

PKI Situation in Japan 2020



Asia PKI Consortium

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GMO INTERNET GROUP

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1. Digital Certificates issued under the law

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(1) For Representative of Juridical Person

- Public Certification Service for Representative of Juridical Person under Commercial Registration Act
- Digital certificate is issued by Japanese Government
- Utilization field : B to G

1. Digital Certificates issued under the law

1. Digital Certificates issued under the law

(2) For Natural Person

- **Public Certification Service for Natural Person under Act on Electronic Signatures and Certification Business Public Certification**
- **Digital Certificate is issued by Government-accredited organization**
- **Utilization field : B to G 、 B to B**

1. Digital Certificates issued under the law

1. Digital Certificates issued under the law

(3) For Natural Person / Individuals [nicknamed JPKI]

- Public Certification Service for Individuals under Act on the Use of Numbers to Identify a Specific Individual in Administrative Procedures
- Digital certificate is issued by Japanese Government
- Utilization field : C to G 、 B to C

2. Penetration Status of Digital Certificates

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(1) Publicly Trusted Digital Certificate

- Around 10 CAs (Private Enterprises) are providing various types of Digital Certificates to Japanese market. Those are;

SSL/TLS(EV,OV,DV),Code Signing, AATL, Client Certificate, (IoT).

※The function/value of them have been recognized , though little by little.

- Some CAs are issuing TSA/TA Certificate (Only for Timestamp related service providers).

2. Penetration Status of Digital Certificates

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(2) Private CA

- There are not a few demands for establishing the closed business community by developing/utilizing Private CA.

 - ※The issue is how the private CA operator can gain the community members' trust for CA management.

- On the other hand, the utilization of digital certificate into IoT field are almost implemented by private CA.

 - ※Generally, the requirements for publicly trusted certificate are not fit for the requirements for IoT related digital certificates.

2. Penetration Status of Digital Certificates

2. Penetration Status of Digital Certificates

(3) For Natural Person / Individuals [nicknamed JPKI]

- **Public Certification Service for Individuals under Act on the Use of Numbers to Identify a Specific Individual in Administrative Procedures**
- **Digital certificate is issued by Japanese Government**
- **Utilization field : C to G 、 B to C**

3. Remarkable Topics (Old)

3. Remarkable Topics

(1) Government's Interest in the Trust Services

- **Japan-EU ICT Strategic Workshop in Vienna (Dec. 2018)**
 - ※ Participants:
 - [Japan] Governments, Economic Organizations , ICT related Forums
 - [EU] EU Commission, DG Connect, Digital Europe, EU Signature Dialog
 - ※ It was agreed to start mapping process between eIDAS regulations and Japanese legislations based on actual "Use Cases".

- **Study Group on Trust Services was formed by the Government**
 - ※ Studying current situations and issues related to Trust Services in Japan.
 - ※ Remote Signature, Timestamp , eSeal , eDelivery and QWAC have been discussed so far.

3. Remarkable Topics (Updated)

3. Remarkable Topics

(1) Government's Interest in the Trust Services

- Government has nominated the three services as immediate target and the Industry-Government-Academia joint Working Groups were formed for each Trust Service.
 - ※ Remote Signature, Timestamp and eSeal
- Each Working Group has engaged in investigations towards the construction of the Trust Service from the view point of legal system, technical aspects and operational aspects.

3. Remarkable Topics (Updated)

3. Remarkable Topics

- And also, the investigation towards the “International Mutual Recognition” is included in the intention of the Japanese Government. At present, each working group is conducting a study considering the possibility of the collaboration with EU/eIDAS.
- Currently, the “Mutual Recognition Pilot Project (tentative name)” between EU and Japan has been projected. The dialogue between the two Governments has been proceeded.

3. Remarkable Topics (Old)

3. Remarkable Topics

(2) Attempt towards International Mutual Recognition

- A technical Working Group for International Mutual Recognition(IMRT-WG) was formed by Keio University.

※The WG consists of experts from EU, US and Japan, and also from CA/Browser Forum.

※ At the Government level, the candidates are the following agencies:

- EU: EU Commission DG Connect
- US: GSA
- Japan: Government CIO/NISC/MIC/METI

3. Remarkable Topics (Updated)

3. Remarkable Topics

(2) Attempt towards International Mutual Recognition

- For supporting Japanese Government and towards the realization of Internal Mutual Recognition, Japanese IMRT-WG members have started to attend the ETSI related meetings and events.

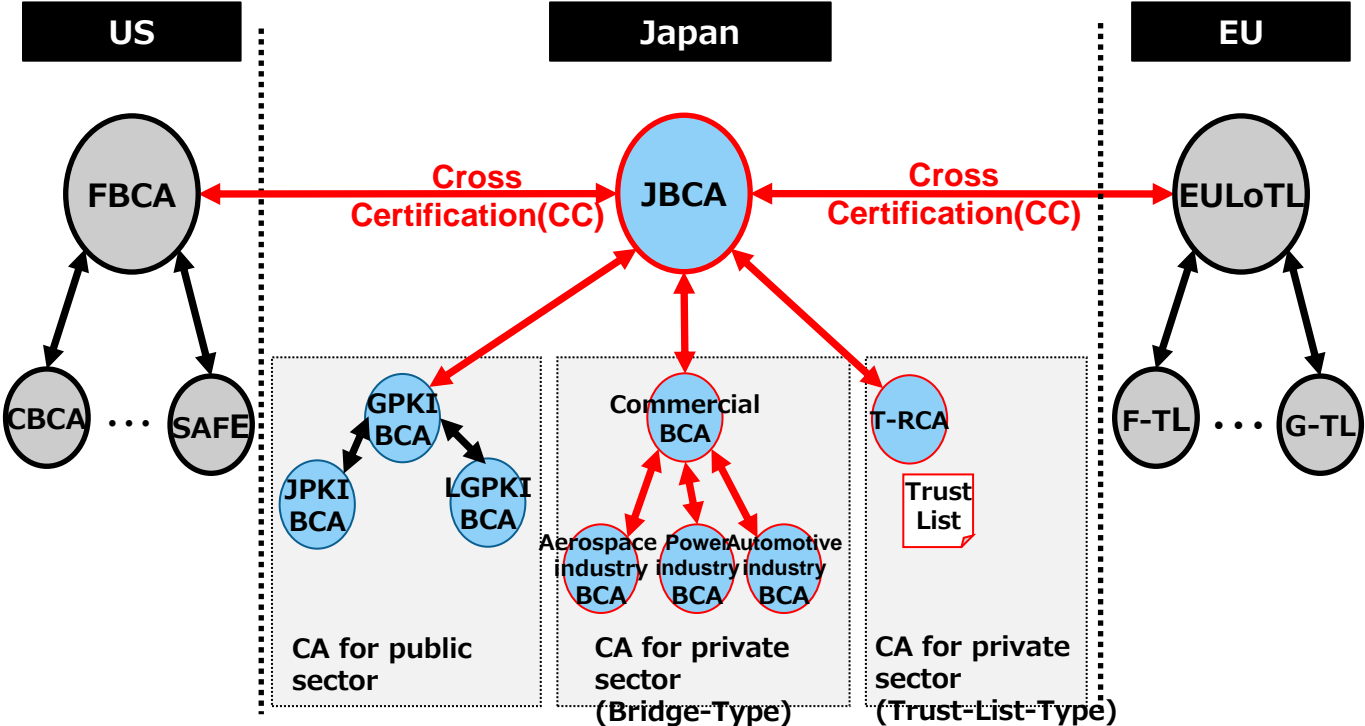
3. Remarkable Topics (Updated)

3. Remarkable Topics

- Through supporting EU/Japan Pilot Project, IMRT-WG is aiming to realize the similar Mutual Recognition Pilot Project between US and Japan as the next step in near future. IMRT-WG consists of experts from EU(ETSI), US(NIST/Federal PKI/ SAFE-BioPharma) and Japan.

Supplement to IMRT-WG activities

[Concept of trust services by International Mutual Recognition]



3. Remarkable Topics (New)

3. Remarkable Topics

(3) COVID-19 brought the opportunity to rethink the work style of office worker.

- Paper and Seal



- Telework environment



Thank you

About GlobalSign

GlobalSign is the leading provider of trusted identity and security solutions enabling businesses, large enterprises, cloud service providers and IoT innovators around the world to secure online communications, manage millions of verified digital identities and automate authentication and encryption. Its high-scale Public Key Infrastructure (PKI) and identity solutions support the billions of services, devices, people and things comprising the Internet of Everything (IoE).

