Market Power and Competition Policy in the Telecommunications Market

Apr. 8, 2013

Director for Policy Planning
Tariff and Telecommunications Access Policy Division
Telecommunications Bureau
Ministry of Internal Affairs and Communications

Atsushi UMINO
Current Status of the Telecommunications Market
In JAPAN
Telecom Service Subscriptions in Japan

As of End Dec. 2012 (millions)

- Mobile Telephony: 138.4
- Fixed Telephony: 53.6 (Broadband), 33.5 (Fixed Telephony), 30.5 (IP Telephony)
- Broadband
- IP Telephony
As of End Dec. 2012

Total: 53.6M

FTTH 23.6M

LTE 13.6M

CATV 6.0M

ADSL 5.7M

BWA 4.7M
International Comparison of Broadband Technology

Source: OECD (As of June 2012)
## Current Status of Broadband Spread in Japan

### Area Coverage Rate

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultra-High-Speed Broadband*1</td>
<td>86.5%</td>
<td>90.1%</td>
<td>91.6%</td>
<td>92.7%</td>
<td>97.3% (96.5%)</td>
</tr>
<tr>
<td>Broadband*2</td>
<td>—</td>
<td>99.7% (98.3%)</td>
<td>99.9% (99.1%)</td>
<td>100% (99.2%)</td>
<td>100% (99.7%)</td>
</tr>
</tbody>
</table>

*Inside ( ) : only fixed broadband*

### Penetration Rate

<table>
<thead>
<tr>
<th></th>
<th></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>47.6%</td>
</tr>
<tr>
<td>Mobile Ultra-High-Speed Broadband*5</td>
<td>14.4%</td>
</tr>
</tbody>
</table>

*1 FTTH, CATV Internet, FWA, BWA (only services whose downloading 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 downloading speeds are over 30Mbps)
*5 3.9G Mobile Broadband, BWA (other than Local WiMAX)
Current Status of Telecommunications Policy
Status of Sales Volume in the Domestic Telecommunications Market (FY2011)

- NTT: ¥5.1 trillion
- KDDI: ¥3.6 trillion
- SoftBank: ¥2.5 trillion
- Other: ¥0.2 trillion

Growth in Telecom Market:

- NTT: ¥8.8 trillion
- KDDI: ¥3.6 trillion
- SoftBank: ¥2.5 trillion

From 1985 to 2011, the sales volume increased by approximately 3 times.
Market Share of NTT Group Companies

As of End Dec. 2012

Fixed Telephony
- NTT East/West: 77%

IP Telephony
- NTT East/West: 58%

Broadband
- NTT East/West: 34%
- NTT DoCoMo: 44%

Mobile Telephony
- FTTH: 73%
- NTT DoCoMo: 44%
Changes in Fixed Broadband Share by Operator
Competition in the Broadband Market

### Facility-based competition

**Metal access**
- NTT East & West: 99.8%
- Others: 0.2%

**Fiber access**
- NTT East & West: 77.3%
- Others: 22.7%

### Service-based competition

**ADSL**
- NTT East & West: 34.3%
- Softbank: 39.6%
- Others: 2.9%
- e-Access: 23.2%

**FTTH**
- NTT East & West: 72.9%
- KDDI: 11.1%
- UCOM: 2.2%
- Power Co. subsidiaries: 8.9%
- Others: 5.0%

As of the end of Mar. 2012
As of the end of Dec. 2012
Development of Competition Policy
## Changes in Competition Policy in Telecommunications Market

<table>
<thead>
<tr>
<th>Period</th>
<th>Changes</th>
</tr>
</thead>
</table>
| **1985 ~** | - Introduction of the principle of competition  
              - Enactment of Telecommunications Business Act, privatization of NTT Public Corporation |
| **1997 ~** | - Introduction of asymmetric regulation  
              - Institutionalization of interconnection rules for fixed telecommunications services  
              - Deregulation of market entry  
              - Abolition of supply & demand adjustment and across-the-board foreign investment restriction  
              - Deregulation of retail rate regulation → Abolition of authorization system  
              - Reorganization of NTT |
| **2001 ~** | - Expansion of asymmetric regulation  
              - Institutionalization of interconnection rules for mobile telecommunications services  
              - Introduction of rules for prohibition of anti-competitive activities  
              - Establishment of the universal service system |
| **2004 ~** | - Deregulation of market entry → Abolition of permission system  
              - Deregulation of retail rate regulation → Abolition of general retail rate/tariff regulation  
              - Reinforcement of consumer protection rules → Accountability of important terms and conditions |
| **2010 ~** | - Response to shift to mobile → Introduction of accounting separation  
              - Ensuring equivalence between NTT East & West and competitors  
              - Functional separation of NTT East & West |
# Changes in regulations on Telecommunications Business

<table>
<thead>
<tr>
<th></th>
<th>1985~</th>
<th>1990~</th>
<th>2000~</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entry</strong></td>
<td>‘85~ Permission/Registration/Notification</td>
<td></td>
<td>‘04~ Registration/Notification</td>
</tr>
<tr>
<td><strong>Exit</strong></td>
<td>‘85~ Permission/Notification</td>
<td></td>
<td>‘04~ Notification</td>
</tr>
<tr>
<td><strong>User Charge</strong></td>
<td>‘85~ Authorization (partly, Notification)</td>
<td>‘98~ Notification</td>
<td>‘04~ Basically, no regulation</td>
</tr>
<tr>
<td><strong>Consumer Protection</strong></td>
<td></td>
<td></td>
<td>‘04~ Accountability of important terms and conditions</td>
</tr>
<tr>
<td><strong>Interconnection</strong></td>
<td></td>
<td></td>
<td>‘99~ Obligation of acceptance of request for interconnection</td>
</tr>
<tr>
<td><strong>Asymmetric Regulation (Fixed)</strong></td>
<td></td>
<td>‘99~ Authorization of reference interconnection offers, Unbundling</td>
<td>‘99~ Accounting separation</td>
</tr>
<tr>
<td><strong>Asymmetric Regulation (Mobile)</strong></td>
<td></td>
<td>‘01~ Prohibition of anti-competitive activities</td>
<td>‘01~ Notification of reference interconnection offers</td>
</tr>
<tr>
<td><strong>Universal Service</strong></td>
<td></td>
<td>‘10~ Accounting separation</td>
<td>‘06~ Start of operation</td>
</tr>
</tbody>
</table>
Current Framework of “Asymmetric Regulation”

Fixed Telecommunications Market

“Category 1 designated facilities” Rule
operators that have over 50% share of all access lines

NTT East, NTT West

- Interconnection
  - Authorization of reference offers
  - Accounting separation
  - Unbundling etc.

- Retail rate (partly)
  - Notification of tariffs
  - Price cap regulation etc.

- Prohibiting anti-competitive activities
  - Abuse of information gained through interconnection
  - Discriminatory treatment among operators
  - Unjust intervention with manufacturers or others
  - Concurrent executive posts in specific operators etc.

Mobile Telecommunications Market

“Category 2 designated facilities” Rule
operators that have over 10% share of all terminals

NTT DoCoMo, KDDI, Softbank Mobile

- Interconnection
  - Notification of reference offers
  - Accounting separation etc.

- Prohibiting anti-competitive activities
  - Abuse of information gained through interconnection
  - Discriminatory treatment among operators
  - Unjust intervention with manufacturers or others

Operators specifically designated whose revenue shares are over 25%

NTT DoCoMo

N/A
Criteria for Designation of “Dominant Carriers” in Mobile Market

1. Over 10% terminal share
2. Over 25% revenue share
   - (1) Over 40% market share throughout period of time
     - This operator shall be presumed to have market power and be designated, unless special circumstances are acknowledged, after considering each factor stated at (3).
   - (2) When some operators have over 25% but not more than 40% market share
     - A The largest share
       - This operator shall be designated, only in the case where it is specifically presumed to have market power after considering a level of share and each factor stated at (3).
     - B Other than above
       - This operator shall be designated, only in the case where it is specifically presumed to have market power through the fact that the difference of share to the operator with the largest share is small and after considering the level of said share.

(3) Basically, a criterion of (1) or (2) shall be considered, but the suitability of designation shall be comprehensively judged by service area, considering the following factors:

Size of business (capital, revenue, employment number), influence in market, brand power, substitutability between supply and demand, price elasticity, predominance in the selling or distribution of services/handsets or others, joint dominance etc.
Framework of Regulations on NTT Group

NTT

- Holding company

100%

- NTT East
  - Local telecommunications business in eastern Japan

100%

- NTT West
  - Local telecommunications business in western Japan

100%

- NTT Communications
  - Long distance/international telecommunications business, and ISP

63%

- NTT DoCoMo
  - Mobile telecommunications business

54%

- NTT Data
  - System integration business

Regulation on special companies

- Responsibility to provide universal services
- Line-of-business restrictions
- Foreign investment restriction (below 1/3)
- Governmental possession of over 1/3 of all stocks

Regulation on dominant carriers

1. Regulations regarding interconnection

   [Main regulations]
   - Authorization/notification and publication of reference interconnection offers
   - Accounting separation

2. Prohibiting anti-competitive activities

   [Main prohibited activities]
   - Abuse of information obtained through interconnection
   - Discriminatory treatment among operators
   - Unjust intervention in other companies (including content providers, manufacturers and sales companies)

3. Functional separation (only NTT East/West)

   - Separation of the “facility department” and the “sales department”

NTT Act
The MIC has assured a certain level of equal access to the bottleneck facilities of NTT East & West through such measures as accounting separation and access/interconnection rules.

For further assurance of equal access, the firewall between the facility department and the sales department was strengthened by such means as:
1. establishing an exclusive facility department,
2. appointing a chief information manager on interconnection in the facility department, and
3. establishing a monitoring department on interconnection affairs.

“Functional Separation” of NTT East & West

Chief information manager on interconnection

Facility department

Sales department

Monitoring department

Annual report

(If necessary)
- On-site Inspection
- Administrative order

Supervision for effective functional separation

Came into effect in November 2011
Review of Operators Subject to Mobile Regulations

• The MIC amended the ministerial ordinance in June 2012. By way of this amendment, the threshold of the designation concerning the “Category II designated telecommunications facilities” rule, which imposes regulations for fairness and transparency of interconnection charges, etc. on specific mobile operators, has been reduced from “over 25% terminal share” to “over 10% terminal share”.
• As a result of this amendment, Softbank Mobile has become subject to said designation, in addition to NTT DoCoMo and KDDI.

(1) Curtailment of the disparity of negotiating power
Disparity of negotiating power in interconnection among 3 operators (NTT DoCoMo, KDDI, and Softbank Mobile) has decreased as their market shares close.

(2) Development of MVNO entry
While more MVNO entries are desirable, even MNOs with a small market share can have stronger negotiating power vis-à-vis MVNOs.
Competition Evaluation
Outline of “Competition Evaluation”

- ‘The amendment to the Telecommunications Act’ in 2003, has converted the regulatory framework from ex-ante regulation to ex-post regulation.
- The MIC has introduced the “Competition Evaluation” as a means to comprehend rapidly changing market trends accurately.
- Results of the evaluation are used as fundamental data for policy making.

Scope of analysis and evaluation in the “Competition Evaluation in FY2011”

<table>
<thead>
<tr>
<th>Field</th>
<th>Market</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice</td>
<td>Fixed phone (including 0ABJ-IP phone)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relay phone</td>
<td>· Not evaluated</td>
</tr>
<tr>
<td></td>
<td>050-IP phone</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mobile</td>
<td>Cell phone, PHS</td>
</tr>
<tr>
<td>Data</td>
<td>Mobile</td>
<td>Cell phone, PHS, BWA, LTE</td>
</tr>
<tr>
<td></td>
<td>Fixed</td>
<td>Broadband as a whole</td>
</tr>
<tr>
<td></td>
<td>FTTH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADSL</td>
<td>· Not evaluated</td>
</tr>
<tr>
<td></td>
<td>CATV internet</td>
<td>· Comprehend relationships to FTTH in “broadband as a whole”</td>
</tr>
<tr>
<td></td>
<td>Narrowband (including ISDN)</td>
<td>· Out of scope</td>
</tr>
<tr>
<td></td>
<td>ISP</td>
<td>ISP</td>
</tr>
<tr>
<td>Wholesale</td>
<td>WAN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leased line</td>
<td></td>
</tr>
</tbody>
</table>
Main topics of the results of “Competition Evaluation in FY2011” (1)

Through “Competition Evaluation”, the MIC found as follows:

**Mobile market**

- **NTT DoCoMo’s position of possibly exercising market power might have a tendency to subside gradually,** partly in light of the recent trend of its share decrease (even at a high level), the average rates of a monthly increase in the numbers of subscribers, and the status of number portability.

- **There might be little possibility for NTT DoCoMo to exercise its market power individually or collectively,** partly in light of the status of campaign development of retail rates or others, the potential pressure of MVNOs and the status of each operator’s service including those in cooperation with OTT players/handset makers or others.

- **There is no indication that a certain mobile operator forms its market power through cooperation with OTT players/handset makers at this time,** judging partly from circumstances where no specific operators might enclose their own customers through cooperation with OTT players/handset makers or other means.
Fixed broadband market

- NTT East in eastern Japan and NTT West in western Japan have positions of possibly exercising their market power individually, partly in light of the shares by operator, the degree of market concentration, and concern about leverage from the fixed phone market.

- There might be little possibility for NTT East & West to exercise their market power in reality under the regulation on “Category 1 designated telecommunications facilities,” partly in light of the fact that rates of increase in numbers of FTTH subscribers have a tendency of slowing.

- NTT East & West and other operators with large shares would have possible positions to exercise their market power collectively, judging only from shares by operator. However, there might be little real possibility of this considering the current status of competition in the fixed broadband market.
In eastern Japan, NTT East might be in the position of possibly exercising its market power individually. However, there might be little real possibility under the regulation in “Category 1 designated telecommunications facilities,” in light of the fact that the rates of increase in the numbers of FTTH subscribers have a tendency of slowing, analysis of wholesale transactions, and the status of recent service-based competition.

In western Japan, NTT West might be in the position of possibly exercising its market power individually, which is degrading when compared to NTT East. In addition, as well as eastern Japan, there might be little real possibility under the regulation on “Category 1 designated telecommunications facilities,” in light of analysis of wholesale transactions, and the status of recent service-based competition.
Implementation Plan of “Competition Evaluation in FY2012”

New subjects for analysis

- Analysis of competitive conditions from the viewpoint of new entrants (MVNOs)
- Trends of the spread of collaborated services, such as collaboration of smartphone and FTTH, and influence thereof on competitive conditions

Partial change of market definition

- Defining “Mobile ultra-high-speed broadband” (LTE/BWA) as a partial market of “Data” (mobile), in accordance with rapid changes in the telecommunications market structure

Reinforcement of analysis and evaluation of demand-side data

- Adding “Quality of services” and “Costs of changing services” to analytical indicators, besides “Rate,” which is already in use

The result of the evaluation is to be published around summer of 2013