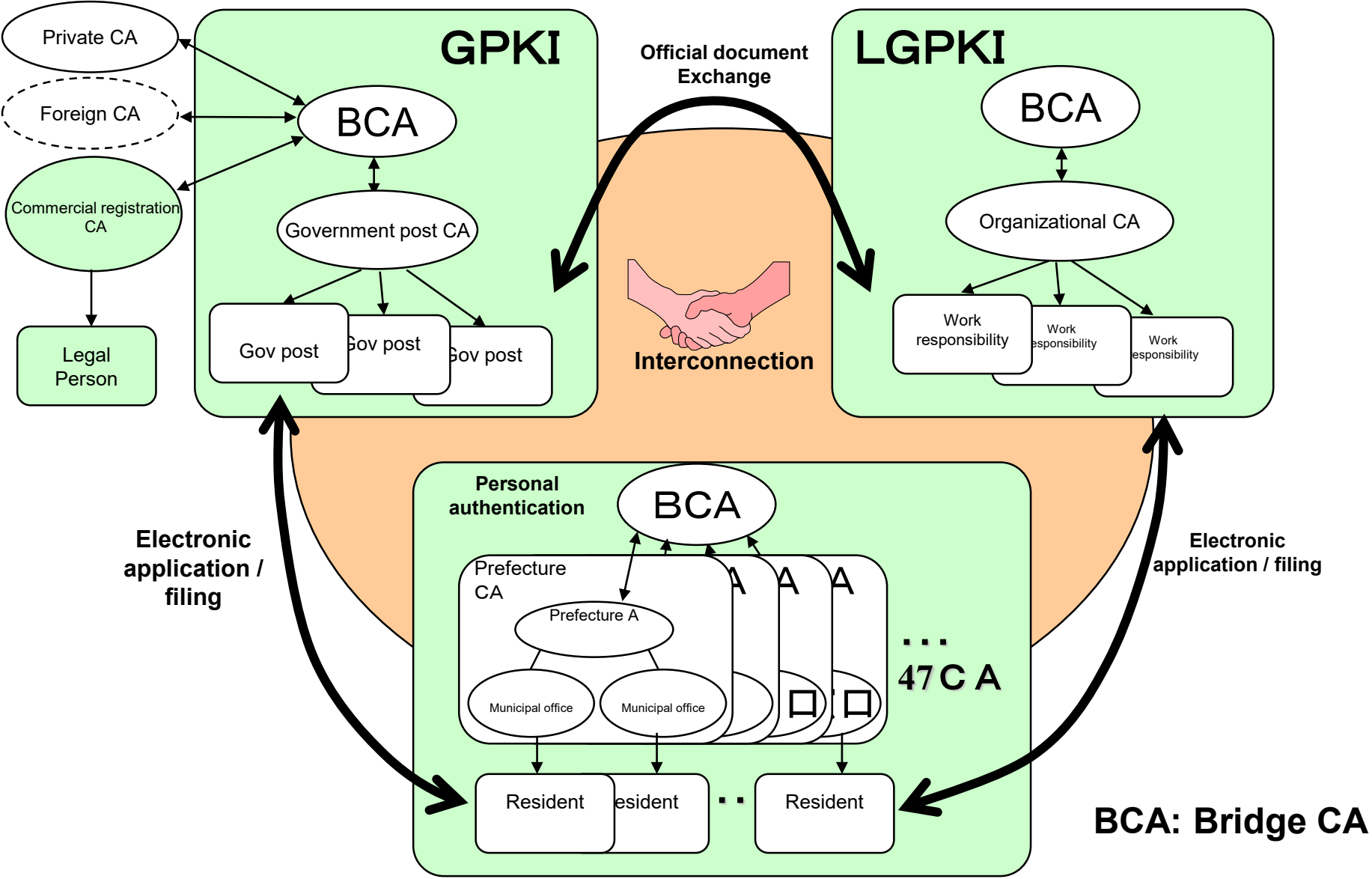
Certification Business

Specific and Accredited Certification Business

●Act on Japanese Public Key Infrastructure Services

- Laws for authentication service of local public bodies for electronic signature and electronic authentication (Act on Japanese Public Key Infrastructure)
- The function to ensure that there is no spoofing in application and falsification of electronic data during communication, which is to implement safe and secure administrative procedures through internet

Overview of Japanese PKI



Overview of Japanese PKI

Name of certification infrastructure	Issuer		User	Law	Usage
GPKI	Public	Each ministry or agency	Public	Government positions	G / G, B, C
LGPKI		Accreditation authority of each prefecture		Local government positions	G / G, B, C
Ministry of Justice Commercial Register		Ministry of Justice	Private	Representative of a corporation	○ B / G, B, C
Japanese Public Key Infrastructure Service (JPKI)		Governors of each prefecture		Residents	○ C / G
HPKI	HPKI CA accredited by the Ministry of Health, Labor and Welfare	Healthcare professionals		B / B, C	
Specific CA	Private	Private business operators	Private	Natural person	○ C / G, B, C
Other CA		Private business operators, etc.		People, things, addresses, etc.	B, C / B, C

G: Public organizations B: Private businesses C: Citizens

Electronic Power of Attorney

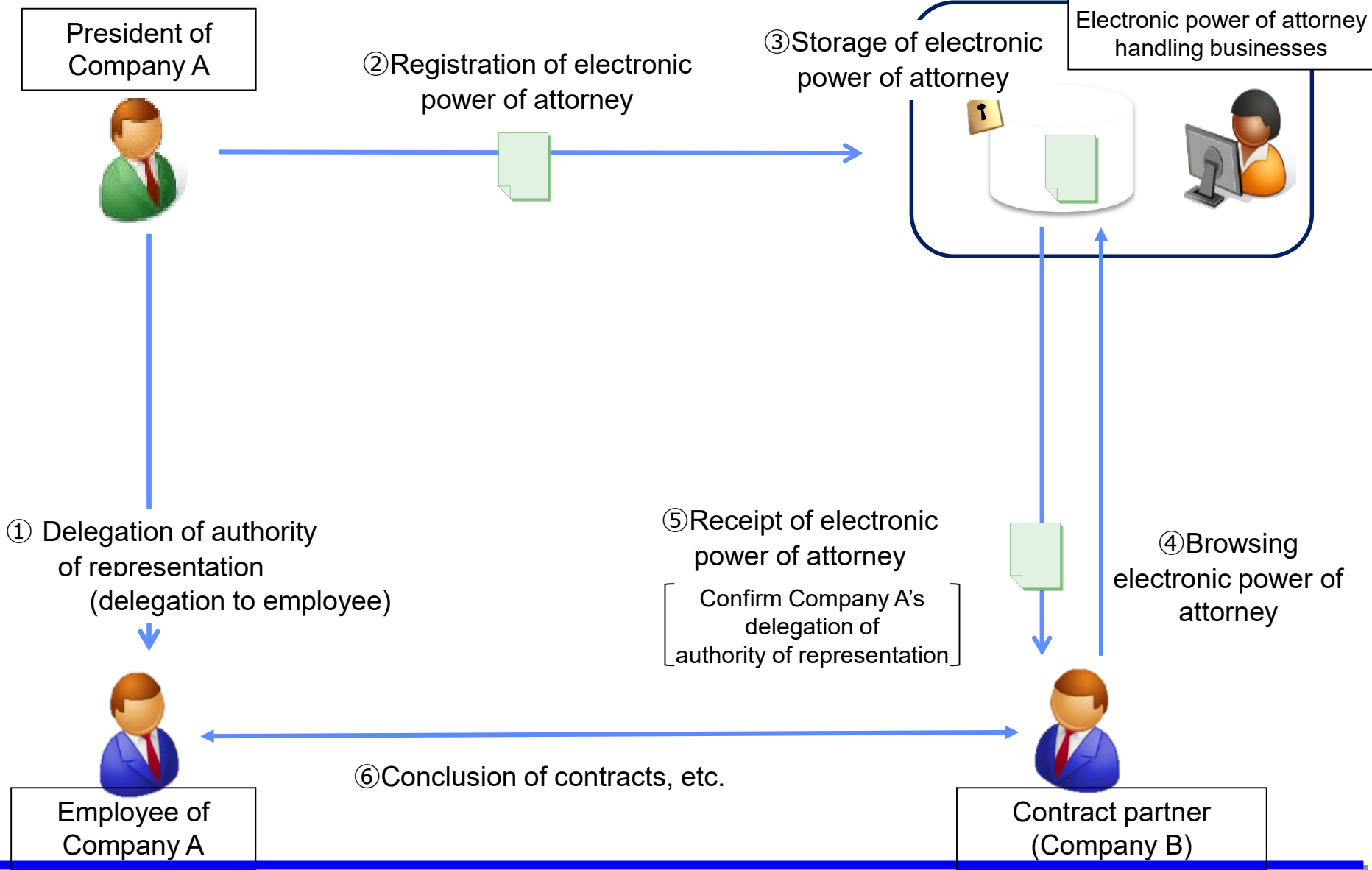
●Basic Act on the Advancement of Public and Private Sector Data Utilization (December 2016)

- Article 10(3) The State is to implement legislative and other necessary measures to ensure that a person that was delegated with mandate by a representative of a corporation is able to implement an offer of a contract or any other procedure by exclusively using an electronic data processing system.

●Act on Promotion of Dissemination of Electronic Power of Attorney (January 2018)

- Basic guidelines for promoting the dissemination of electronic power of attorney and accreditation system for handling electronic power of attorney has been established.

Electronic Power of Attorney



Study Group on Trust Services

Key Issues

- (1) Present condition analysis of Trust Service and examination of challenges
- (2) Issues concerning the ideal state of Japan's Trust Services and measures to secure interoperability with overseas countries from the viewpoint of promoting smooth data distribution utilizing online platform services in Japan and overseas countries

Key Issues

- (1) 13 People
- (2) Chair : Prof. Satoru Tezuka (Professor, Faculty of Environment and Information Studies)
- (3) Other members : TSPs, Lawyers, and so on

Key Issues

- (1) 9 meeting held since January 2019
- (2) Timestamp, Remote Signature, eSeal, eDelivery and Web Authentication have been discussed so far

Source of reference : Introduction of Japan Trust Service Forum and Japanese Trust Services. A-Trust Innovation DAY

Interim report from the study group on trust services

● Remote Signature

- Necessity of standards related to Specified/Accredited Certification Business for Remote Signature
- Necessity of organizing the remote signature on e-Signature Act

● eSeal

- Expected to promote digitization
- More study on reliable environment for eSeal incl. systematization

● Website Authentication

- Strategic participation to CA/B forum
- Japanese Trusted List

● Timestamp

- Further study on required system to promote the use of timestamp
- Global interoperability

● eDelivery

- Less Needs
- Need to study more use cases and needs

● 122 comments received

- Most of them are positive comments

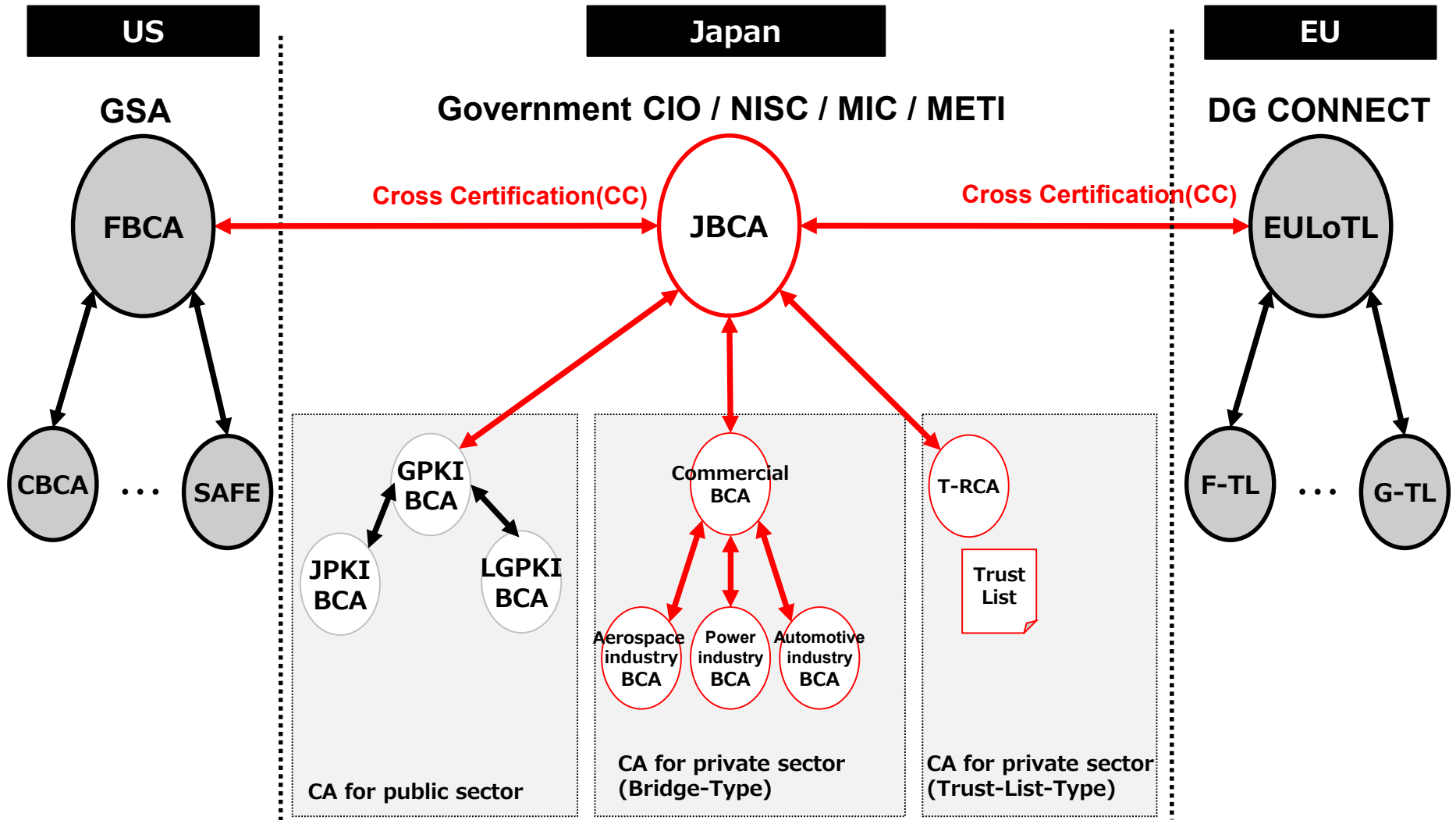
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2. International Mutual Recognition -Technical WG

Concept of mutual recognition

- Concept of trust services by international collaboration



● International Mutual Recognition Technical WG (IMRT-WG)

- A Technical Working Group (WG) for international mutual recognition is to be formed by Keio University. The WG will consist of three technical experts each from US, EU, and Japan, and also one technical expert each from the CA/B Forum.

- Chair Satoru Tezuka (Keio University)

- US (3 people)

 - Judith Spencer(CertiPath), Kyle Neuman (SafeBioPharma), Patrick Patterson(A4A, Carillon)

- EU (3 people)

 - Nick Pope (Security and Standards Associates), Arno Fiedler (Nimbus), Olivier Delos (Sealed)

- Japan (3 people)

 - Soshi Hamaguchi (Keio University), Kazuo Noguchi (Keio University), Atsushi Inaba (GMO Global Sign)

- Others

 - Kirk Hall (CA/B Forum, Entrust Data Card)

Outcome of IMRT-WG

ETSI "Pillar"		ETSI for PTC	WebTrust for PTC	ETSI for eIDAS	FPKI	Japanese electronic Signature Act
Legal context	Law	CA/Application agreement	CA/Application agreement	eIDAS Regulation	E-Government Act of 2002	Act on Electronic Signatures and Certification Business
	Objective	Acceptance by application root store	Acceptance by application root store	Legal recognition of trust services,	Identity management and trust across organizational, operational, physical and network boundaries.	To promote the distribution of e-document through ensuring the smooth use of e-Signatures.
	Application	Web Servers	Web Servers	Signature, ERDS, Timestamp, e-Seal, Website (server) authentication	Authentication (Personal ID and Device ID) Signature Encryption (Content signing, FIPS201 e.g. PIV) (Card Authentication, FIPS201 e.g. PIV used for PAGES) Web Servers (aligned with CAB Forum Requirements, separated root CA)	Signature
	Community	Global Public	Global Public	EU public, business and government	US Public, Business and Government	JP Public, business and government
supervision & auditing	Governor	Application provider	Application Provider	National supervisory body	CIO Council	Ministry of Economy, Trade and Industry. Ministry of Internal Affairs and Communications. Ministry of Justice.
	Harmonization Body	CA/Browser forum	CA/Browser forum	EU Commission	N/A None	N/A
	Accreditation Body	National Accreditation Bodies (coordinated via EA)	AICPA/CIPA	National Accreditation Bodies (coordinated via EA)	(Cross-Cert with FBCA requires Third Party Audit)	Ministry of Economy, Trade and Industry. Ministry of Internal Affairs and Communications. Ministry of Justice.
	Certification Body	Conformity Assessment Body (Accredited by NAB)	Licensed Practitioners	N/A	FPKI Policy Authority	Same as above
	Conformity Assessment Body	Conformity Assessment Body (Accredited by NAB)	Same as above	Conformity Assessment Body	FPKI Certification Policy Working Group	Designated Investigation Organization
Technical requirements	Harmonized standards	RFC5280 X. 509 RFC3647 FIPS140-2 CC EAL4	RFC5280 X. 509 RFC3647	RFC5280 X. 509 RFC3647 FIPS 140-2 CC EAL4	RFC5280 X. 509 RFC3647 FIPS 140-2	
	Supporting Technical Documents	ETSI Standards	WebTrust Criteria	ETSI Standards	NIST SPs, FIPS 201, FPKIPA Documents	Accreditation Criteria
	Assurance to be achieved	Technical Compliance	Technical Compliance	Legal admissibility + Technical Compliance	Technical Compliance, Interoperability with Federal PKI system	Legal admissibility + Technical Compliance
Trust representation	Trust representation	Browsers/OSs	Browsers/OSs	Trusted List	Federal Bridge CA	Official Journal and Websites

IMRT-WG event

- **Workshop Style Seminar International Data Free Flow with Trust:
Trusted Services and International Mutual Recognition**

Agenda

Wednesday, September 4, 2019, 11:30 – 17:30 (Lunch provided)
Hitachi America, Ltd., 101 Park Avenue, 10F, New York, NY 10178

12:30 – 13:30: EU status and direction on Mutual Recognition: Nick Pope, Arno Fiedler, Olivier Delos, experts with ETSI (European Telecommunications Standards Institute), etc.

13:30 – 14:15: US industry and technical view of the Trusted Services and Mutual Recognition: Judith Spencer, CertiPath

14:15 – 15:00: NIST perspective and progress of Trust Services (Tentative – please propose the title): David Temoshok, NIST

15:00 – 15:30: Japan's perspective and progress of Trust Services: Satoru Tezuka, Keio University

Japanese Language Seminar and Q&A

16:00 – 17:30 Japanese language presentation and Q&A

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For registration, please send your full-name, title, and affiliation to: kazuo.noguchi@hal.hitachi.com.
The registration will be closed when we reached maximum of 55 people.