Telecommunications Policy in Japan
Overview and Recent Developments

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Today’s Topics

1. Recent Telecom Market in Japan

2. Recent Action for Telecom Policy
   - Revision of Competition and Consumer Policy toward 2020
   - Mobile Vitalization Plan
   - Introduction of Next Generation Mobile Communications Systems

3. Our View around Internet Governance
1. Recent Telecom Market in Japan
Growth in Japan’s Telecom Market

- **NTT Group**
  - NTT: 51.34 billion US$
  - NTTWest: 15.90 billion US$
  - NTTEast: 17.74 billion US$
  - NTT others: 18.7 billion US$
- **SoftBank Group**
  - SoftBank: 66.67 billion US$
- **KDDI Group**
  - KDDI: 44.31 billion US$
- **NTTDoCoMo**
  - 44.6 billion US$

※ Based on account settlement materials of each company.
Telecommunications Service Subscribers in Japan

As of end Mar. 2014

Population: approx. 128 million
Households: approx. 56 million   (Jan. 1, 2014)

Mobile Phone (including PHS system)

Source: MIC
Current Status of Broadband Spread in Japan

(As of end Mar. 2014)

Area Coverage

- **Ultra High-Speed Broadband** *1: 99.9% (98.7%)
- **Broadband** *2: 100.0% (99.9%)
  
  Inside (): only fixed broadband

Rate of Subscription

- **Fixed Broadband** *3: 65.2%
- **Fixed Ultra-High-Speed Broadband** *4: 48.5%
- **Mobile Ultra High-Speed Broadband** *5: 42.6%

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*1 FTTH, CATV Internet, FWA, BWA (only services whose download speeds are over 30Mbps, other than FTTH)
*2 FTTH, DSL, CATV Internet, FWA, Satellite Broadband, BWA, 3.5G Mobile Broadband
*3 FTTH, DSL, CATV Internet, FWA, BWA (only Local WiMAX)
*4 FTTH, CATV Internet (only services whose download speeds are over 30Mbps)
*5 3.9G Mobile Broadband, BWA (other than Local WiMAX)

Source: MIC
Traffic increase in Japan

**Fixed broadband communication**

※ FTTH, DSL, CATV, FWA

- **Total download traffic**
  - Increased by 27.1%
  - In a year
  - 2,892 Gbps (estimated)

- **Total upload traffic**
  - Increased by 17.5%
  - In a year
  - 905 Gbps (estimated)

**Investigation by MIC**

- A part of mobile communication traffic is included as for until May. 2011.

**Mobile communication traffic**

- Increased 1.4 times in a year
- 783.9 Gbps

※ mobile communication traffic per second is about the amount of 27 DVD Movie (2 hours)
(The size of 2 hours DVD Movie is about 28.8 Gb)

**Investigation by MIC**
The spread of smartphone

The number of smartphone subscribers increased by 6 times (57 million) as of end Mar 2014, compared to that as of end Mar. 2011.
2. Recent Action for Telecom Policy
Revision of Competition and Consumer Policy toward 2020
Trends of Telecommunication Business Policy in Japan

**Target**

- Promotion of free-competition by various entities
- Solution for negative aspects of the market mechanism  
  ⇒ Protection of users, Prevention of accidents, Dispute Resolution etc.
- Development of ICT infrastructures

**Entry Regulations**

- Privatization of NTT (‘85)
- Abolition of supply-demand adjustment provision (‘98)
- Abolition of foreign investment regulations in principle (‘98)
- Abolition of permission process (‘04)

**Asymmetric Regulations**

- Unbundling regulation on NTT East and West (‘97)
- Prohibited activity regulations for SMPs (‘01)
- Interconnection regulation on MNOs (‘01)
- Functional separation of NTT East and West (‘11)

**Protection of Users**

- Technical Standards (‘85)
  ⇒ Obligation to explain important matters, etc.

**Revision of Telecommunication Policy for 2020 (2015〜)**

- Revision of Competition Policy
- Revision of Consumer Policy
- Additional measures for accident prevention (2014)
Creation of new businesses and services by using ICT Infrastructure

(1) Ease SMP regulation concerning collaboration with different business sectors
→ In order to accelerate collaboration with different business sectors, partially ease regulation (*) on NTT docomo
* Rules of prohibited act: rules to prohibit SMPs from give unreasonable preferential treatment for certain telecommunications carriers, etc.

(2) Accelerate innovation by promoting uses of optical fiber infrastructure
→ Toward promotion of innovations, consider necessary measures to ensure fair competition regarding wholesale service of optical access line supplied by NTT East and West

Realization of world’s highest-level ICT environment by ensuring fair competition

(1) Promote competition policy to address grouping and oligopoly of major operators
→ In order to prevent further oligopoly, introduce rules, etc. to check grouping of operators.

(2) Promote competition of mobile services
→ For the purpose of further spread and development of MVNOs(*), make rules that enable them to connect only to necessary part of mobile communications network.
→ Promote SIM unlocking(*) in order to prevent excessive enclosure of users, etc.
* MVNO (Mobile Virtual Network Operator): Operators which provide their own services by using the mobile network of other operator that is allocated radio wave.
* SIM (Subscriber Identity Module) locking: Mobile operators’ behavior to set mobile terminals to function only when specific SIMs, such as the operators’ own, are inserted.

(3) Promote competition related to ultra high-speed broadband infrastructure
→ Begin examination of the connection system regarding subscribed optic fiber based on professional expertise.
3 Creation of convenient and worry-free ICT environment

(1) Review and enrich rules on consumer protection
   → Strengthen accountability for consumers and introduce canceling rules for initial subscription
      (These rules are not applied to terminal devices, etc. sold at stores. The range of services that subject to the rules are to be further examined.)

(2) Promote ICT infrastructure building to vitalize local areas
   → Continue to promote infrastructure building by using public subsidy for regions that still lack ICT infrastructures

(3) Realize ICT environment friendly to visitors from overseas
   → Promote development and smooth use of free Wi-Fi system

4 Ensuring proper administrative operation
   → Formulate fundamental administrative operation policy, and implement market trend analysis and examination, etc.
Mobile Vitalization Plan
Mobile is an ace for Japan’s reconstruction

1. Currently, mobile phones including the smartphone are widespread to be indispensable for people’s life.
2. In the future, mobile communication tools including wearable device, M2M and IoT as well as smartphones will prevail widely in the entire economic and social activities.
3. To this end, it is important to develop an environment in which mobile communications can be used more freely, more accessibly, more speedily and more conveniently.

(1) More freely!
⇒ Promote mobile selectable freely (SIM unlocking, etc.).

(2) More accessible!
⇒ Promote mobile services that can be used at lower prices and safely.
   (Promote MVNOs, develop an environment where young people can use it without anxieties.)

(3) More speedily!
⇒ Increase speed of mobile communications (4G assignment).

(4) More conveniently!
⇒ Create new mobile services (review regulations imposed on operators).

Implement what can be done speedily.
⇒ Aim to reconstruct Japan and lighten burdens (telecommunications cost) on the people using the mobile communications.
**Mobile and other radio-related industry scale (prediction)**

Currently (2013) 34.3 trillion yen

⇒ 2016 approx. 45 trillion yen

* It includes the market of service providers of automobile, medical institutions and educational institutions using radio in addition to terminal device and mobile contents markets as well as mobile and other telecommunications infrastructure market.

(Source) estimated based on Radio Policy Vision Council materials

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**MVNO subscriptions**

Currently (end of 2013) 6.7 million subscriptions

⇒ in 2016

100% increase (approx. 15 million subscriptions)

* MVNO (Mobile Virtual Network Operator): Operators which provide their own services by using the mobile network of other operators that is allocated radio wave.
Introduction of Next Generation Mobile Communications Systems

**Major characteristics of 4G**

- **Ultra high-speed:** Max. 1Gbps

- **Highly flexible utilization:** Carrier aggregation

- **Approx. 30 sec.**

- **Approx. 4.8 min.**

- **Approx. 34 min.**

- **Approx. 1h**

- **DVD Movie**
  - 2 hour
  - 3.6GB

- **3G:** 384kbps
- **3.5G:** 14Mbps
- **3.9G:** 100Mbps
- **4G:** 1Gbps

- **Approx. 1h**

- **3.48-3.60 GHz band was allocated for 4G in Dec. 2014**

- **Consideration of social policy and social responsibility of carriers**
  - Reduction of mobile phone dead zones
  - Realization of fee plans meeting various needs of consumers
Introduction of Next Generation Mobile Communication Systems (2)

2. R&Ds and Standardization of 5G Mobile Communication Systems

Roadmap Towards Realization of 5G
(Based on the “Final Report” of Radio Policy Vision Council of MIC)

World’s first 5G implementation in 2020

- Activities of the 5GMF
- R&Ds on 5G through Industry-Academic-Government Cooperation
- 5G Standardization Activities
3. Our View around Internet Governance
Outlook around Internet Governance

Nov. 2015 IGF João Pessoa
Oct. 2015 ICANN Dublin
Sep. 2015 Expiration of the current IANA contract
Jun. 2015 ICANN Buenos Aires
Sep. 2014 IGF Istanbul
Aug. 2014 NETmundial Initiative Launch
Mar. 2014~ ICANN launched a process to develop a proposal to transition the IANA stewardship

NETmundial
Statement on Principles and Roadmap

IGF convened by UN
Academia
Technical
Private
Sector
Civil Society
Government

Dialogue

Mar. 2014 NTIA announcement on IANA function

ICANN
IP address
Domain Name

Internet Resources

Since 2006, every year

Since 1999, three times every year

Multistakeholder

United Nations
Security
Education
Assistance to developing countries
Human Rights
WSIS II
Tunis Agenda

WSIS I

2012 WCIT

2015

2010

2005

2000

High Level Meeting on WSIS+10 Review (2 days)
~
Oct. 2014 ITU Plenipotentiary Conference
✓ **Securement of free circulation of information** transcending border on the Internet is imperative
  ⇒ This enables to utilize benefits brought about by the Internet to the maximum.
  ⇒ From this view point, the Internet to receive strong regulations by the government is not considered to be a right selection.

✓ Stable management for the Internet resources to be a basic is essential. In regard to this management, **multi-stakeholder approach based on ICANN**, which has supported this from earlier and contributed to the development of the Internet, should be maintained.

✓ Inasmuch as the Internet so far has rapidly developed and grown in the community of technology and academia and the industrial sector or the like by private initiatives, **discussions should be carried out respecting existing framework and system so that growth and innovation cannot be disturbed**.

✓ For the sake of various problems around the Internet which is becoming increasingly complex, **multi-stake holder approach to form best practice will be effective by gathering together various stakeholders’ experiences and knowledge**.
Thank you for your attention!