



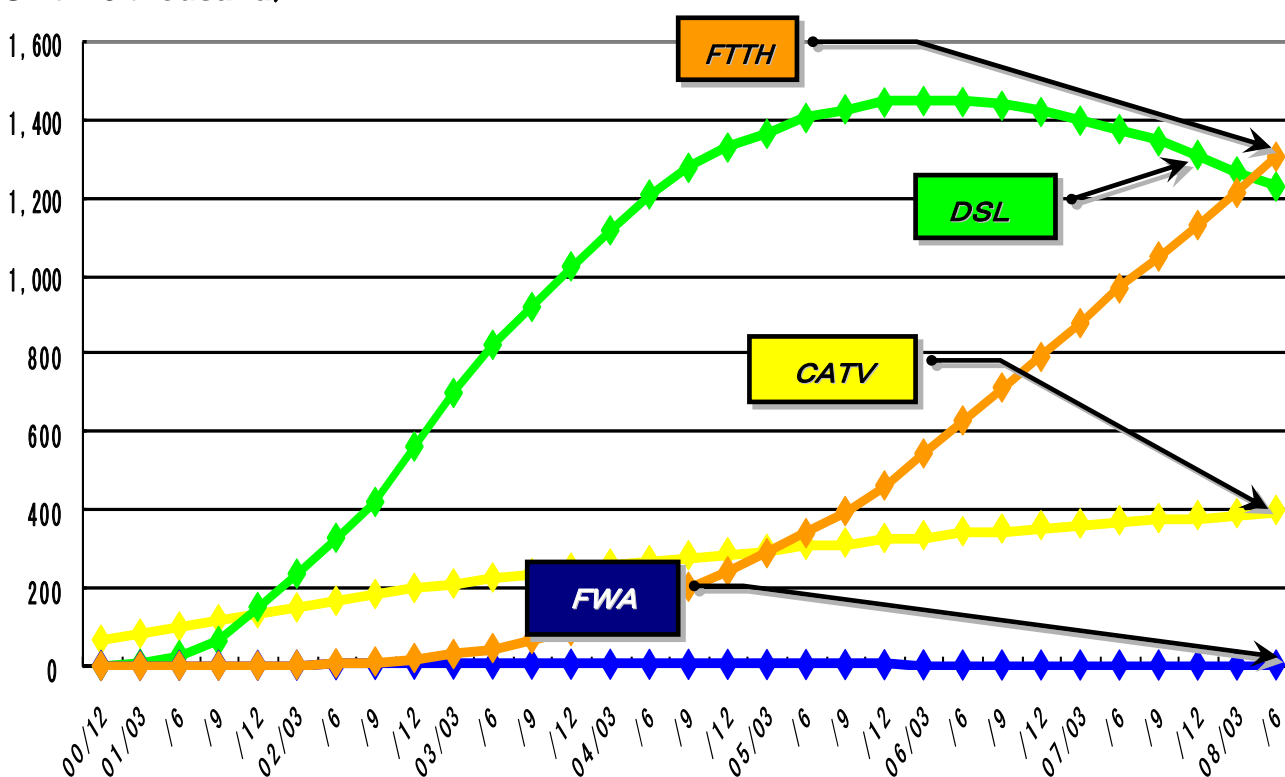
# 1. Broadband Service Subscribers

The number of broadband service subscribers in Japan (June 2008) is indicated in the following table.

	Total	FTTH	DSL	CATV	FWA
30 Jun. 2008	<b>29,341,909</b>	<b>13,082,699</b> (45%)	<b>12,289,972</b> (42%)	<b>3,956,096</b> (13%)	<b>13,142</b> (0.04%)
31 May. 2008	<b>28,748,618</b>	<b>12,153,018</b> (42%)	<b>12,710,678</b> (44%)	<b>3,872,098</b> (13%)	<b>12,824</b> (0.04%)
Net increase number	593,291	929,681	▲ 420,706	83,998	318

note: Japan has around 130 million population, 50 million households.

(Unit: 10 thousand)

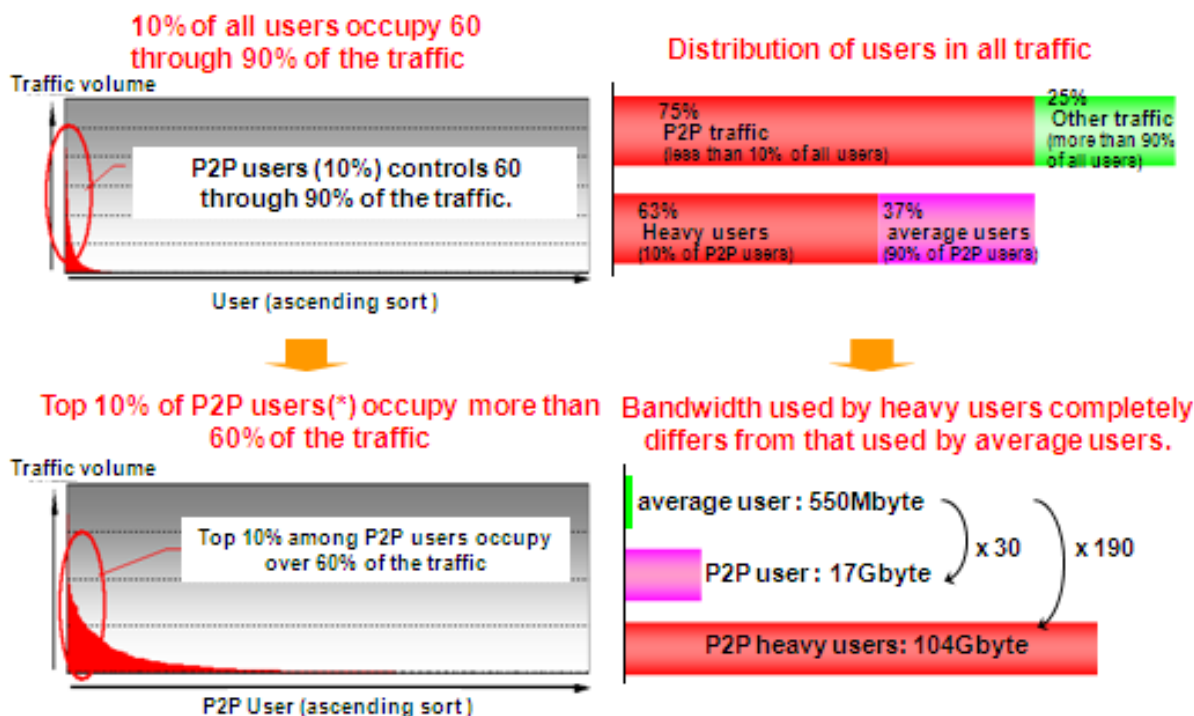


- Contracts for **broadband service numbered 29.34 million.**
- Contracts for FTTH access service numbered 13.08 million, **exceeding the number of contracts for ADSL access service for the first time.**

## 2. Network Neutrality

In Japan, Internet traffic has been increasing due to the rapid penetration of broadband networks and services.

### Bandwidth Usage and P2P Users



Some ISPs have been conducting bandwidth control to prevent degradation of the quality of general user communications due to bandwidth occupancy by a handful of heavy users.

In response, MIC had conducted a study with Internet services providers.

The industry groups (ISPs, Telecom operators, CATVs) finalized and issued the Guideline for Packet Shaping in May 2008.

The outline of the Guidelines for Appropriate Operation of Bandwidth Control is as follows.

- (1) Basic principles for operating bandwidth control
  - The control is exceptional. Basically traffic increase should be tackled with enhancing network capacity.
  - If the control is conducted, it shall obtain users' consent
  - Procedures restricting specific applications and heavy users etc.
- (2) With respect to secrecy of communications
- (3) Information disclosure
- (4) Others

### 3. Next Generation Network (NGN)

NTT-East and NTT-West started their NGN services on March 31 2008 offering a variety of services (Broadband, IPTV (High Definition), IP phone etc.).

MIC has conducted study, and made a decision on basic framework for interconnection rules in June 2008.

1. Adding NGN to Designated Telecommunications Facilities (Under MIC's regulation, such as authorization of interconnection tariff etc.)
2. Setting standard interconnection points and unbundled functions concerning NGN.

Interconnection tariff was set tentatively. Since then, the study group has been considering the cost driver, which is necessary for more accurate calculation.

Category		Network Services on NGN
<p>■ QoS services including "Hikari Denwa", video telephony, multicast and unicast for content distribution</p> <p>■ Charges for best effort services and standard –QoS "Hikari Denwa" &amp; video telephony approximately the same as current rate levels</p> <p>■ Customer-friendly rate levels and structure for QoS services other than those above (TBD)</p>		
Fiber Access Service -ISP Connection -IPv6 communications as standard function		<p>For Single-Dwelling Unit (up to 100 Mbps)</p> <p>For Multi-Dwelling Unit ( up to 100 Mbps)</p> <p>For Office (up to 1Gbps)</p>
DAB-J IP Phone/ TV Telephone	QoS	<p>"Hikari Denwa" (Standard Quality, <i>High Quality [7KHz]</i> )</p> <p>Next Providing Plans (For Business)</p> <p>Video Telephony (Standard Quality, <i>SD quality, high quality [7KHz]</i>)</p>
VPN (Center -End Type, CUG Type Services)	QoS	Next Providing Plans
	Best Efforts	VPN (Center/End Types and CUG Type Service)
Service for Content Distribution	QoS	<p><i>Uni-cast (Securing Band Frequency)</i></p> <p><i>Multi-casts (Securing Bandwidth) * For retransmission of digital terrestrial television over IP</i></p>
	Best Efforts	<p>UniCast</p> <p>Multicasts</p>
Ethernet Service		Ethernet (intra-prefectural & inter- prefectural)

Explanatory Note      Planned for March 2009      Planned for future    *Italics: New Services of NTT East/West*

#### 4. Interconnection on Optical Fiber

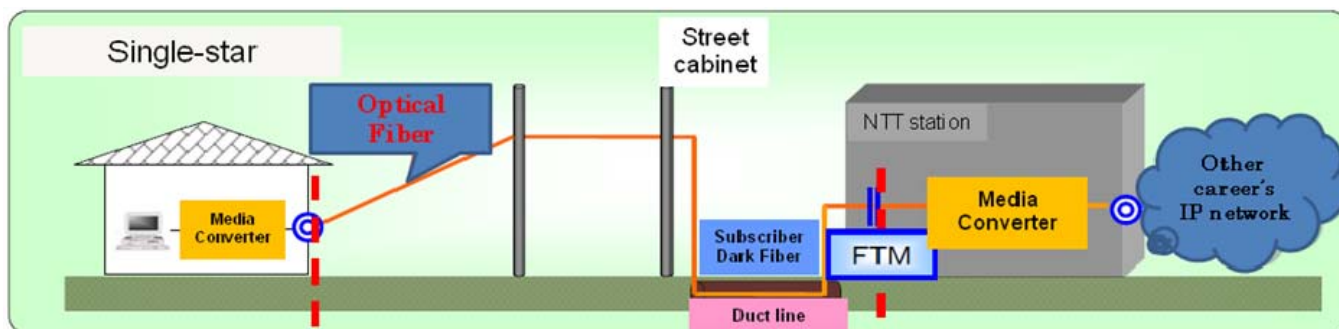
In order to set a level playing field, optical Fiber of NTT East and NTT West have been regulated, so as copper cable. Under some technological and economical constraints, below is the typical example of renting an optical “dark” fiber in single-star system. The interconnection tariff has been approved by the MIC.

The MIC reviewed the interconnection tariff calculation policy, and introduces a provisional adjusting method to bury discrepancy between forecasted cost and actual cost. The tariff is set with forecasted cost. However, if the actual cost exceeds too much, NTTs can claim a rise in interconnection tariff.

Some are against this provisional adjusting method, because it might damage financial stability. However, setting safeguard for both NTTs and new entrants in April 2008, interconnection charges were lowered as below.

Monthly

1. NTT East 5,054 Yen (fiscal 2007)→4,610 Yen (fiscal 2008)
  2. NTT West 5,054 Yen (fiscal 2007)→4,932 Yen (fiscal 2008)
- 4,610 Yen = US\$ 44



#### 5. Convergence

The Council was consulted on February 15 2008 by MIC on a system that can cope with the convergence of communications and broadcasting and submitted Interim Report on Issues so that it can start concrete discussion for building a national consensus.