International Workshop on Building Smart and Resilient Cities and Communities in Asia and the Pacific: Role of Policy Makers and Planners of Local Government

NIPPON KOEI

Japanese Public-Private Collaboration toward Digital Transformation of Disaster Risk Reduction and Invitation to the Activities

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May 23, 2024

ID&E

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Disaster Events in Japan

Incident: Noto Peninsula Earthquake (January 2024)

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Incident: Kinugawa River Flooding (Sep. 2015)

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Incident: Mt. Ontake Eruption (September 2014)

Photo: Kuroda Terutoshi, from the video

Photo: The Huffington Post

Photo: Pronk Palisades

Photo: golden-tamatama.com

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Incident: Hiroshima Debris Flow (August 2014)

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Incident: Snow Disasters

Photo: un-farm.com

Photo: hekomi 119

Photo: kyuumaru TK

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Digital Authority, Japan, and Public-Private Digital Transformation Committee in DRR

February 27, 2015

Establishment of Digital Agency, September 2021

- Established in September 2021
- One-third of officials are from private sector
- Aiming at digitalization, not only digitization

Homepage of Digital Agency Website

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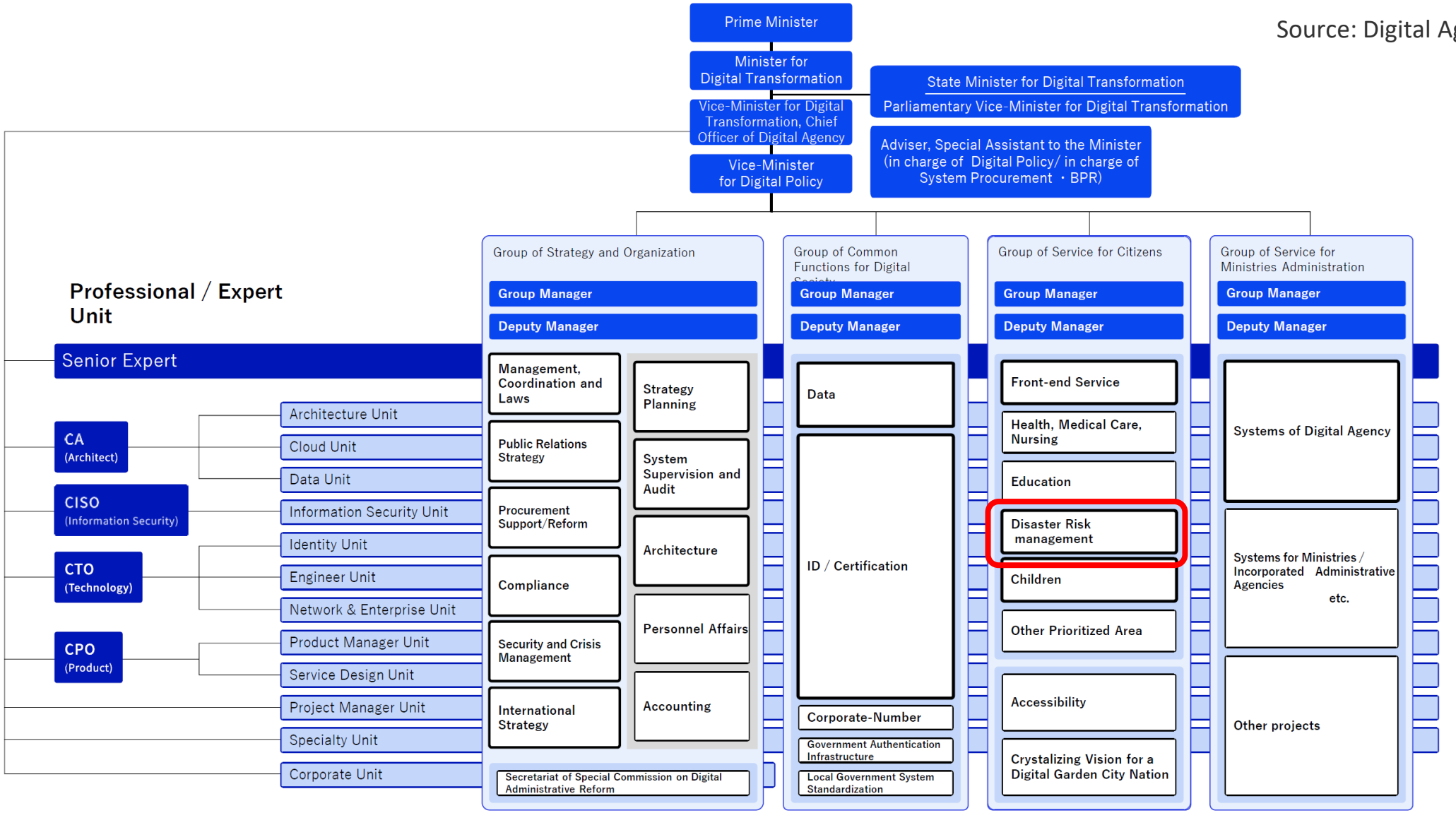
Organization of Digital Agency as of November 2022

Source: Digital Agency Website



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Website of the Committee

Public-Private Digital Transformation Committee on DRR (BDX)

https://ppp-bosai-dx.jp/

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Purpose and Members of the Committee

Purpose:

To realize DRR both in usual and emergency situation by public-private collaboration

Members:

438 entities as of May 10, 2024 consisting of 99 local public entities (prefecture government, municipalities, public organizations) and 339 private entities (data providers, consultants, transportation, startups, Siers, insurance, finance, media, medical, NPOs, etc.)

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Mission of the Committee

1. **Clarification of issues**; To clarify issues relevant to DRR to decide direction of public-private collaboration

2. **Platform Development**; To propose ideal data linkage platform especially from the view point of platform users, such as citizens and municipalities

3. **Market Development**; To create new business opportunities to realize digital transformation of DRR by public-private collaboration

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Major Activities of the Committee

1. Interview and questionnaire surveys to entities relevant to DRR to identify issues
2. Identification of technological trend to determine areas of emphasis and accelerate dissemination of DRR solutions
3. Design of data architecture and data linkage platform
4. Design of data items for DRR applications
5. Design of procurement criteria for applications and systems
6. Design of usage of my number (ID) card for DRR
7. Other subjects to accelerate digital transformation on DRR

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Invitation to Establish and Test OS Assessment Indexes to Introduce Digital Technologies in DRR

February 27, 2015

OS Assessment Indexes to Introduce Digital Technologies in DRR

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【Background】

- The lack of knowledge of local conditions (OS; legal system, human resources, funding, awareness of disasters, disaster preparedness priorities, digital environment, etc.) prevents successful matching of needs and technology seeds.
- Therefore, we would like to establish indexes to evaluate this OS, and also to invite local governments in the world to help us establish and test it.

【Benefits】

- You can know the present status of your city to introduce digital technologies in disaster risk reduction, and to strengthen relevant knowledge.
- You may be able to learn the appropriate state-of-the-art Japanese digital technologies and DRR knowledge to cope with your present situation, and to customize to your local situation aiming at building smart and resilient cities and communites.

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Samples of the OS Assessment Indexes

- **Organization**: Is there an organization related to disaster reduction?
- **Legal system**; Is there a basic law on disaster risk reduction? Is there a legal system related to pre-disaster prevention, emergency response, reconstruction, etc.?
- **Human resources**: Do you have personnel specialized in disaster risk reduction? Cooperation among industry, government, and academia?
- **Funds**; Is there a budget for disaster risk reduction? Is there a fund for disaster management? Distribution system?
- **Disaster awareness**: An idea of disaster preparedness a shared among citizens?
- **Disaster preparedness needs**; Is there preparedness for disasters? Resilience status?
- **Priority of disaster risk reduction;** Priority compared to other subjects (e.g., food, clothing, housing, etc. BHN, relationship with other infrastructure, etc.)
- **Electricity and communication coverage**; Already electrified? Are means of communication secured? Stability? Emergency backup? Digital environment (smartphone and computer penetration rate, literacy)?

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