Keynote address on LAP 10 Tokyo

Telecommunications Policy in Japan
Overview, Recent Telecom Market, Privacy Protection on Smartphones and Combat spam

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1. Overview
**Trends of Telecommunication Business Policy in Japan**

**Target**

- Promotion of free-competition by various entities
- Solution for negative aspects of the market economy 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 permission system (‘04)
- Abolition of foreign investment regulations in principle (‘98)

**Asymmetric Regulations**

- Unbundling regulation on NTT East and West (‘97)
- Legislation of prohibited activity 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.
2. Recent Telecom Market in Japan
Growth in Japan’s Telecom Market

※ 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)

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

Source: MIC
## Current Status of Broadband Spread in Japan

### Area Coverage

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Coverage Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultra High-Speed Broadband *1</td>
<td>99.9% (98.7%)</td>
</tr>
<tr>
<td>Broadband *2</td>
<td>100.0% (99.9%)</td>
</tr>
</tbody>
</table>

* Inside () : only fixed broadband

### Rate of Subscription

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Subscription Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Broadband *3</td>
<td>65.2%</td>
</tr>
<tr>
<td>Fixed Ultra-High-Speed Broadband *4</td>
<td>48.5%</td>
</tr>
<tr>
<td>Mobile Ultra High-Speed Broadband *5</td>
<td>42.6%</td>
</tr>
</tbody>
</table>

*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

(As of end Mar. 2014)
Market Share of Telecommunications Service in Japan

Share by Number of Subscribers

**IP Telephone**
- NTT East/West: Approx. 84%
- NTT Communications: Approx. 35%
- Softbank BB: Approx. 15%
- KDDI, etc.: Approx. 10%

**Broadband**
- NTT East/West: Approx. 84%
- Softbank BB: Approx. 33%
- KDDI, etc.: Approx. 25%
- eAccess, etc.: Approx. 16%

**Mobile**
- NTT DoCoMo: Approx. 40%
- KDDI (au): Approx. 30%
- Softbank Mobile: Approx. 20%
- PHS, etc.: Approx. 10%

Share by Infrastructure

**All cables**
- NTT East/West: Approx. 84%
- Affiliates of Power Companies: Approx. 16%

**Optical fiber**
- NTT East/West: Approx. 78%
- KDDI: Approx. 15%
- UCOM, etc.: Approx. 7%

(As of the end of Mar. 2014)

Source: MIC
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**Revision of Telecommunication Policy for 2020** (2015~)
- Revision of Competition Policy
- Revision of Consumer Policy
- Additional measures for accident prevention (2014)
3. Privacy Protection on Smartphones
Change in and Forecast of the Number of Domestic Smartphone Shipments

Smartphones are continuing to make up a rapidly growing percentage of the mobile phones shipped in Japan, and are expected to reach about 80% in FY 2013.

* Survey conducted by MM Laboratories (values from FY 2013 onwards are estimated). (“Recorded and projected numbers of smartphones shipped annually (as of March 2012)” (9th March 2013).
Japanese personal information protection rules

Act on the Protection of Personal Information
(fully entered into force in April 2005)

- Basic principle, Responsibilities and Measures of the state and local governments, Establishment of basic policy, etc. (Chapter 1-3)

Duties of Entities Handling Personal Information, etc.
(Chapter 4-6)

- Competent ministers take measures in each field of business.
- 40 guidelines related to 27 fields of business are formulated as of March 2012.

Measures about personal information and privacy by MIC

- Consumer-centric principles about lifelog-monitoring services (May 2010)
  1. Publicity, promotion, and education activities
  2. Assurance of transparency
  3. Assurance of opportunities for consumer participation
  4. Assurance of data collection by appropriate means
  5. Assurance of adequate security controls
  6. Assurance of frameworks to address complaints and inquiries

- SMARTPHONE PRIVACY INITIATIVE (SPI) (August 2012)
  Guideline for Handling Smartphone User Information

- SMARTPHONE PRIVACY INITIATIVE II (SPI II) (September 2013)
  Promoting Applications Privacy Policy and third-party verification

- Location Data Privacy Report (Proposal)
  Study on proper handling of location data obtained by telecommunication operators

Measures for challenges, etc. facing businesses using lifelog and smartphone applications
SPI aims for a long and medium term development of the smartphone market by promoting the **proper handling of user information** and enhancing relevant literacy. SPI puts forward the following comprehensive countermeasures for privacy protection on smartphones in order for users to be able to use the service in a safe and secure environment:

i) Proposing the **“Guideline for Handling Smartphone User Information”** to a wide range of business actors including apps providers, data collection module providers, application distribution market operators, OS providers, and mobile careers;

ii) Proposing measures for effective implementation of the Guideline, which includes building a mechanism for **verifying apps by a third party institution**;

iii) Sharing information and **raising public awareness** in order to improve user literacy

iv) Promoting international cooperation
“Smartphone Privacy Initiative”
Structure of the Guideline for Handling Smartphone User Information

● Anxiety of users regarding user information should be eliminated voluntarily by responsible business actors.

### Fundamental Principles

1. Ensuring Transparency
2. Securing the Opportunity of User Participation
3. Ensuring Data Collection through Proper Means
4. Ensuring Proper management of User Information
5. Properly Handling Complaints and Requests for Advice
6. Privacy by Design

### Measures Undertaken by User Information Acquirers
(e.g., Apps provider, information collection modules providers, Advertisement delivery service providers)

#### 1. Making Application Privacy Policy
☞ A privacy policy including the following items should be created for each app and each information collecting module. Such privacy policy should be easily understandable and a simplified version or short notice should also be made available.

- i) Name of the apps provider who acquires personal information;
- ii) Details of the personal information to be acquired;
- iii) How to acquire such personal information;
- iv) Specifying and explicitly explaining the purpose of acquiring personal information;
- v) How to notify and disclose privacy policy, and acquire user consent, and how the user participates are ensured;
- vi) Whether or not the acquired information is to be transmitted to the third party; whether or not it is transmitted to information collecting module providers;
- vii) Contact point for queries; and
- viii) Procedure for changing privacy policy.

#### 2. Proper Management of User Information

#### 3. Special Instructions regarding Information Collection Module Providers and Advertisement Delivery Service providers

#### Measures taken by other relevant business operators

1. Mobile Network Operators and Mobile Terminal Providers
☞ when selling smartphone services, etc.
☞ Application distribution portals operated by mobile telecommunication carriers

2. Application Distribution Portal Operators, and OS Providers
☞ Application distribution portals

3. Other relevant business operators
☞ Reviews on applications, etc.
● Smartphone users’ anxieties over privacy protection are expanding, because there are applications that collect a variety of user information through smartphones (e.g., information on each user’s phonebook, location, and application usage history) and provide such information to third parties with no sufficient explanation to the users.

● Application providers should prepare and announce privacy policies (describing the kinds of information collected, the purposes of collecting the information, and whether the collected information is provided to third parties).

● Promoting the description of the privacy policies and the development of a system enabling third parties to verify the actual usage situations of applications in order to bring a stronger sense of security to users.

Establishing a third-party verification system in cooperation with the private sector*

※ Venders for security, Operator for verification of application, Telecommunications carrier etc.

Current situation of the market of application

○ At least 35 organizations, including the Telecommunications Carriers Association and Japan Smartphone Security Association, participated and established a liaison council on smartphone user information.

○ Industry organizations’ preparation of guidelines is making progress (e.g., the Telecommunications Carriers Association is establishing standards for applications, such as the creation and announcement of privacy policies).

○ The preparation and posting of privacy policies on applications are not making sufficient progress.

Verification for applications by third party

Verification for Privacy Policy

- Whether the privacy policies and relevant matters have been prepared and announced.
- Whether the contents of the privacy policies are appropriate.
- Whether information of a highly private nature on users is acquired or provided to third parties with the consent of the users.

Technical Verification of Application

Verifying applications from a technical point of view and checking the presence or absence of the external transmission of user information.

Actually operating applications and inspecting the operation of the applications. (Dynamical Analysis)

Analyzing the configuration files of applications and checking the possibility of the external transmission of user information. (Static Analysis)

Comparison between the contents of privacy policy and implementation of applications.

<table>
<thead>
<tr>
<th>Places</th>
<th>Japan (Best 40 applications)</th>
<th>US (Best 36 applications)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of applications</td>
<td>ratio</td>
</tr>
<tr>
<td>Inside the applications</td>
<td>14</td>
<td>35.0%</td>
</tr>
<tr>
<td>Google Play Introductory page</td>
<td>10</td>
<td>25.0%</td>
</tr>
<tr>
<td>Homepage of developers</td>
<td>32</td>
<td>80.0%</td>
</tr>
</tbody>
</table>
6. Combat spam
- Spam mail is now more than 60% of all e-mail traffic in Japan.
- Spam mail is circulating across the border
  (In Japan, more than 90% of spam comes from overseas.)
- So, international collaboration is important in taking action against spam.

Information sharing with foreign countries

- Japan is sharing information on spam mail senders such as IP addresses with foreign countries such as Korea, Brazil, China, Hong Kong, Taiwan and Vietnam.

Bilateral collaboration

Multilateral relationship

- London Action Plan (LAP) has regular meetings to exchange information on anti-spam activities and to promote international spam enforcement cooperation.

Utilizing the framework of London Action Plan, we MIC, Japan is promoting international spam enforcement cooperation.
In Japan, the Anti-Spam Law was enacted in 2002. The opt-out regulation was amended to the opt-in regulation in 2008. If senders do not have recipients’ consent, they cannot send ad-mail. Senders are required to keep records of recipients’ consent and to label the records.

**Overview of Japanese Anti-Spam Law**

- **Recipient**
  - Report on spam senders (Art. 8)
  - Report on spam senders (Art. 8)

- **Sender/Sending consigner**
  - Opt-in Regulation (Art. 3)
    - Para(1) Prohibition on sending ad-mails without recipients’ consent
    - Para(2) Obligation to keep records of recipients’ consent
    - Para(3) Prohibition on sending ad-mails to a person who rejects such ad-mails
  - Labeling duty (Art. 4)
  - Prohibition on sending Email under false sender Information (Art. 5)
  - Prohibition on sending Email to fictitious addresses (Art. 6)

- **ISP**
  - Refusal to provide Email services (Art. 11)

**Penal Provisions**

(Art. 34)
- If he or she has violated the provisions of Art. 5,
- If he or she has violated an order in accordance with the provisions of Art. 7 (excluding those pertaining to the maintenance of records pursuant to the provisions of Art. 3 para (2)),

(Art. 35)
- If he or she has violated an order in accordance with the provisions of Art. 7 (restricted to those pertaining to the maintenance of records pursuant to the provisions of Art. 3 para (2)),

He or she shall be punished by imprisonment with labor for a term not exceeding one year or by a fine not exceeding one million yen. Also, if he or she is a staff of a juridical person, the juridical person shall be punished by a fine not exceeding thirty million yen.

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**Enacted:** 2002

**Amended:** 2005 & 2008

**Administrative Order**
- Art. 7
- On-site inspection
- Collection of report
  - Art. 28

**Inquiry concerning contractor information**
- Art. 29

**Report on spam senders**
- Art. 8

**Foreign Law Enforcement Agency**
- Provision of information
  - Art. 30

**Ministry of Internal Affairs and Communications - Consumer Affairs Agency**
- Provision of information
- Registration/Oversee
  - Art. 14 etc.

**Registered Organization**
- Provision of information
- Art. 18
1. MIC sends a Warning mail to a spammer first.
2. If a spammer does not observe a warning, then MIC issues an Administrative Order.
3. If a spammer does not comply with an Administrative Order, the spammer may be subject to punishment.

Warnings/Orders process:

1. Warnings
2. Orders
3. Punishment

Spam Recipients -> Spam Reports -> Anti-Spam Consultation Center

Collection of Reports
On-site Inspection

To those who do not stop sending spam despite Warnings

1. Warnings
2. Orders
3. Punishment

If a spammer does not comply with an Administrative Order

Spammers
Under the opt-out regulation, there were only 6 administrative orders in six years, but under the opt-in regulation, 38 administrative orders in six years.

Under the opt-out regulation, it was difficult to prove the fact of violation. However, under opt-in regulation, it has become comparatively easy by utilizing the honeypots to prove positively the fact of violation.

MIC has strengthened law enforcement.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>E-mail Warnings</th>
<th>Administrative Orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002~2007</td>
<td>—</td>
<td>6</td>
</tr>
<tr>
<td>2008</td>
<td>1,147</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>5,987</td>
<td>6</td>
</tr>
<tr>
<td>2010</td>
<td>6,191</td>
<td>7</td>
</tr>
<tr>
<td>2011</td>
<td>5,025</td>
<td>10</td>
</tr>
<tr>
<td>2012</td>
<td>5,495</td>
<td>8</td>
</tr>
<tr>
<td>2013</td>
<td>4,060</td>
<td>7</td>
</tr>
<tr>
<td>2008~2013</td>
<td>27,905</td>
<td>38</td>
</tr>
</tbody>
</table>
### Application of Penal Provisions of Japanese Anti-Spam Law

#### Violation of Prohibition of Transmission under False Sender Information

<table>
<thead>
<tr>
<th>Year</th>
<th>The numbers of punishments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>2</td>
</tr>
<tr>
<td>2007</td>
<td>1</td>
</tr>
<tr>
<td>2008</td>
<td>1</td>
</tr>
<tr>
<td>2011</td>
<td>1</td>
</tr>
<tr>
<td>2013</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Violation of Administrative Order

<table>
<thead>
<tr>
<th>Year</th>
<th>The number of punishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>1</td>
</tr>
</tbody>
</table>

September, 2014.

This is the first case that a spammer was punished for a violation of an administrative order after the enactment of the Japanese Anti-Spam Law.
Thank you for your attention.

For further information, please visit our exhibition in the next room.