

Cloud Computing Policy of Japan



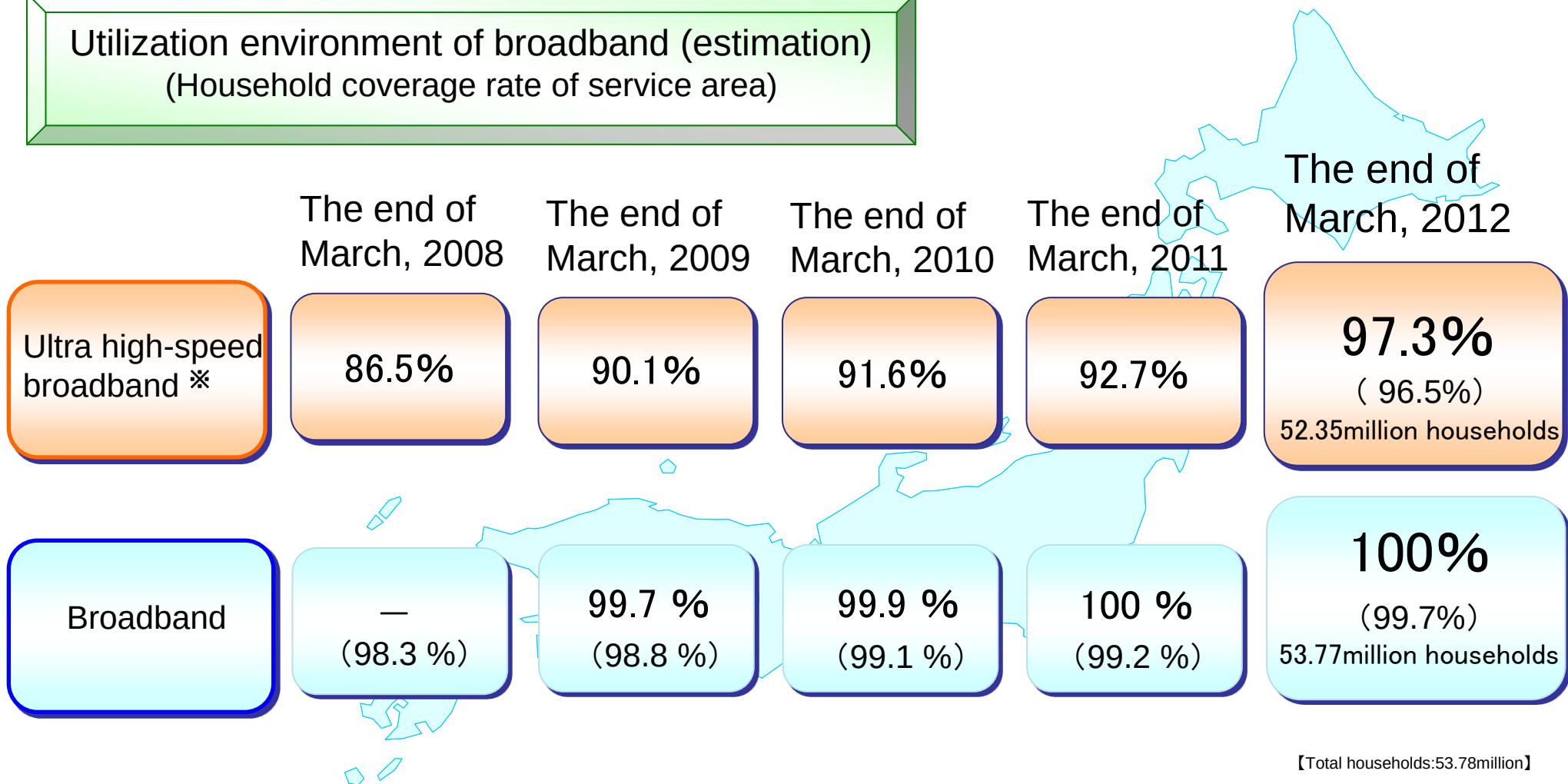
June 2013

Ministry of Internal Affairs and Communications(MIC), JAPAN

Improvement state of broadband infrastructure in Japan

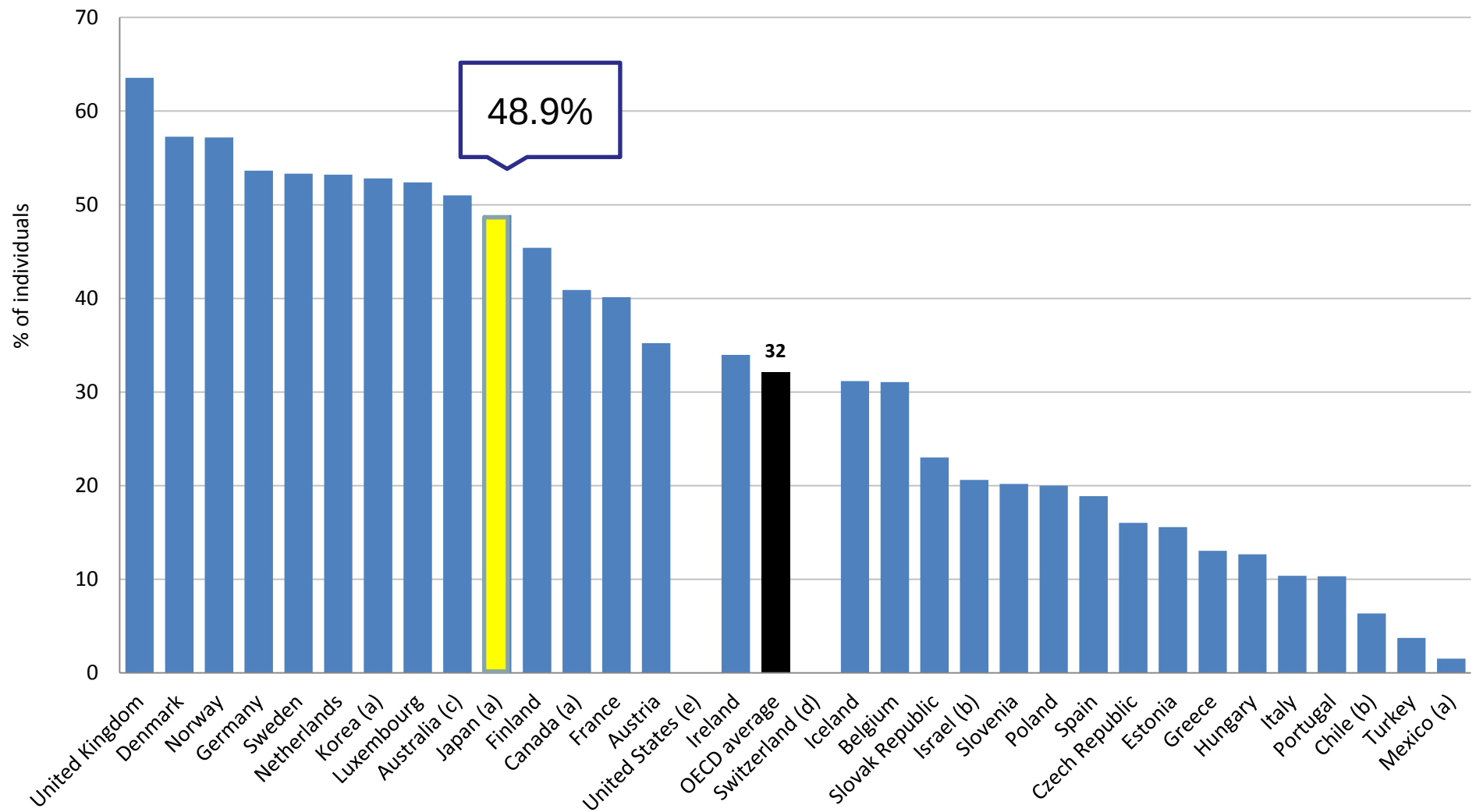
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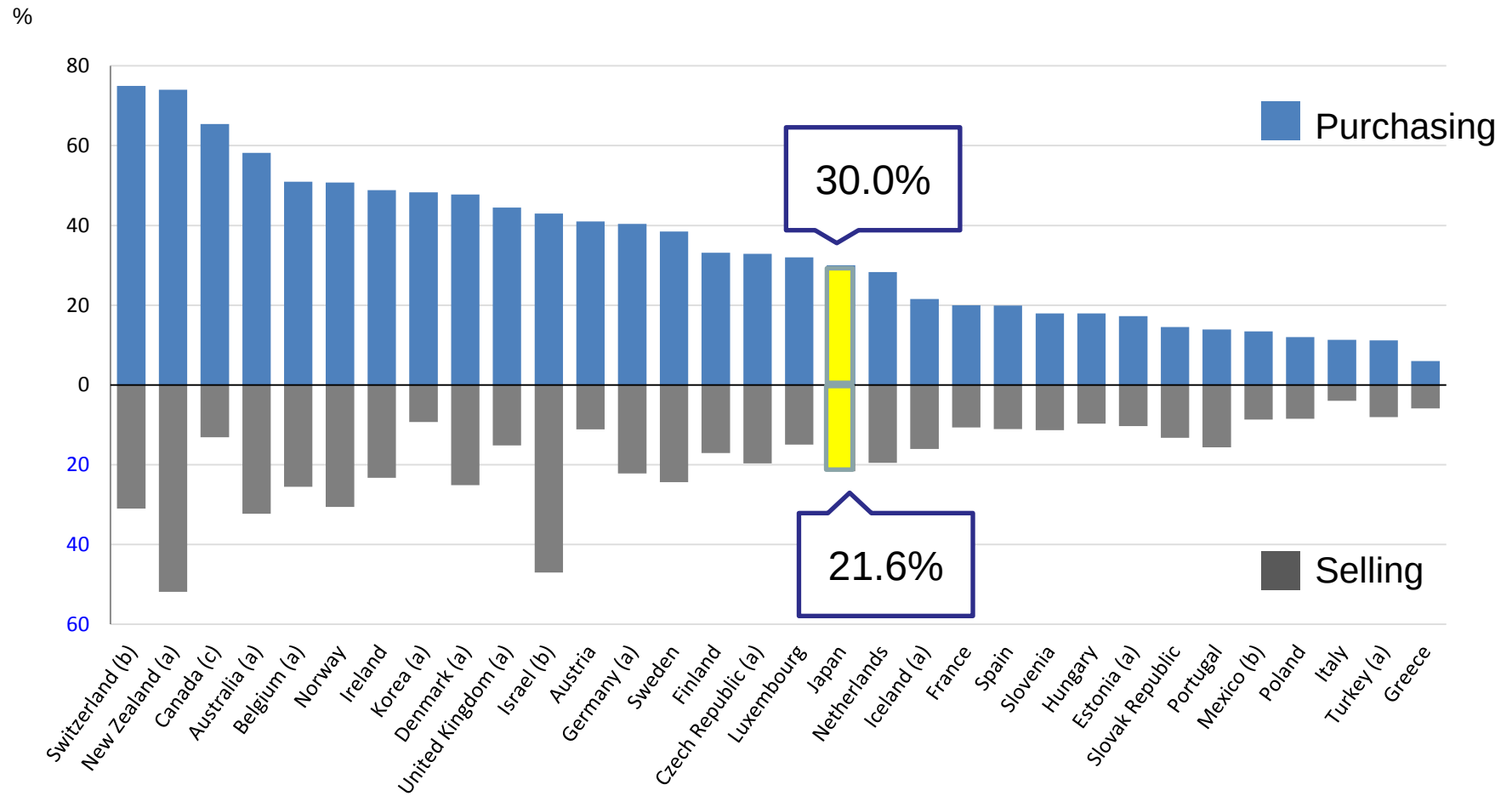
Utilization environment of broadband (estimation)
(Household coverage rate of service area)

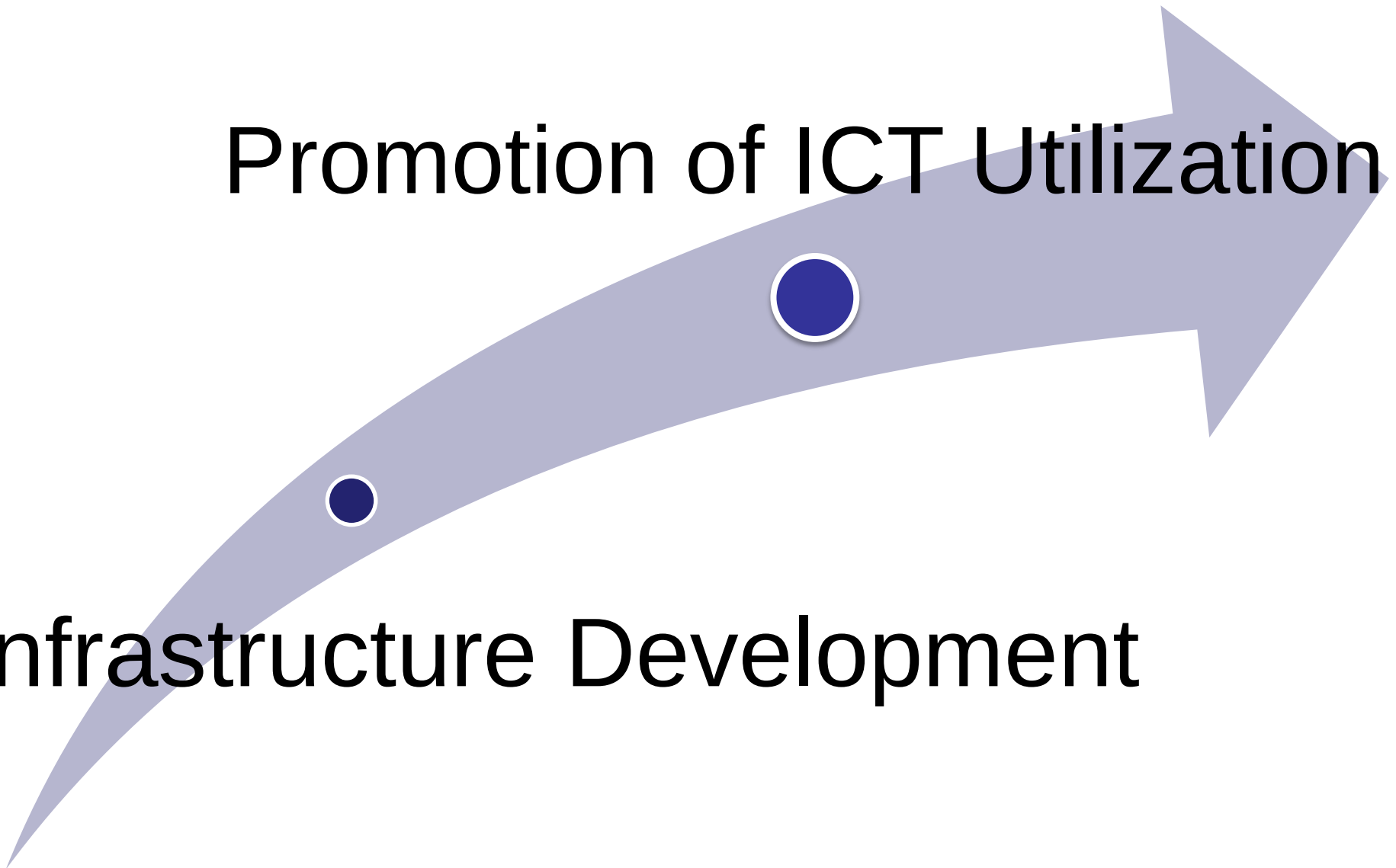


※ **Ultra high-speed broadband**: FTTH, Cable internet, FWA, BWA (limited to downstream transmission speeds of 30Mbps or more, except for FTTH)

The numbers in parenthesis are data for only fixed broadband service.







Promotion of ICT Utilization

Infrastructure Development

Utilization

- Promotion of the full utilization of ICT
- Improvement of the environment for the diffusion of cloud services
- Support for creation of new cloud services
- International expansion of cloud services

Technology

- Promotion of research and development of the next generation cloud technologies
- Promotion of standardization

International Relations

- Building a consensus on international rules in international frameworks such as APEC, OECD, and ITU
- Holding dialogue on policies under the cooperation of industries, academia, and the government

- ◆ Activities of Japan Cloud Consortium (JCC)
- ◆ Developing guidelines regarding ASP, SaaS and cloud computing
- ◆ Developing and Operating “Common Government Platform”
- ◆ Support project for cloud service development in small and medium-sized companies
- ◆ Relaxation of the regulation for data center construction

- ◆ Standard Setting for Technical Requirements of Inter-cloud
- ◆ Research and Development for security technology to promote shift to cloud in preparation for disasters
- ◆ ICT policy dialogues

Japan Cloud Consortium

415 members

<<340 enterprises
63 organizations
12 individuals
(Apr. 2013)>>

General Meeting (around twice a year; a symposium is also held)

Secretarial Board

(a secretariat consisting of Nippon Keidanren and several other enterprises/organizations)

Next
Generation
Cloud Service
Discussion
WG

Cloud
Migration
Discussion
WG

Business
Collaboration
Cloud
Discussion
WG

Education
al Cloud
WG

Agricultur
al Cloud
WG

Health/
Medical
Cloud
WG

Tourism
Cloud
WG

Fishery
Cloud
WG

M2M
Big data
WG

NICT

IPA

ASPIC

JDCC

GICTF

GIPC

OSS-C

Related
organization

In order to promote the usage of Cloud services while ensuring consumer rights, Japan has established the Guidelines, which indicate how to use cloud services appropriately.

<For Providers>

Common

- Information Security Countermeasure Guideline for ASP-SaaS Providers (MIC, Jan.2008)
- Guide for collaboration among ASP-SaaS Providers (MIC, Jul.2012) etc

Specific

- Guideline for Safety Management of Cloud Service Providers who Handle **Medical Information** (MIC, Jul.2009, Dec.2010 updated)
- Guideline for ASP-SaaS service providers in the field of **school affairs** (MIC, Oct.2010)
- Guide for secondary use of **ground information** (MIC, Jul.2012)
- Guide for providing **traceability service of rice and processed rice food** via ASP, SaaS or cloud computing (MIC, Jul.2012) etc

<For Users>

Common

- Guide to Protecting Cloud Service Users and Ensuring Compliance (ASPIC, July.2011) etc

Common

- Guideline for Installing and Using ASP-SaaS by **Local Government** (MIC, Apr.2010)
- Guideline for ICT Outsourcing by **Public Sector Organization** (MIC, Mar.2003)
- Guideline for Installation of Information Systems for School Affairs as a part of Total **School Computerization** Plan (APPLIC, 2009) etc

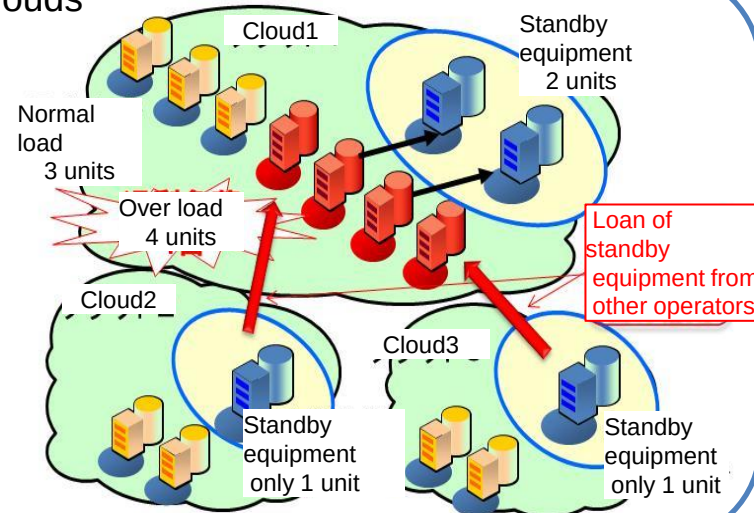
Research and Development into the Construction of a Collaborative Structure Between Wide Area Disaster Response Clouds

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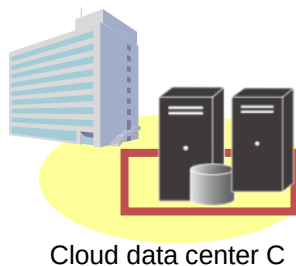
Effect of collaboration between clouds

If it is possible to collaborate between clouds...

→ Through cooperation between operators when information processing is congested, only minimal investment by each operator is required.

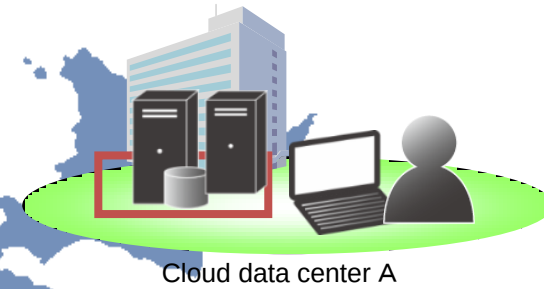


Strengthen responsiveness to disaster through collaboration between clouds distributed in remote locations

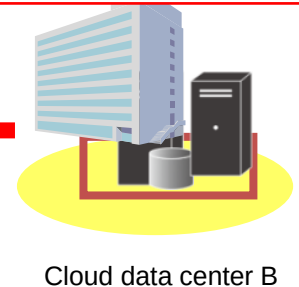


Test bed for collaboration between clouds

Establish instant switchover technology through testing using JGN-X



Released for use by local Tohoku companies.



Promotes global open inter-cloud technologies and standardization through collaboration among academia, government and industry

Set up in July 17, 2009

http://www.gictf.jp/index_e.html

General Assembly

Chair: Tomonori Aoyama

Board of Directors

Technology Task Force

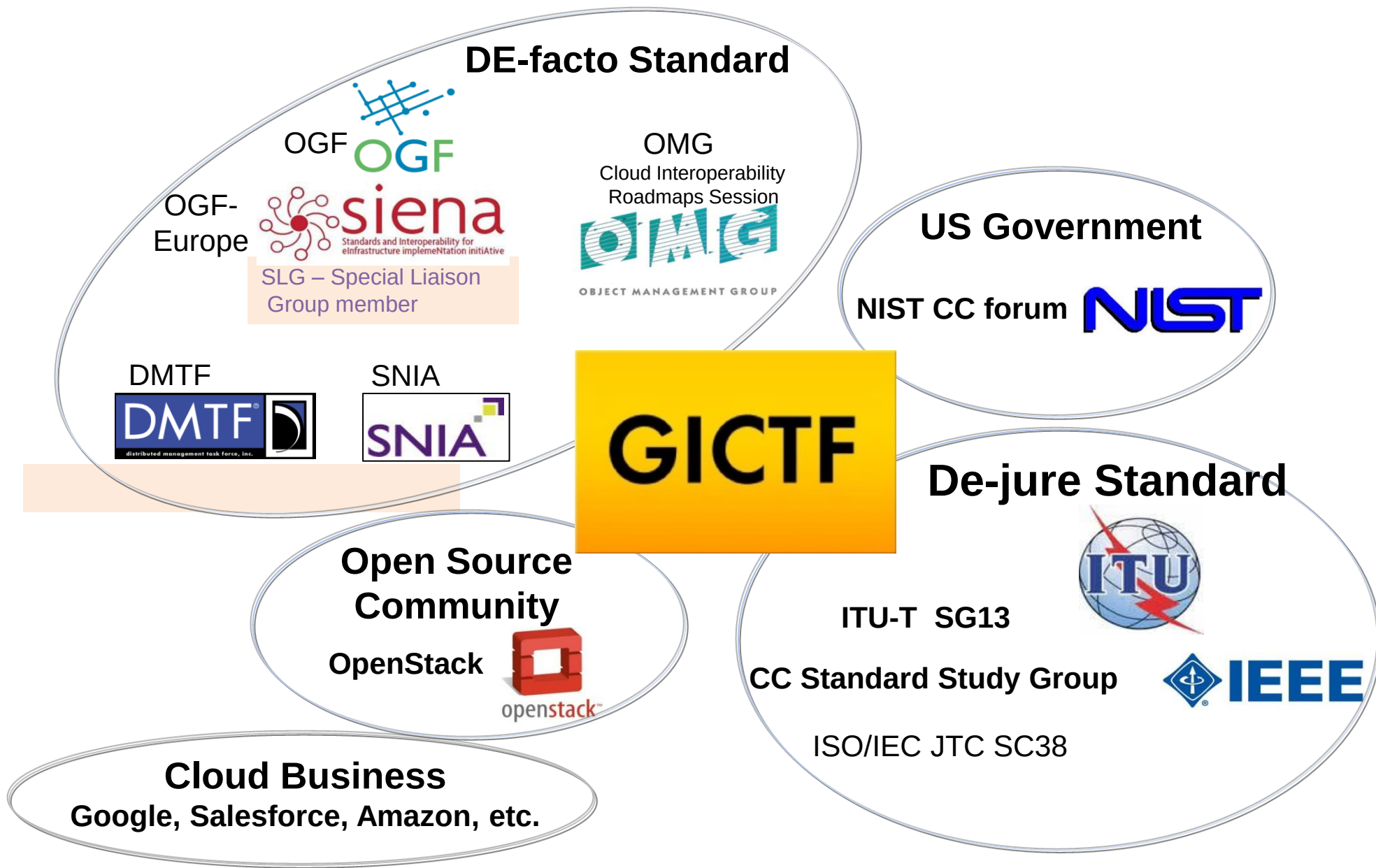
1. Collect and share information with organizations and at conferences related to cloud computing
2. Identify technical needs related to secure cloud interworking applicable to e-Government, etc.
3. Develop a standard set of specifications applicable to e-Government, etc. and propose it to relevant standards bodies
4. Propose inter-cloud test beds

Application Task Force

1. Identify technical needs related to securing cloud interworking
2. Promote widespread use of cloud interworking technology

Member: 87 organizations

**NTT, KDDI, NEC, Hitachi, Fujitsu, Toshiba, Microsoft, IBM, Oracle, Cisco, VMware, IJ, BIGLOBE, NICT, NII, NRI, etc. ,
38 personal members from Univs.**





Proposal based
on the results

➤ Major Deliverables

- I. *"Use case and functional requirements for Inter-Cloud Computing"* E/Aug 2010
- II. *"Inter-Cloud interface specification on protocols"* J/Dec 2011, E/Apr 2012
- III. *"Inter-Cloud interface specification on resources data model for network control"* J/Dec 2011, E/Apr 2012
- IV. *"Network and technical requirements in support of Inter-Cloud"* J/Dec 2011 E/Apr 2012

http://www.gictf.jp/index_e.html

7 frameworks of public international standards are almost completed

I. Cloud Computing Definition

- Vocabulary definition, etc.

II. Requirements

- Service requirements
- Use cases, etc.

III. Cloud Network

- Network structures
- Network requirements, etc.

IV. Cloud Computing Infrastructure

- Structures of infrastructure
- Infrastructure requirements, etc.

V. IP Resources Management

- Ability of resources management, etc.

VI. Inter-Cloud

- Method of inter-cloud
- Security management, etc.

VII. Cloud Computing DaaS

- Requirements and architecture of Desktop as a Service

Market Scale of Cloud Services in Japan

The cloud service market was worth 700 billion yen (8.6 billion U.S. dollars*) in 2011. **It will grow around four times in size to reach approximately 2.8 trillion yen (34.6 billion U.S. dollars*) by 2016.**

Note: The market is expected to **expand by approximately 560 billion yen (6.9 billion U.S. dollars*) through the support measures** for diffusion of cloud services in such areas as government, medical care, and education.

*converted at the rate of 81yen/U.S. dollar (as of April 2012)

