

Promotion of Digital Transformation

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Our Mission

Human-friendly digitalization : No one left behind

We strive to create a future for Japan that we all can take pride in and to envision a digital society where diverse forms of happiness are realized.

Operations of the Digital Agency

1. National information system

Planning, formulation, control and supervision. Self-maintenance of important systems and lump-sum budget allocation

2. Common digital infrastructure for local areas

Coordinate the transition to the Government Cloud and oversee and supervise the subsidized systems.

3. My Number system

Centralize the planning of the My Number System in general

4. Support for digitization of the private and quasi-public sectors

Promote measures in accordance with the priority plan based on the Basic Act on the Formation of a Digital Society
Oversee and supervise the development of information systems in the quasi-public sector (healthcare, education, etc.)

5. Data Utilization

Formulate and operate data strategies as a data authority. Maintain the base registry.

6. Cyber security

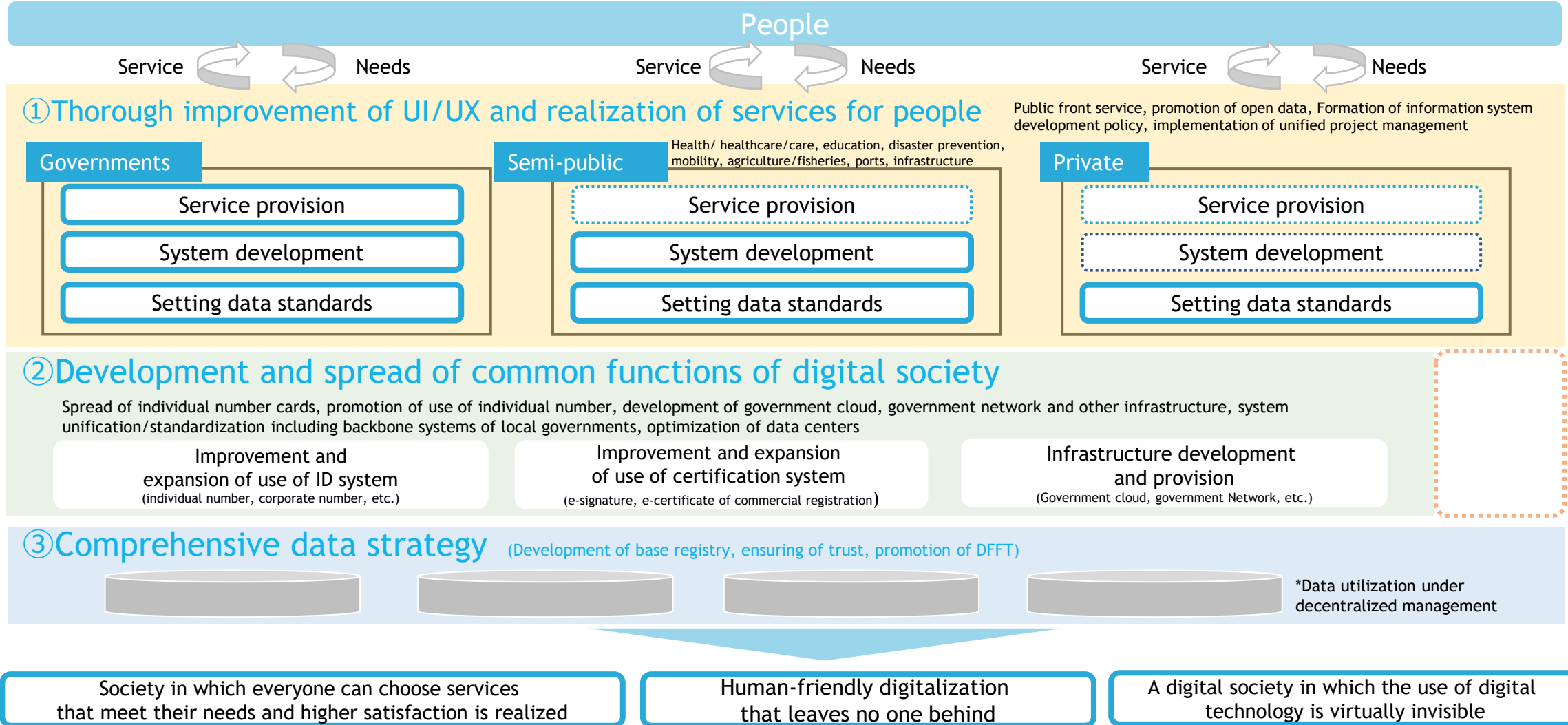
Establish a dedicated security team.

7. Securing digital human resources

①Secure digital human resources in the government sector, ②Establishment of a “digital job”, ③Revolving door for public-private interaction, ④Brush up on public-private collaboration scheme, ⑤Flat and open organization

Goals of the Digital Agency

(Total design toward formation of a digital society)



Japan-EU Digital Partnership

Background

May 2022, EU and Japan established “Japan-EU Digital Partnership” to facilitate and organize joint work in areas of mutual interest and advance the cooperation. We have held the informal workshop and coordinated our activities.

Overview

● Purpose

Work together on a wide range of digital issues in the upcoming years to promote economic growth and ensure a successful digital transformation that delivers solidarity, prosperity, and sustainability. This includes for example the “Data Free Flow with Trust” project.

● Actions

- Hold an annual meeting at ministerial level
- Report at Japan-EU summit

● Priority area

Privacy, Global semiconductor supply chain, 5G and Beyond 5G technologies, High Performance Computing and Quantum technology, Cybersecurity, Artificial Intelligence(AI), Digital Connectivity, Online Platforms, Data(including DFFT[Data Free Flow with Trust]), Trusted Technologies, Digital Trade, SME’s Digital Transformation, International Standardization, Trust Services, Blockchain, Digital Education.

Summary of Japan-EU Digital Partnership

Section 1. Background

- Both sides see the joint benefits of forming a Digital Partnership that will establish structures for collaboration in the digital field and reaffirmed the need for DFFT.

Section 2. Partnering for the development of a human-centric and sustainable digital society

- The Japan-EU Digital Partnership intends to cover the main dimensions of the digital transformation, including infrastructures, skills, digital transformation of businesses, and digitalisation of public services. It intends to further facilitate data free flow and strengthen consumer and business trust by respecting a high level of privacy and security.
- Both sides share the ambition to improve the functioning of the global digital economy and intend to work jointly in an active and assertive manner to promote a human-centric vision of digitisation, building on respective bilateral and multilateral work such as the G7, G20, OECD, and WTO.

Section 3. Establishing a Digital Partnership between Japan and the EU

- The Digital Partnership intends to establish an annual meeting at ministerial level. It is expected to take stock of progress in the partnership and provide political guidance on the next steps.
- The Digital Partnership intends to provide for the over-arching framework of bilateral cooperation in the digital field for both sides.

Section 4. Achieving joint results in priority areas for enhanced digital cooperation

- Both sides intend to work jointly on the following priority areas : Privacy, Global semiconductor supply chain, 5G and Beyond 5G technologies, High Performance Computing and Quantum technology, Cybersecurity, Artificial Intelligence(AI), Digital Connectivity, Online Platforms, Data(including DFFT[Data Free Flow with Trust]), Trusted Technologies, Digital Trade, SME's Digital Transformation, International Standardization, Trust Services, Blockchain, Digital Education.
- These areas will be reviewed and updated on a regular basis through the Japan-EU Digital Partnership Council.

Section 5. Strong leadership and progress monitoring for a successful Digital Partnership

- The Japan-EU Digital Partnership Council should be provided with clear progress reports by its secretariat in order to take stock of the progress achieved and provide strategic guidance on the priorities and next steps.

Our country's vision for DFFT

- Encouraging data free flow based on securing trust through technology*. (DFFT)
- Leading the formation of international regulations that balance 'economic growth and innovation' with 'security' and 'privacy', with technology at the core.

※ Technology examples: use of PETs, security technology, blockchain, etc.

'Trust' facilitates data flow.

Japan : Direction of DFFT Operationalization.

- Multi-dimensional approach from six areas, including e-trade, trust, privacy, etc.
- Visualization of each country's regulations and identification of barriers to promote interoperability.
- Consideration of an international framework for cooperation with other countries.

< Concrete measures >

- G7 Japan Presidency (2023) : Specific agreements on DFFT (Basic principles etc.) , Examination of the framework for promoting DFFT
- Follow-up to the EU-Japan Digital Partnership launched at the initiative of the Digital Agency. (May 2022)

3 areas where expect cooperations from the private sectors in DFFT



Creating innovative use cases and common platform including GAIA-X, E-Invoice(Peppol), Smart-City, AI, Open science WG, Web3.0 etc.



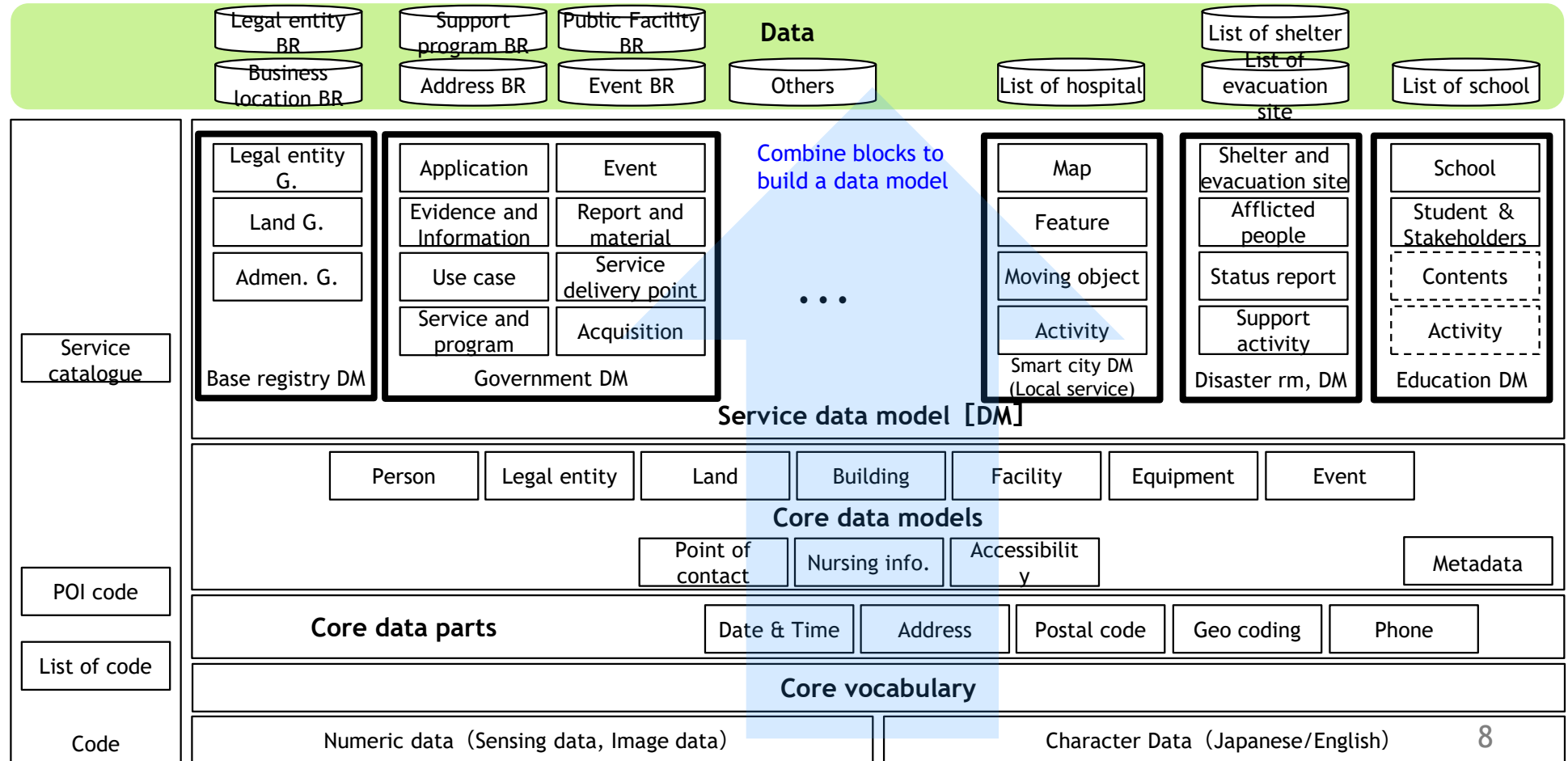
Countering cyberspace surveillance and other authoritarian states and ensuring a balance between security/privacy and data free flow



Standardization and international regulations to facilitate data free flow and emerging technology

Government Interoperability Framework

- We should provide structured and high-quality data.



Guidebooks

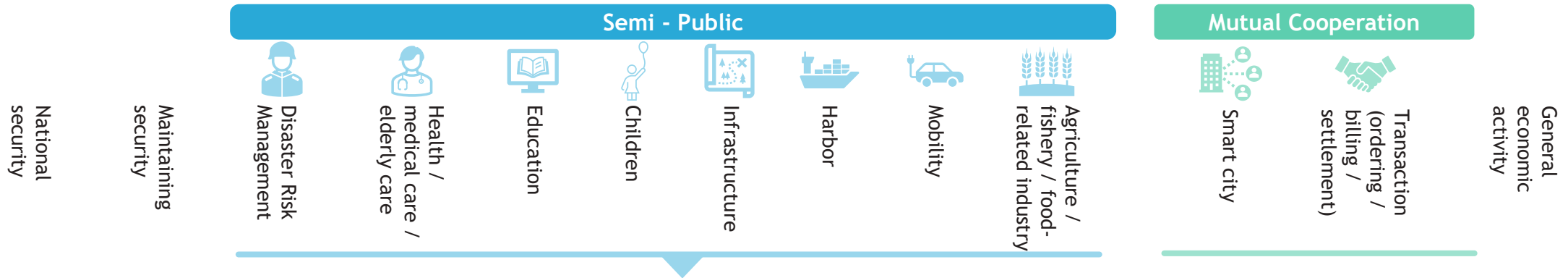
GIF Guidebook

- Character data guidebook
- Master data design guidebook
- Code design guidebook
- API guidebook
- Data management guidebook
- Data specialist guidebook
- Architecture guidebook
- Data quality guidebook
- Metadata guidebook

- Service catalogue
- POI code
- List of code
- Code

Promotion of digitalization in the Semi-public sector

We pursue a society in which individuals can receive services at will based on their needs, and proactively design their own lifestyles for more pleasant lives.



1. Health / medical care / elderly care

To promote the utilization of private PHR(Personal Health Record) services and medical-fee-revision DX efforts.

2. Education

To promote the utilization of educational data and consider education for the Digital Society that makes “individually optimized learning” and “collaborative learning” feasible.

3. Disaster Risk Management

To promote the digitalization of disaster prevention workload in local governments.

4. Children

To carry out the pilot project that connects data from education, childcare, welfare, medical care, etc.

5. Mobility

Development and demonstration to promote the distribution of mobility-related data.

6. Transaction(ordering / billing / settlement)

Enable transaction-wide data linkage that includes everything from the contract to the payment by promoting efforts to utilize the necessary data.

Crystalizing National Vision for a Digital Garden City

Unleashing the full potential of digital technology, “developing the character and abundance of the local areas,” and “being equal or more productive and convenient than the city areas,” crystalize the “National Vision for a Digital Garden City.” And achieve “Well-being” & “Sustainability in environment, society, and economy.”

Basic concept for National Vision for a Digital Garden City

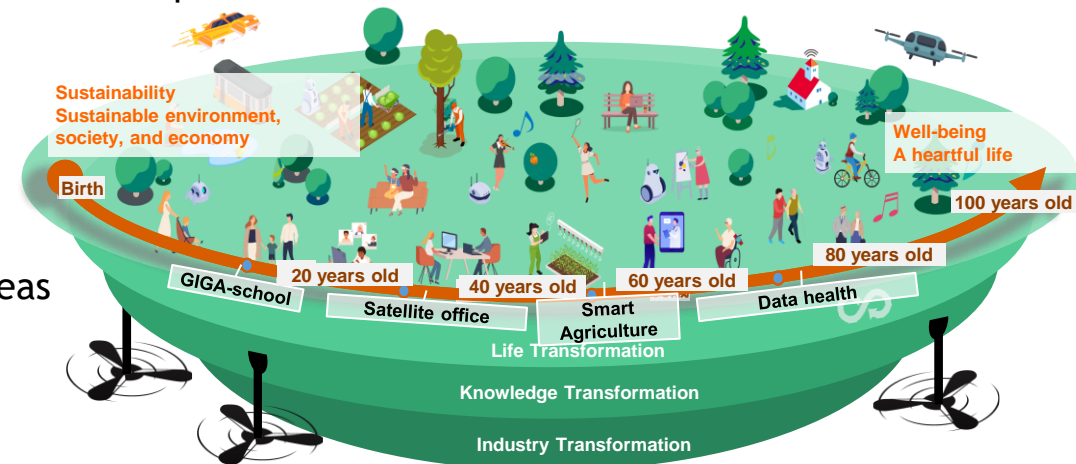
To the extent that it follows the Digital principles and promotes the development of open data infrastructure, the government will support local activities that collaborate with multiple businesses and citizens to figure out the social issues.

Main efforts for a Digital Garden City

- (1) Developing digital infrastructure that supports local areas
- (2) Deploying digital services that solve local issues
- (3) Fostering digital human resources & Enhancing the new influx to local areas
- (4) Revitalizing local industries and foster startups for digital technology
- (5) Exporting the Digital Garden City model to the world

Setting clear goals

Set clear goals and report to the supporters the progress and the results by monitoring all activities for a Digital Garden City.



PETs Privacy Enhancing Technologies

PETs are technologies that embody fundamental data protection principles by minimizing personal data use, maximizing data security, and empowering individuals.

The European Union Agency for Network and Information Security (ENISA) refers to PETs as:

‘software and hardware solutions, ie systems encompassing technical processes, methods or knowledge to achieve specific privacy or data protection functionality or to protect against risks of privacy of an individual or a group of natural persons.’

Examples

1. Differential Privacy

where noise is added to an analytical system so that it is impossible to reverse-engineer the individual inputs.

Apple inc. uses this technology to collect data of safari browser.

3. Homomorphic Encryption



where data is encrypted before it is shared, such that it can still be analysed but not decoded into the original information.

It was introduced on NSCAI(The National Security Commission on Artificial Intelligence)’s report.

2. Federated Analysis

where parties share the insights from their analysis without sharing the data itself.

Google LLC uses this to train a predictive model for smartphone keyboard.

4. Secure Multiparty Computation



where data analysis is spread across multiple parties such that no individual party can see the complete set of inputs.

It was introduced on EDPB(European Data Protection Board)’s recommendation.

International Standardization

International standardization is one of the topics that was discussed at the G7 meetings in the last few years.

May 2022, G7 Digital Ministers meeting(Germany)

*“We also welcome the efforts of the German G7 Presidency to foster discussion on **supporting standardisation towards digital and green transformations**, as well as on areas for improving the participation of MSMEs in and education on standardisation, to help remove barriers of entry to the standards development process.”*

June 2021, G7 Cornwall Summit COMMUNIQUÉ(UK)

*“To **support effective standard-setting** that reflects our core values and principles, we will strengthen our coordination, including by consulting with industry, with regards to engagement with and appointments to Standard Developing Organisations, where appropriate.”*

*“We commit to better sharing of information and best practice, including between our national standards bodies, enhanced capacity building and **support for multi-stakeholder participation in standard-setting.**”*

April 2021, G7 Digital and Technology Ministers’ meeting(UK,Online)

*“We recognise the significant and positive role that **digital technical standards** have in supporting the global economy and society.”*

*“We recognise that the way in which **digital technical standards** are developed and deployed has a real world impact on citizens and societies.”*

G7 Digital and Tech Ministers' Meeting in Takasaki, Gunma

Event schedule

29th -30th April 2023

Theme

DFFT and such priorities of the digital sector, as facilitation of emerging technologies to improve online safety and reliability, ICT infrastructure including Beyond 5G/6G and a human-centred approach to artificial intelligence. (TBC)

Participating countries

Host country (Japan) G7(France, U.S.A, U.K. Germany, Italy, Canada)
EU、Inviting Countries、International Organization (OECD, ITU etc.) * based on organizations joined in 2022

Related initiatives

Multi-stakeholder meetings with the participation of industry and other
Exhibitions and other events to demonstrate our ICT
Other various events to contribute to regional revitalization