

Infrastructure, Competition and Deregulation for the Convergence of Media

from the Sight of the Regulator

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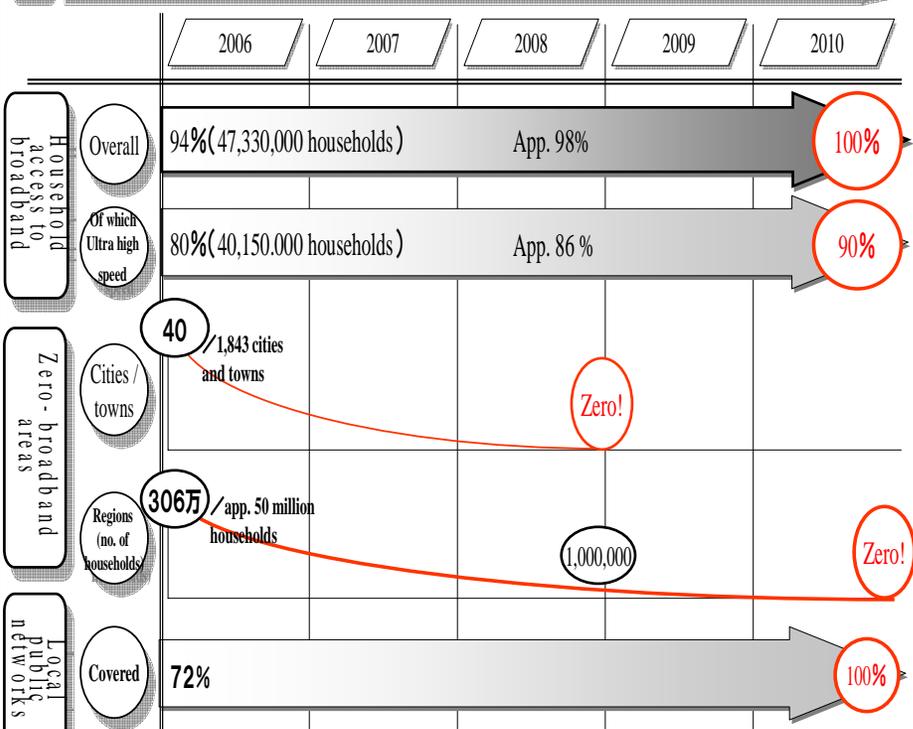
Deployment of Broadband Network & Digitization of Terrestrial Broadcasting

Next Generation Broadband Strategy 2010

Targets

By FY 2010: Japan will

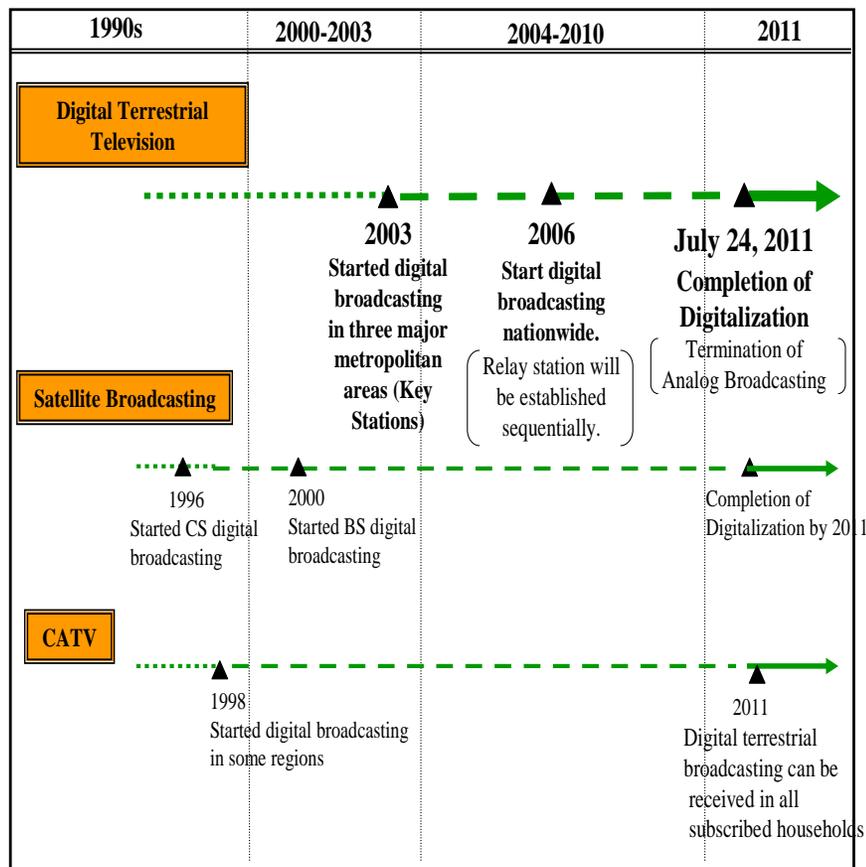
1. Eliminate all of zero-broadband areas (household-basis) throughout the country (During the process eliminate zero-broadband citeis, towns and villages by 2008)
2. Achieve over 90 % household access to Ultra high-speed Interactive Broadband Networks (UIBN)



Note: The figures shown above under "2006" are as of March 31, 2006.
The figures shown above under "2008" only provide a rough guide but not a specific target

Digitization of Terrestrial Broadcasting

By 2011, the digitization of Terrestrial Television Broadcasting, Satellite Broadcasting, and CATV will be completed.

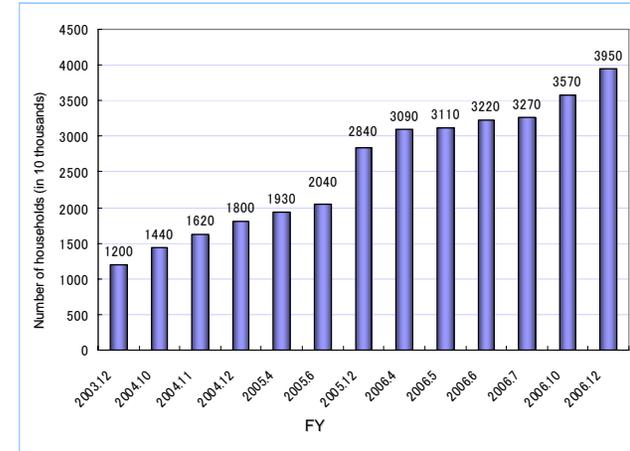


Current Situation Regarding Diffusion of Terrestrial Digital Broadcasting

■ Households able to Receive Digital Broadcasting

- Direct reception :
About 84% of households in 47 prefectures of Japan
 (as of December 1, 2006)

■ Transition in the Number of Households able to Receive Broadcasting Directly



■ Number of Shipped Receivers for Terrestrial Digital Broadcasting

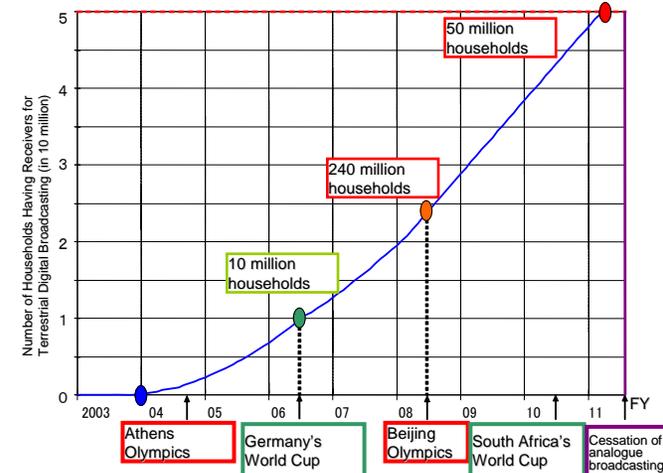
About 510 thousand receivers (before the start)
→ About 18.44 million receivers (as of end of January, 2007)

(according to JEITA and Japan Cable Laboratories)

(※ The number of Personal Computers is as of end of December, 2006)

(In a separate notation) **One-segment cellular telephones: 3.4 million**
 (as of December, 2006)
In-Vehicle receivers for terrestrial digital broadcasting: 260 thousands
 (as of January, 2007)

■ Target Diffusion of Receivers for Terrestrial Digital Broadcasting



Triple Play Services in Japan

	Telephone services	TV Broadcasting services	Internet access services	Basic charges including three services*.
MOVIE SPLASH (KDDI)	Free: between Hikari one users Domestic: 8.4 yen (per 3 min.)	Multi-channel Broadcasting (30Ch, CS broadcasting programs) VOD (approx. 4,500 programs) Communications-karaoke	Max. 1Gbps	9,555 yen (detached housing) 7,245 yen (collective housing)
Yahoo! BB Hikari TV package (SoftBank BB)	Free: between BB phone users Domestic: 7.875 yen (per 3 min.)	Multi-channel Broadcasting (41Ch, CS broadcast programs) VOD (approx. 5,000 programs)	Max. 100Mbps	7,234 yen (detached housing) 4,189 yen (collective housing)
FLET'S Hikari Premium (NTT West+OCN+On-Demand TV)	Free: between OCN Dot Phone users Domestic: 8.4 yen (per 3 min.)	Multi-channel Broadcasting (21Ch, CS broadcast programs) VOD (approx. 3,000 programs)	Max. 100Mbps	8,683 yen (detached housing) 7,024 yen (collective housing)
J:COM (J:COM Tokyo)	Between J:COM Phone users: 5.3 yen (per 3 min.) Local call: 8.3 yen (per 3 min.)	CATV Multi-channel Broadcasting (81Ch, terrestrial/BS/CS broadcasting programs) VOD (approx. 3,500 programs)	Max. 30Mbps	11,350 yen

* These are the rates when users choose TV broadcasting services as well as a basic multi-channel broadcasting plan the services of which vary depending on each operator.

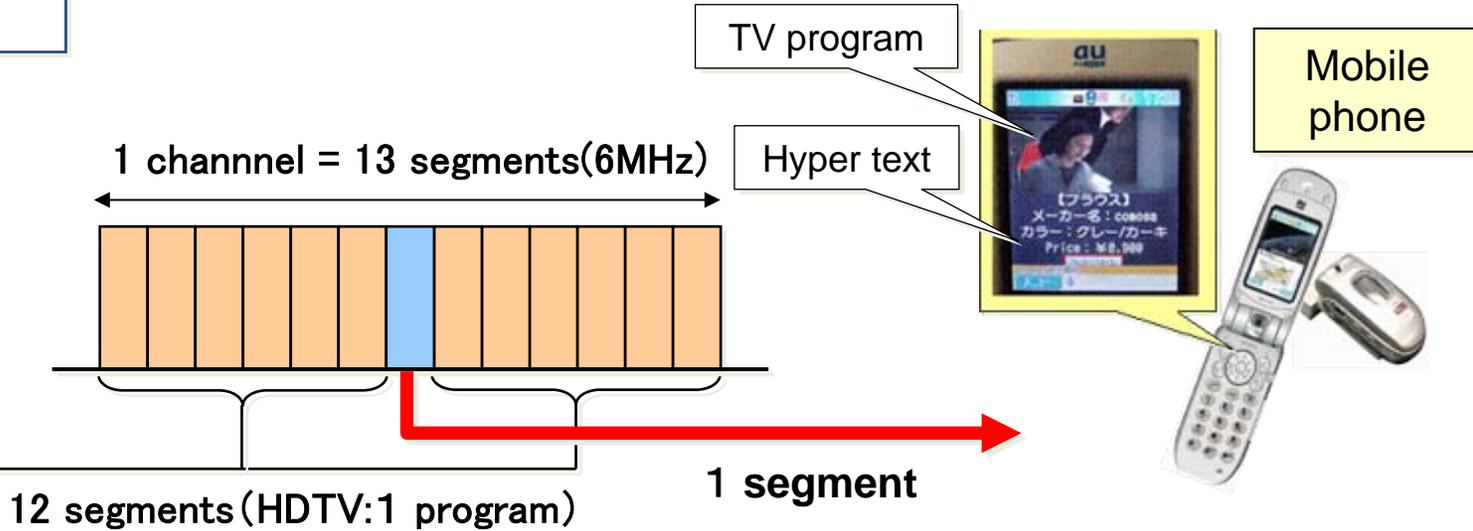
This table was created by MIC using data on each operator's web site.

Terrestrial Digital Broadcasting on Mobile Phone

NHK and commercial broadcasting companies started to provide terrestrial digital broadcasting services for mobile phone, "One-seg", on April 1, 2006.

System Image

High-definition television



Service Image

Broadcasting station



TV program & Related information data



User

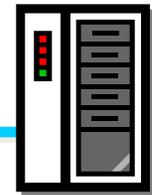


Mobile phone base station

Mobile phone network



Content provider



E-commerce
Movie distribution,
Etc.

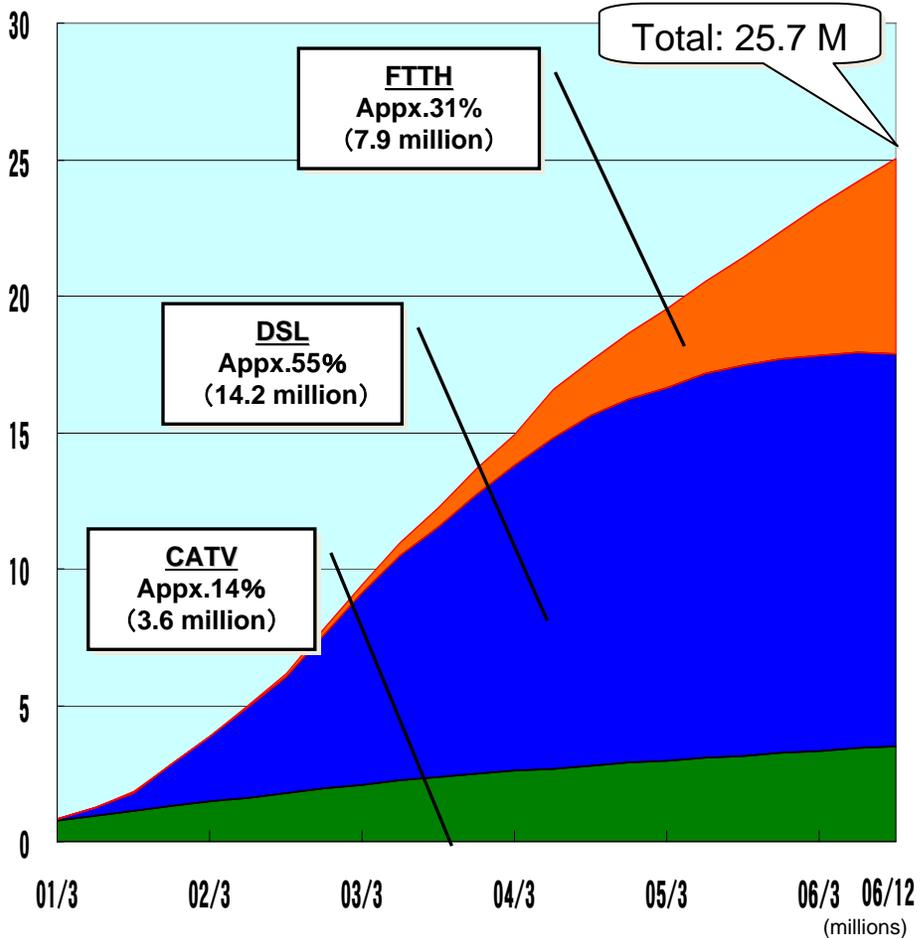
Regulatory Issues

1. Promotion of Competition
2. Expansion of Broadcaster's Business
3. Comprehensive Reform of the Legal System of Communications and Broadcasting

Number of Broadband Subscribers in Japan

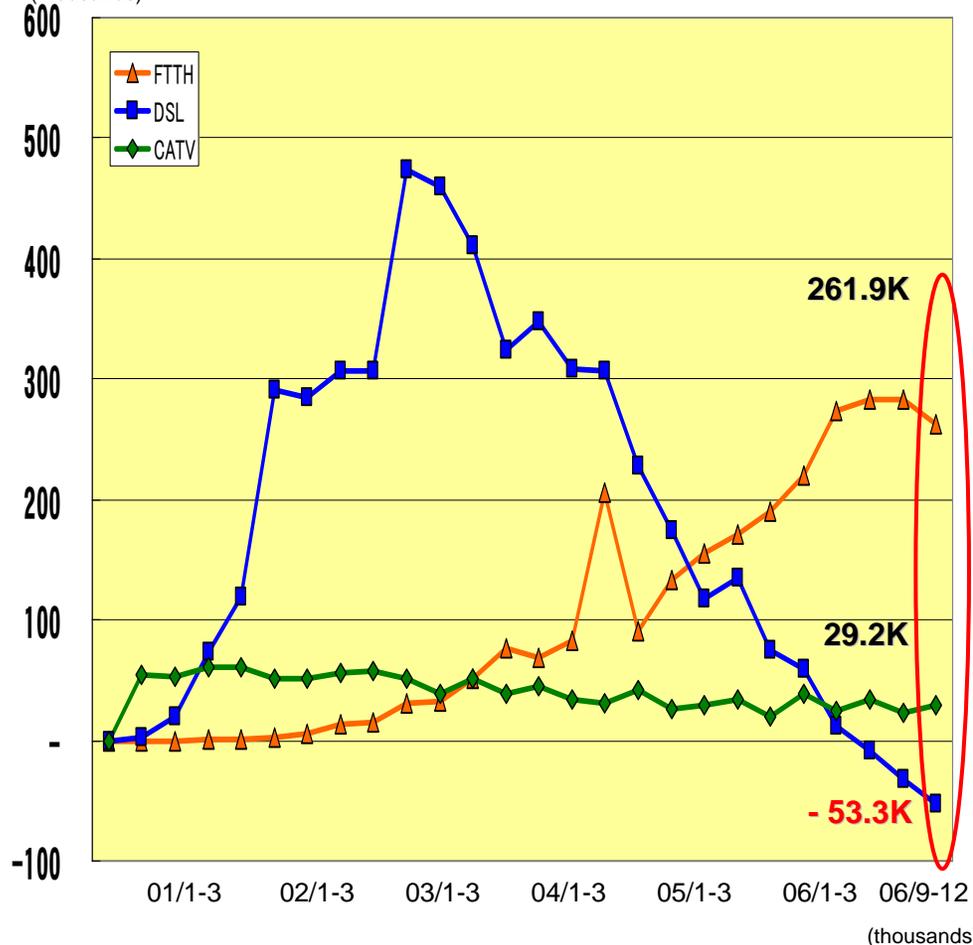
【Number of subscribers】

(millions)



【Monthly increase (average) in number of subscribers】

(thousands)



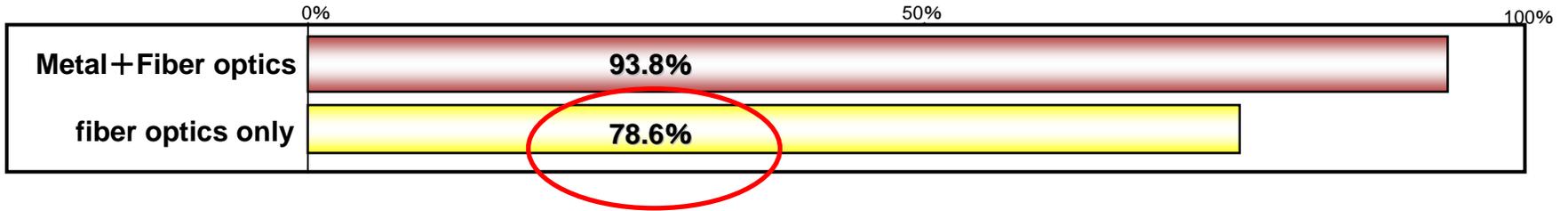
	01/03	02/03	03/03	04/03	05/03	06/03	06/12
FTTH	0.0002	0.003	0.3	1.1	2.9	5.5	7.9
DSL	0.07	2.4	7.0	11.2	13.7	14.5	14.2
CATV	0.8	1.5	2.1	2.6	3.0	3.3	3.6

	01/1-3	02/1-3	03/1-3	04/1-3	05/1-3	06/1-3	06/9-12
FTTH	0.07	5.7	33.1	82.7	154.9	273.5	261.9
DSL	20.3	73.6	459.1	308.3	116.8	12.3	-53.3
CATV	54.0	51.0	38.3	34.3	28.9	24.3	29.2

Note: The number of VoIP subscribers is approximately 11.5 million (as of the end of FY 2006).

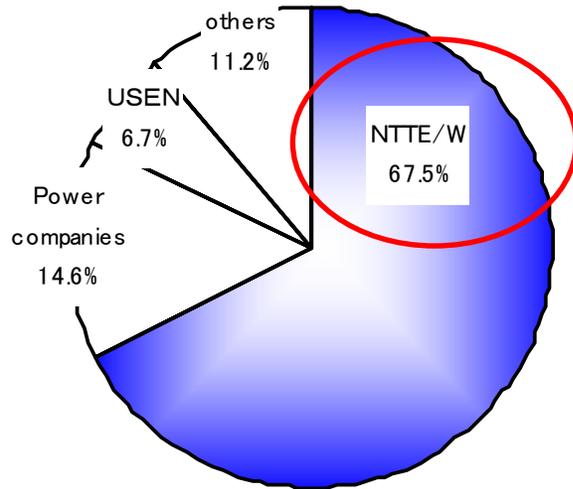
NTT's Market Share (As of Mar., 06)

Share of Subscriber Line [as of Mar.,06]

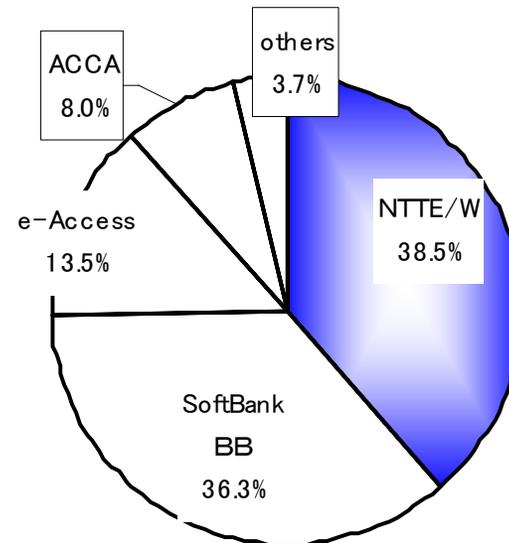


Share of service [as of Dec., 06]

FTTH



ADSL



2000: ADSL service became technologically feasible.

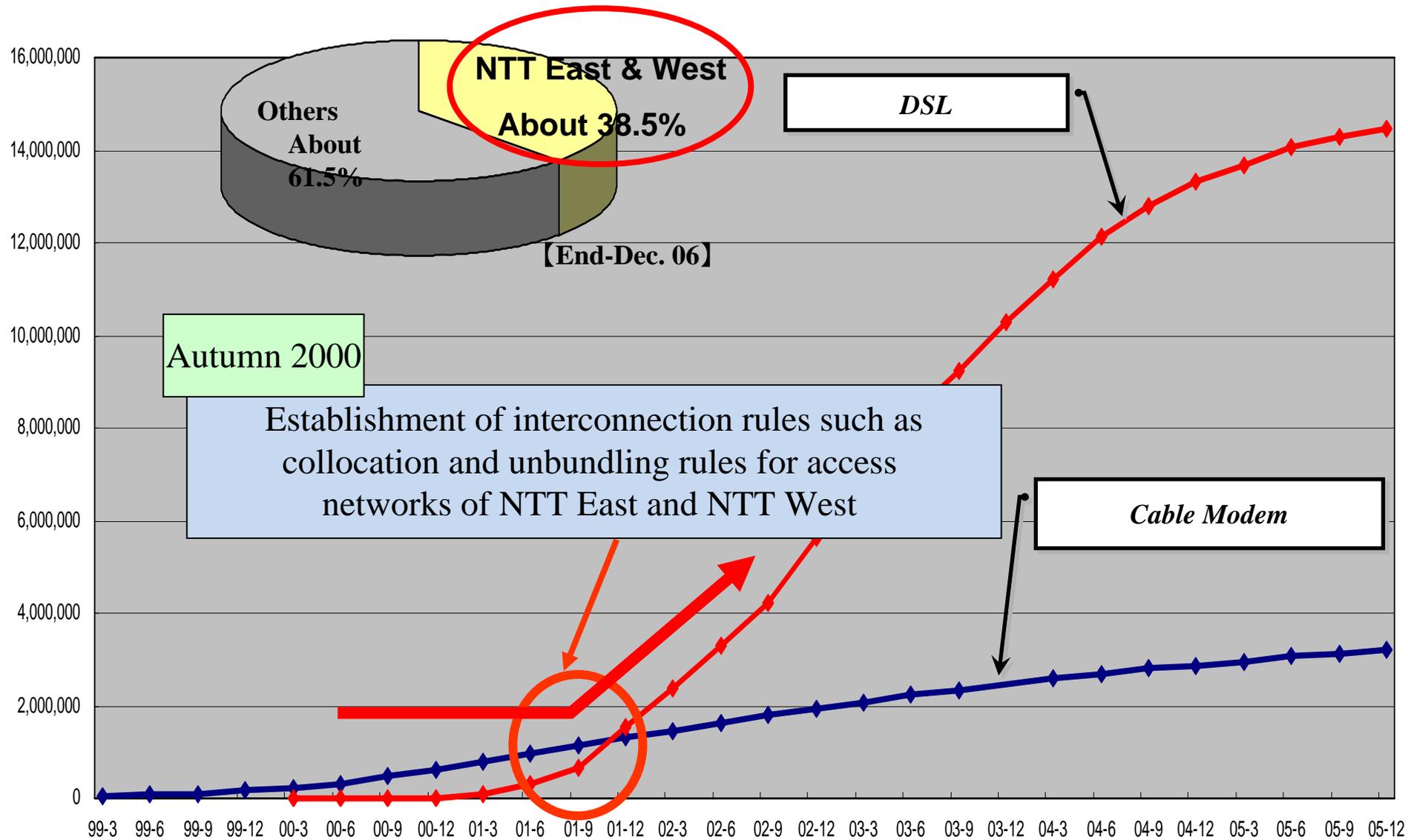
Strong expectation for rules regarding line-sharing and inter-exchange optical-fiber unbundling

2000-2001: Unbundling rules installed.

Sep. 2001 : Yahoo BB! started low-price ADSL service

2,280yen (€ 14) /month

Severe competition has led to NTT's loss of majority share in DSL market



Main Policies of New Competition Promotion Program 2010

Comprehensive Review of Competition Rules to Address the Shift to IP Based Networks (Comprehensively implemented by early 2010s)

1. Promotion of Infrastructure Competition

Further Opening up of Line Infrastructure (from FY 2007)

Promotion of Diversification of Access Networks (wireless, etc.)

2. Review of Interconnection Policy

Review of Open-up obligation (Dominant regulation)

Introduction of Competition Safeguard System (from FY 2007)

Comprehensive review of Open-up obligation (implementation will be launched by FY 2010.)

Review of Calculation Method for Interconnection Charges of NTT E&W

PSTN (concluded in 2007)

Fiber Optic (dealt with after the submittal of an application)

3. Review of Universal Service System

Improvement of interconnection rules for NGNs

Consideration ("feasibility study" in 2007, consideration in the Information and Communications Council in 2009)

4. Review of Tariff Policy

Review of the Price Cap Regulation

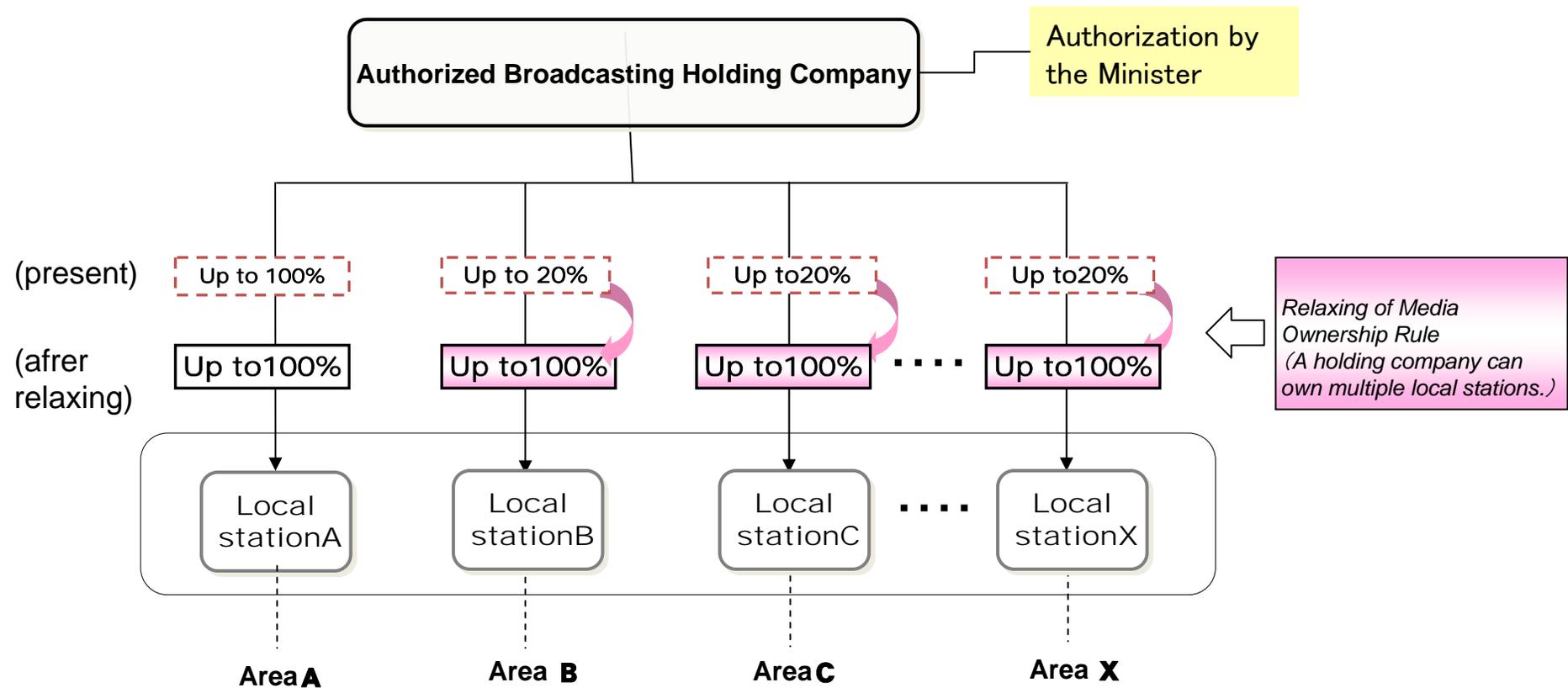
5. Other Main Policies

Promotion of Competition in the Mobile Communication Market (concluded in 2007 summer)

Study concerning the Network Neutrality principles (concluded the first recommendations in 2007 summer)

Others (Strengthening dispute settlement functions, Review of market exit rules and the like)

Broadcasting Holding Company



* The number of local stations that a holding company can own would be decided by ordinance of the Ministry.

Study Group on Comprehensive Legal System Governing Communications & Broadcasting

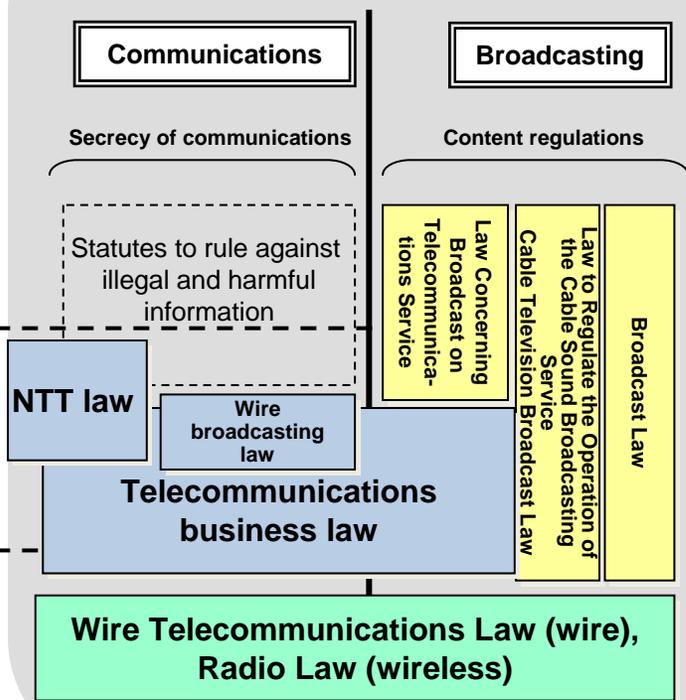
Advances in broadband communications and use of IP

Advances in digital switchover of broadcasting

Advancement of convergence and connection between communications and broadcasting

Amid the progress of convergence and connection, the following issues have been surfacing in respective layers which transcend the conventional framework of communications and broadcasting.

Current legal system of communications and broadcasting



[Layer division example]

Advances in convergence and connection

Study subjects (example)

Content

The same audio, visual and other type of contents are distributed beyond the conventional framework of communications and broadcasting (IP multicast, "1 Seg" services, etc.)

- Framework for "Secrecy of communications"
- Framework for "Content regulations"

Platform/ services

Mutual market access and cooperation of services and businesses increased. Commonization of fee charges and authentication platforms increased as well.

- Framework for the regulations for user protection
- Framework of the regulation for fair competition

Transmission infrastructure

Advances in shared use of the transmission infrastructure for communications and broadcasting (Law Concerning Broadcast on Telecommunications Service, etc.)

- Framework for the radio regulations
- Framework for technological criteria of wire and radio telecommunications

Looking ahead to 2011 (the first year of the complete digital switchover), when communication via broadband and digital switchover of broadcasting will be completed.

Studying the "Comprehensive legal system" that will solve these problems, and flexibly address the convergence and connection between communications and broadcasting