PKI Progress in the year 2021-2022 : Japan

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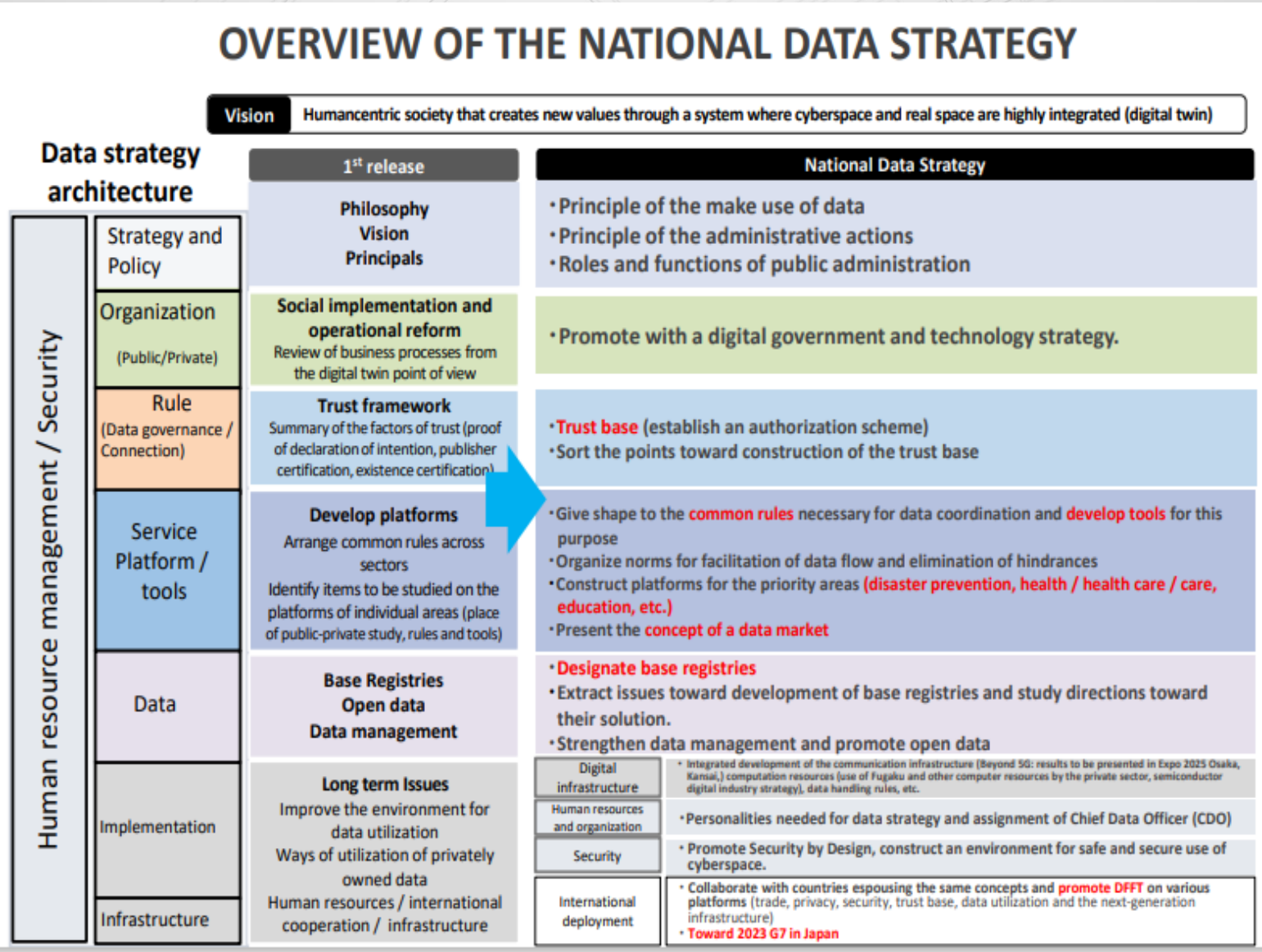
1.Government related Updates

1.(1)National Data Strategy : Overview



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1.(1)National Data Strategy : Action Plan for Trust

Trust

- Trust is an essential matter in a data-driven society. Trust includes social issues and technical issues.
- The Japanese government proposed a “DFFT” initiative in 2019. (DFFT: Data Free Flow with Trust)

- Open government, data and various activities foster trust.
  - ID systems, evidence-based policymaking, diverse, quantitative and high-quality data

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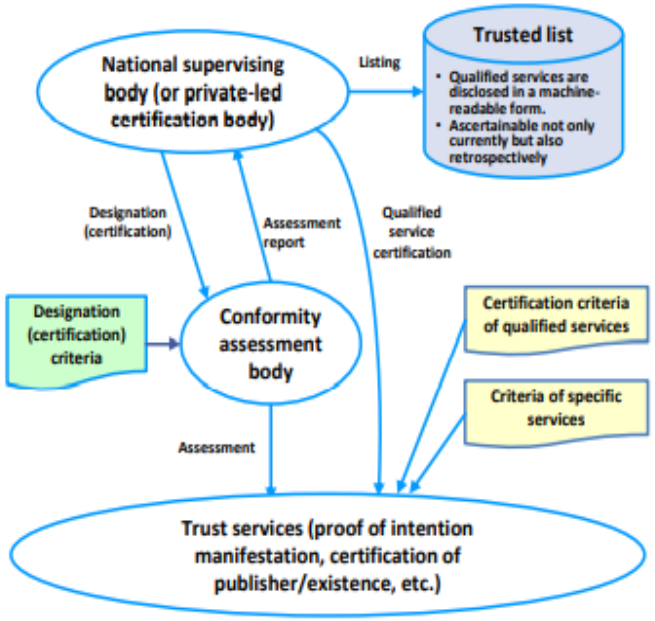
1.(1)National Data Strategy : Action Plan for Trust

Trust

- Basic Concept
  - Comprehensive trust framework toward digital society
  - Trust service's general principles and common requirements
  - International mutual recognition
- Key Actions
  1. Establishment of authentication schemes
  2. Establishment of a trust framework
  3. Effects of certification
  4. Define the certification criteria
  5. Disclosure of qualified services as a trusted list
  6. International mutual recognition framework



Concept of Trust framework

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1.(2) Activation of the “Digital Agency”

Outline of the Act on the Establishment of the Digital Agency

Purpose

The Digital Agency will be established, and matters in relation to its affairs and organization will be determined, in order to **promote measures for the formation of a digital society in a prompt and focused manner**. It assists the Cabinet in carrying out Cabinet affairs in the formation of a digital society together with the Cabinet Secretariat and **carries out the relevant administrative affairs for the formation of a digital society in a prompt and focused manner**.

Outline

1. Establish the Digital Agency in the Cabinet

2. Administrative Affairs of the Digital Agency

(1) **Assisting the Cabinet**

- Planning and comprehensive coordination of basic policies on measures for the formation of a digital society

(2) **Shared management of affairs**

- Establishment and promotion of priority plans for the formation of a digital society
- Comprehensive and basic policy planning, etc. regarding numbers that identify individuals
- Usage of My Number, My Number cards and corporate numbers as well as the installation and management of network systems for the provision of information
- Planning of comprehensive and basic policies on verifying identity using information and communication technology, etc.
- Electronic certification of commercial registration (through verifying identity using information and communication technology), electronic signatures, public personal authentication (related to verifiers), affairs regarding electronic power of attorney
- Comprehensive and basic policy planning for data standardization, external cooperating functions and a database on basic public information (basic registry), etc.
- Creation and promotion of basic policies for establishing and managing the information systems of national, local public organizations, and quasi-public sector private businesses
- Supervising the establishing and management of information systems conducted by the government, lump-sum budgeting, and executing all or part of those affairs independently

3. Organization of the Digital Agency

(1) **The head and chief minister of the Digital Agency is the Prime Minister.**

(2) **A Digital Minister who assists the Prime Minister and supervises the affairs of the Digital Agency will be appointed**, and in order to smoothly carry out the affairs of 2 (1), provided with **the right to recommend to the heads of relevant administrative organs**.

(3) In addition to **one senior vice-minister and one parliamentary secretary**, **a Chief Officer of Digital Agency will be appointed by the cabinet as a special position , to give advice to the Digital Minister, organize agency affairs, and supervise the affairs of each department**.

(4) **Establish the Digital Society Promotion Council**, with the Minister of State, etc. as a member of the Council, **which is in charge of promoting the implementation of measures for the formation of a digital society**.

4. Effective date

(1) Effective date: September 1st, 2021.

(2) Provisions for review after a certain period of time and revision of related laws.

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1.(2) Activation of the “Digital Agency”

What will “Digital Agency” do?

https://www.digital.go.jp/en

Policy priorities: “total design”

- Improvement of user-friendliness of online public services
- Development of common functions such as IDs, certifications, and infrastructure such as cloud services and networks
- Comprehensive data strategy
- Building digital capabilities through training and education
- Regulatory reform to allow use of new technologies
- Securing accessibility
- Ensuring safety and security
- Promoting R&D and demonstration
- Examine and Evaluate the program

In the global context

Data Free Flow with Trust

“ We must, on one hand, be able to put our personal data and data embodying intellectual property, national security intelligence, and so on, under careful protection, while on the other hand, we must enable the free flow of medical, industrial, traffic and other most useful, non-personal, anonymous data to see no borders, repeat, no borders.

The regime we must build is one for D.F.F.T., Data Free Flow with Trust--non-personal data, needless to say.”

January 23, 2019
World Economic Forum Annual Meeting

Cited from "https://www.digital.go.jp/en"

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2. Updates in the Private Sector

2.(1) [SIP project]

The “Mutual Recognition Pilot Project between EU and Japan”

[Features of the Project]

- SIP is a national program led by the Council for Science Technology and Innovation (CSTI) of the Japanese Government(the Cabinet Office).
- This 3 year project has started in 2020 as one of the projects under the SIP (Crossministerial Strategic Innovation Promotion Program).

[Main Purposes of the Project]

- Mapping Best Practice
  - TSPs (CAs, TSAs and RSSP)
- Implementing Trust representation
  - J TSL (Japanese Trusted Status List)
- Proof of Concept (Demonstration)
  - Validation of digital signature with J TSL and EU LoTL
  - Remote signature creation with extended API

Cited from "https://www.enisa.europa.eu/events/trust-servicies-forum-ca-day-2021/ca-day-presentation/07_sip-1-_soshi-hamaguchi.pdf"

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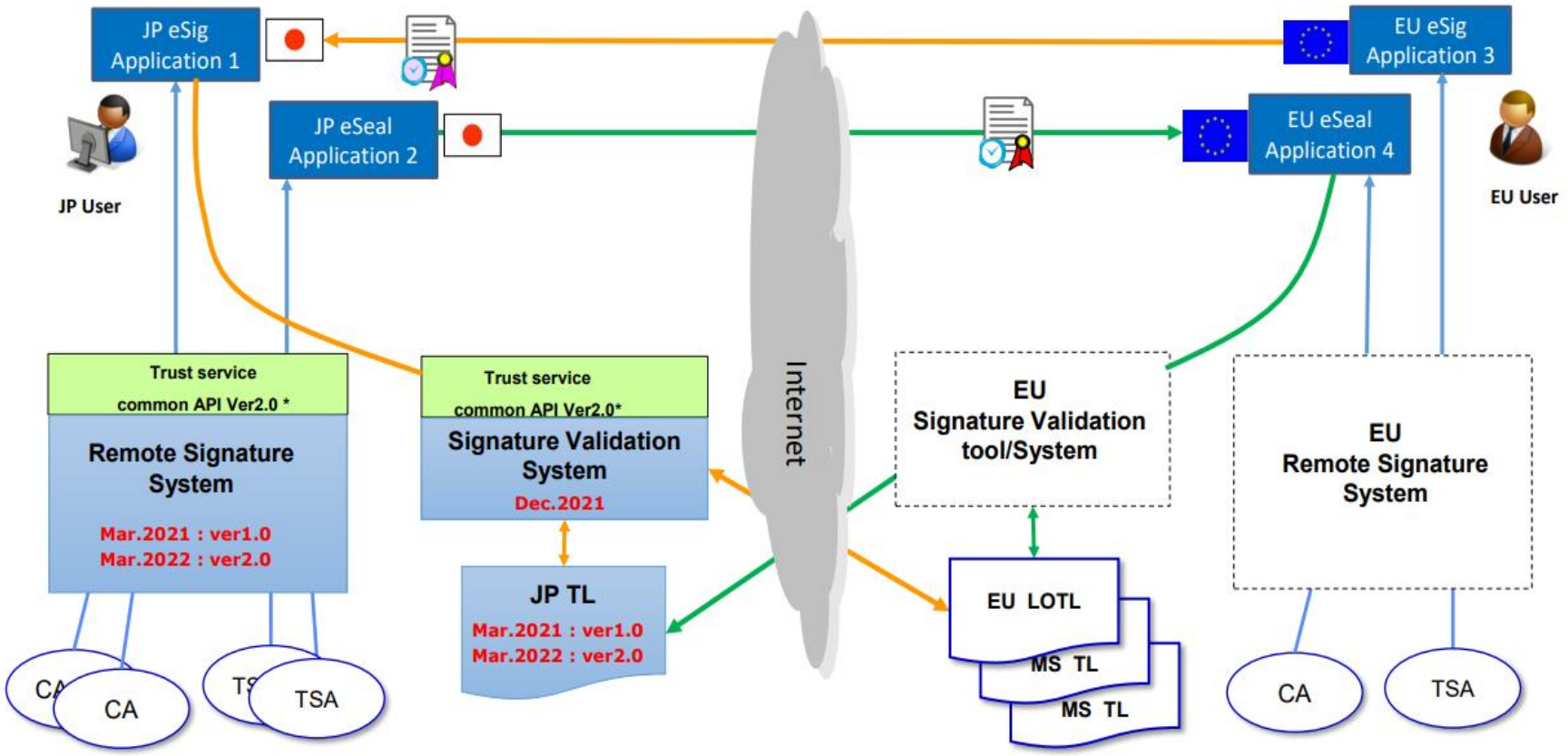
2.(1) [SIP project]

a. Overview of SIP project



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2.(1) [SIP project]

Methodology

Main points for comparison between PKI-based trust service schemes
(for each of the four pillars)

Legal context	Equivalent trust service requirements	**Legal context**
Supervision & auditing	Audit & supervision with equivalent oversight	**Supervision & auditing**
Best practice	Meeting common requirements for equivalent level of trust supporting interoperability	**Best practice**
Trust representation	Mappable to common Trust representation	**Trust representation**

The EU-Japan Pilot Projectis focusing on these pillars.

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Cited from "Global acceptance of EU Trust Services" presented by Olivier Delos/ETSI at APKIC Symposium

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2.(2) JDTF

In the fall of 2020, the JDTF(Japan Digital Trust Forum), a council focused on trust services, was established. The JDTF is made up of companies and organizations from different sectors and industries, such as SIers, TSPs, lawyers, audit organizations, and user companies, with government organizations as supporting organizations.

The JDTF will work to spread the concept of digital trust, and also make efforts to promote and propose the development of legal systems and rules for social implementation of trust services.

The JDTF has proposed “TaaS (Trust as a Service)” as an architecture to realize DFFT’s trust and to realize a digital society in harmony with other countries, and summarized the concept of TaaS in a white paper. An English version of the white paper is currently under preparation.

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