



# Communications News

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## Topics

### Announcement of final report from Study Group on a Framework for Competition Rules to Address the Transition to IP Based Networks

MIC set up the Study Group on a Framework for Competition Rules to Address the Transition to IP Based Networks (Chair: Prof. HAYASHI Toshihiko, The University of the Air) on October 28, 2005, to investigate a framework for competition policies in the telecommunications field, looking ahead to the full implementation of IP networks.

This Study Group on a Framework for Competition Rules to Address the Transition to IP Based Networks recently compiled its final report [details will be available in the next number].

#### Background

MIC set up the Study Group on a Framework for Competition Rules to Address the Transition to IP Based Networks (Chair: Prof. HAYASHI Toshihiko, The University of the Air) on October 28, 2005, to investigate a framework for competition policies in the telecommunications field, looking ahead to the full implementation of IP networks. The study group recently compiled its report, having taken into consideration the results of its investigations from ten meetings, including two consultations with relevant business operators and organizations.

## Topics

### Study Group on Comprehensive Legal System Governing Communications and Broadcasting set up

MIC set up on August 30, 2006, the Study Group on an Integrated Legal System for Communications and Broadcasting, to study from an expert point of view a framework for a legal system that would address the fusions and connections

between communications and broadcasting. This is with a view to defining directions that should be pursued for a legal system that would address these fusion and connections between communications and broadcasting.

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### Background and goals

The present government's agreement on a framework for communications and broadcasting (June 20, 2006) stated that investigations would start rapidly concerning an integrated legal system for communications and broadcasting, on the premise of maintaining the concept of basic broadcasting, with a conclusion by 2010. Taking this into consideration, MIC set up the study group to study from an expert point of view a framework for a legal system that would address the fusions and

connections between communications and broadcasting, with a view to defining directions that should be pursued for a legal system that would address these fusion and connections between communications and broadcasting.

### Investigation topics

Studies will be carried out on the following topics.

- (1) State of operation and issues of current legal system
- (2) Current state and future outlook of technology and networks related to communications and

broadcasting

(3) Future outlook of communications and broadcasting related services and business models

(4) Framework for regulations on transmission, platforms and contents

(5) Framework for confidentiality in communications and freedom of expression

(6) State of services and legal system in various foreign countries  
Etc.

## Topics

# Report from Study Group on Systematic Problems of Ubiquitous Network Society

MIC held the Policy Roundtable for Realizing a Ubiquitous Network Society from March to December 2004, and announced its u-Japan Policy in December of the same year. One of the contents of the policy was to determine topics that could turn into current or future

problems with the advent of a ubiquitous society, and 100 individual topics were pinpointed. This investigative group (Chair: Prof. HORIBE Masao, Graduate School of Law, Chuo University) based itself on this, and taking into consideration the changes in the i

nformation and communications environment over the next two years, investigated new topics that should be looked at, as well as whether any of the topics needed to have closer attention paid to them.

# Competition Review in the Telecommunications Business Field in FY2005

### Competition review

MIC started evaluating of the state of competition in the telecommunications business field (hereinafter referred to as "competition review") in FY2003 in order to evaluate and analyze the state of competition in the communications sector which is changing rapidly with the progress in the move to broadband and development of the move to IP, and to reflect this in the development of policies.

The same methodology as previous years was used to conduct

competition review. Firstly, competition review guideline which is the overview of the competition review, and details of implementation of methods for information gathering and analysis were determined. Next, research of market data from both the demand side and the supply side, and after the review target market was determined, the state of competition was analyzed and the results were determined. Public comment and public policy conference were actively implemented in the all process, so that the opinions of

relevant business operators and the public are fully reflected.

(Ref: Graph 1)

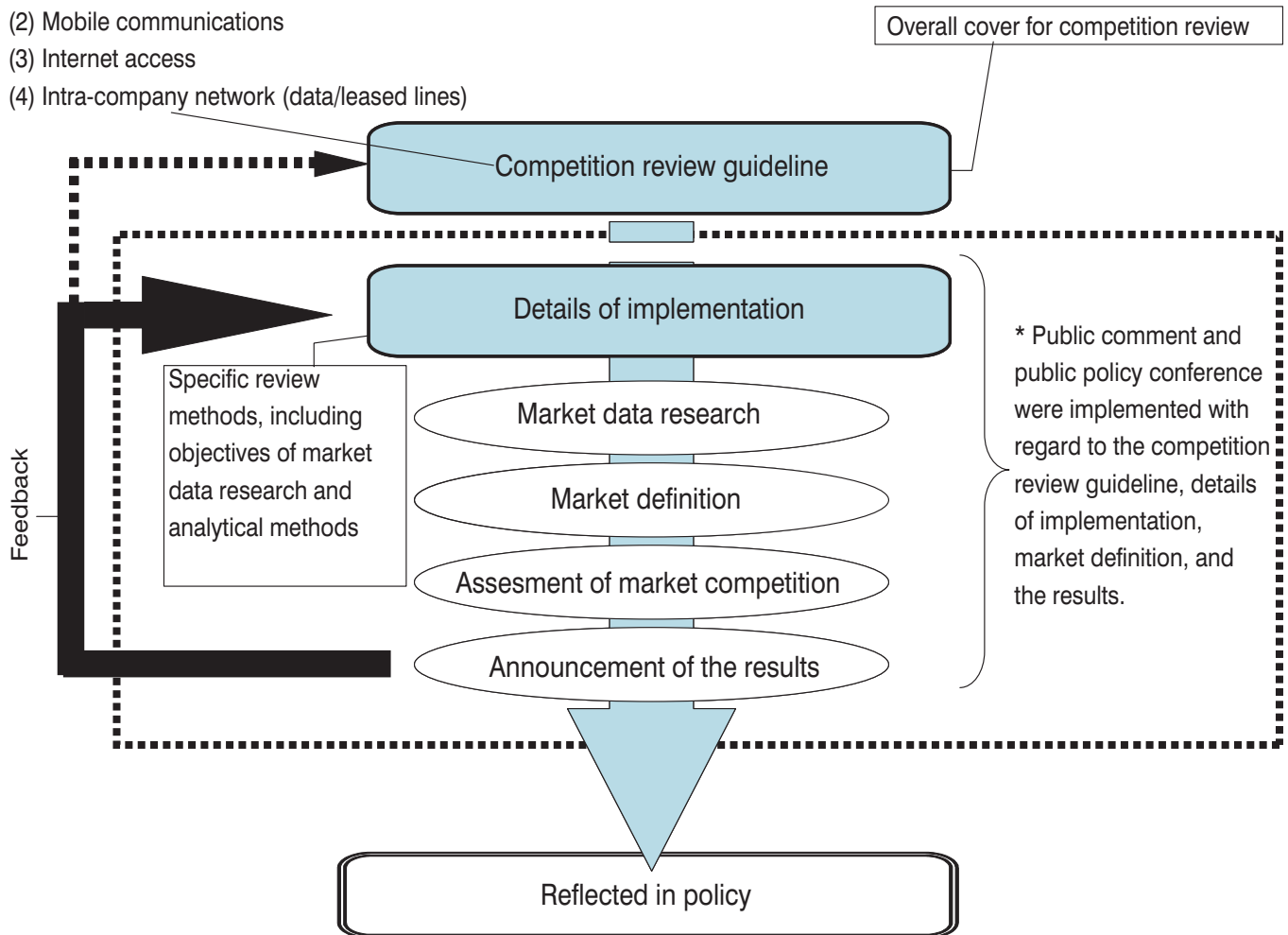
The areas covered by the review have included until now detailed review and analysis of "Internet Access" and "Intra-company Network" in FY2003, and "Mobile Communications" and "Internet Access" in FY2004.

For FY2005, review and analysis was carried on a summary of the areas covered to date, plus a concentrated evaluation at "Fixed Telephony".

**Graph 1 - Competition review methodology**

Areas covered by evaluation

- (1) Fixed telephony
- (2) Mobile communications
- (3) Internet access
- (4) Intra-company network (data/leased lines)



**Points of review**

The points of competition review for the FY2005 were as follows.

- 1-Analysis of the area of fixed telephony
  - 2-The relationship between the fixed telephony market and related markets
  - 3-Migration analysis
- The outline of these is introduced below.

**Market analysis of the area of fixed telephony**

- Fixed telephony market (subscribed)

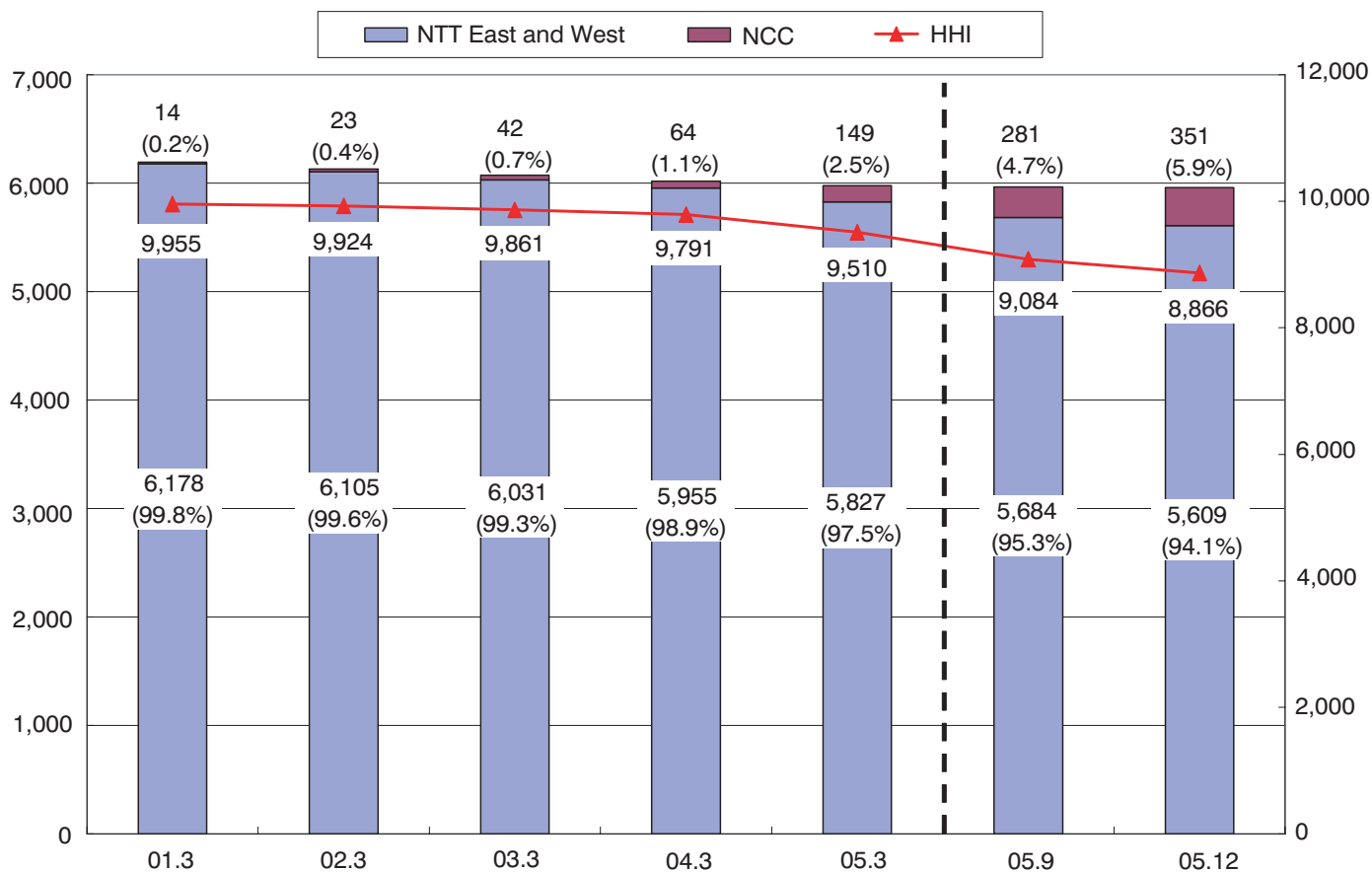
The share of NTT East and West (number of contracts) as of December 2005 stood at 94.1% and remains overwhelmingly high (Ref. Graph 2). On the other hand, other fixed telephony providers and 0ABJ-IP phones continue to grow.

With regard to market power, NTT East and West which monopolize their essential facilities continue to maintain their lead position.

However, since the regulations concerning category I designated telecommunications facilities and the existence of competition rules

act as a deterrent, and with the competitive pressure that other fixed line operators are gradually eliciting, there is not much possibility that its market power will actually be exercised. But there is the concern that there will be an impact on related markets (broadband, mobile communications, etc.) using its market power in fixed telephony as a lever, and this needs to keep watching.

Graph 2 Trends in NTT East and West market share and HHI in fixed telephony contract numbers



Note 1: NTT subscribers (including ISDN) and 0ABJ-IP phones are included in the NTT East and West market share.

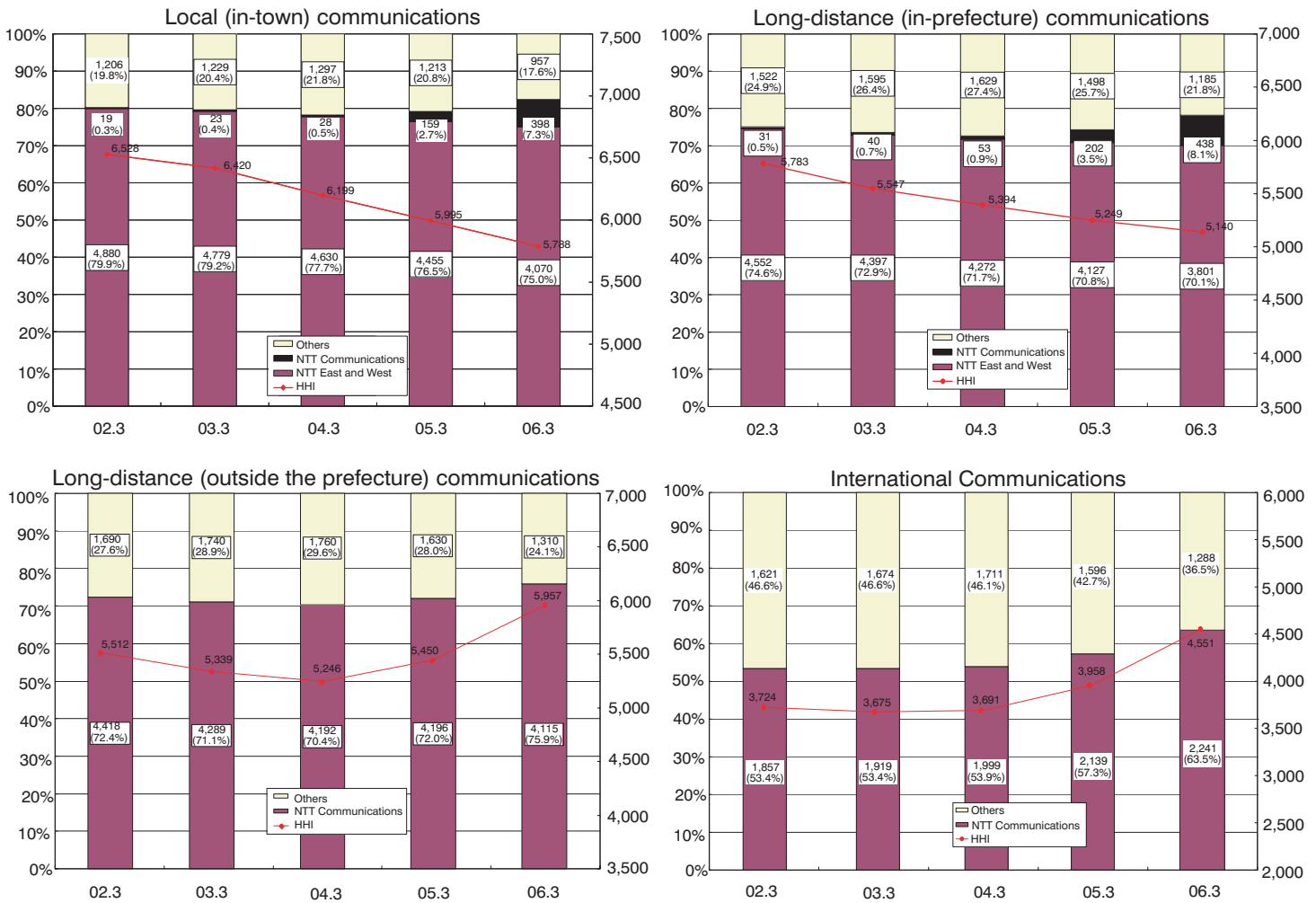
Note 2: HHI for the whole country was calculated on the basis of NTT East and West being one company.

-PSTN call services market(sub-market)  
As of March 2006, the market share (number of contracts) for NTT East and West stood at 75.0% for local (in-town) communications and 70.1% for long-distance (outside the city but within the prefecture) communications. The market share (number of contracts) for NTT

Communications for long-distance communications (outside the prefecture) reached 75.9%. So, aside from international communications, NTT East and West and NTT Communications together are in the position which is possible to exercise its market power (Ref. Graph 3).

However, the option of choosing carriers through the "My Line" system, low-priced 050-IP telephony, and software telephone are creating competitive pressure and it is therefore unlikely that its market power will be exercised.

Graph 3 Trends in NTT share within My Line contract numbers



Note: Where there is no request for My Line, the count is for NTT East and West for local (in-town) and long-distance (in-prefecture) communications, and NTT Communications for long-distance (outside the prefecture). Also, HHI for the whole country was calculated on the basis of NTT East and West being one company.

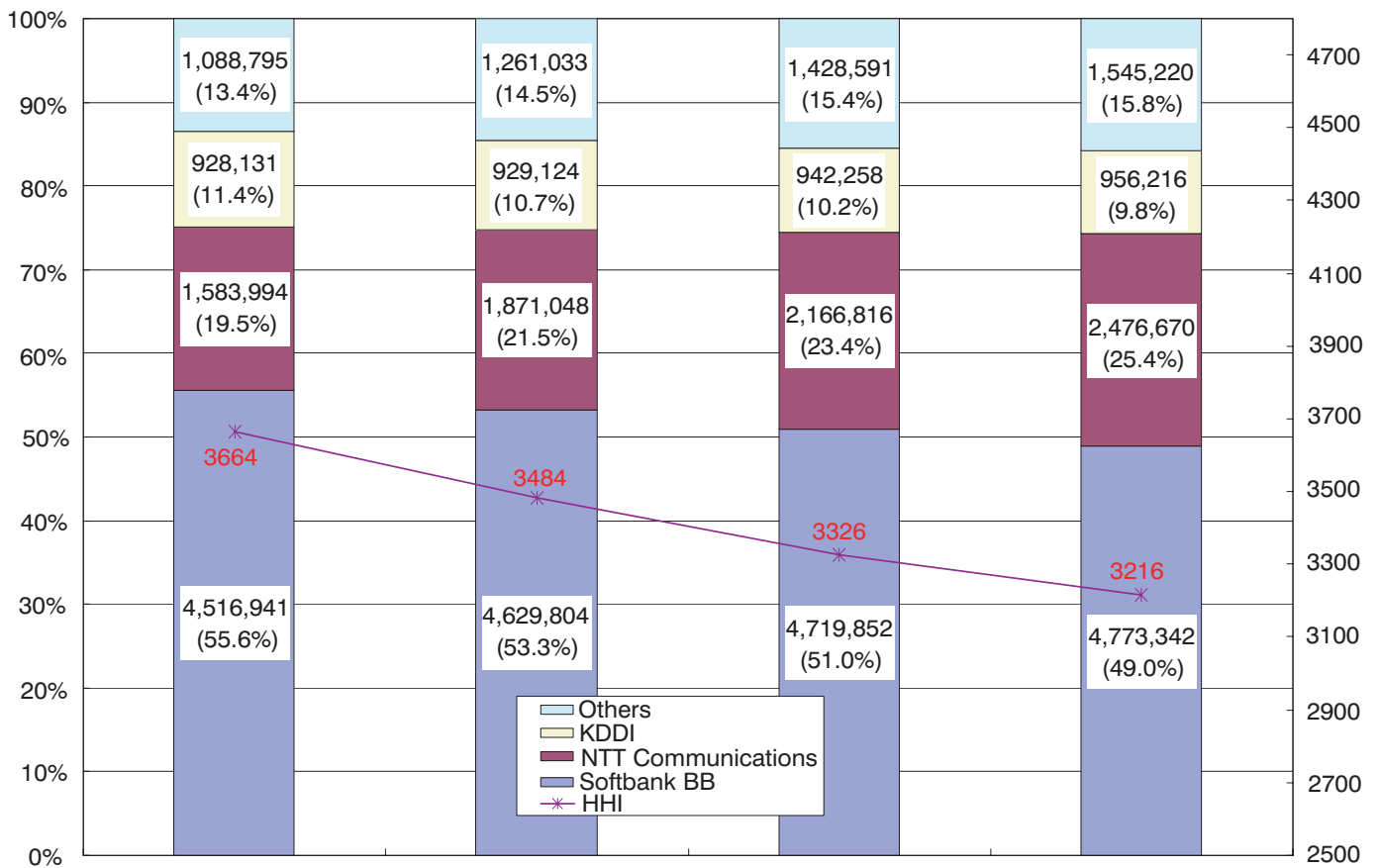
-050-IP telephony (sub-market)  
 There is no single carrier with a dominant position in the market, but the three leading companies accounted for 84.2% of the market as of December 2005, so there is a high level of concentration,

remaining the possibility that several carriers will exercise its market power in a coordination manner (Ref. Graph 4).

However cheap rates that are offered as value-added services with Internet access are appearing, and

subscribers have become accustomed to discount prices, such as free calls between subscribers of the same carrier, so it is unlikely that its market power would be exercised.

Graph 4 Share and HHI trends for 050-IP telephony (numbers used)



**Relationship between fixed telephony market and related markets**

"The relationship between fixed telephony market and related markets" and "the analysis of migration" were compiled based on the analysis of a usage survey that was carried out among Internet users.

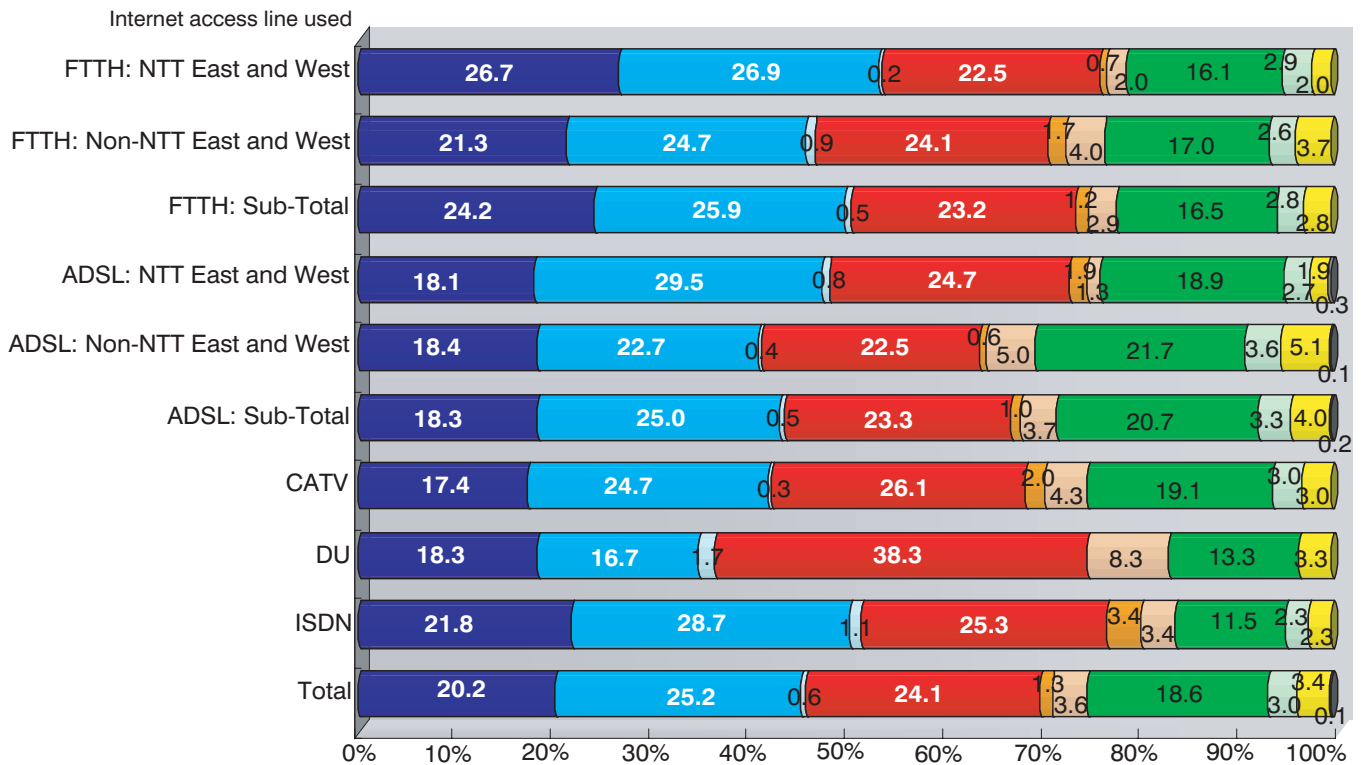
The usage survey showed that

there is a link in the selection process of carriers for the various markets of fixed telephony, Internet access, and mobile communications, and there is a tendency towards selecting the same carrier or group (Ref. Graphs 5 & 6).

These results reflect the likes of corporate brands and are not a problem in terms of competition

policy, but since NTT East and West are dominant in the fixed telephony market, and the market share for NTT Group in the other markets is overwhelming, it is necessary to pay close attention to the relationship among the fixed telephony market, Internet access market and mobile communications market.

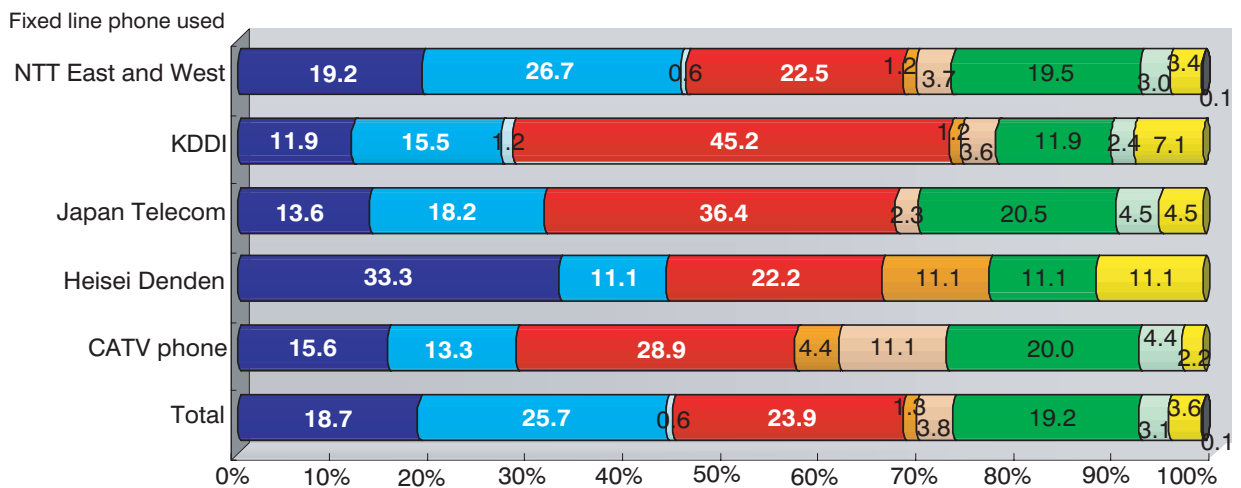
**Graph 5 Carrier selection for Internet access lines and mobile phones**



Mobile phone used

■ DoCoMo 3G ■ DoCoMo 2G ■ DoCoMo PHS ■ au 3G ■ au 2G ■ TU-KA ■ Vodafone 2G ■ Vodafone 3G ■ Willcom ■ Others

**Graph 6 Carrier selection for fixed telephony and mobile phones**



Mobile phone used

■ DoCoMo 3G ■ DoCoMo 2G ■ DoCoMo PHS ■ au 3G ■ au 2G ■ TU-KA ■ Vodafone 2G ■ Vodafone 3G ■ Willcom ■ Others

**Migration analysis**

The net increase figures for FTTH have been rising rapidly and migration to FTTH continues to pick up momentum. The main trend is for a shift from a 40% share for NTT East and West's ADSL to a 60% share for NTT East and West's FTTH.

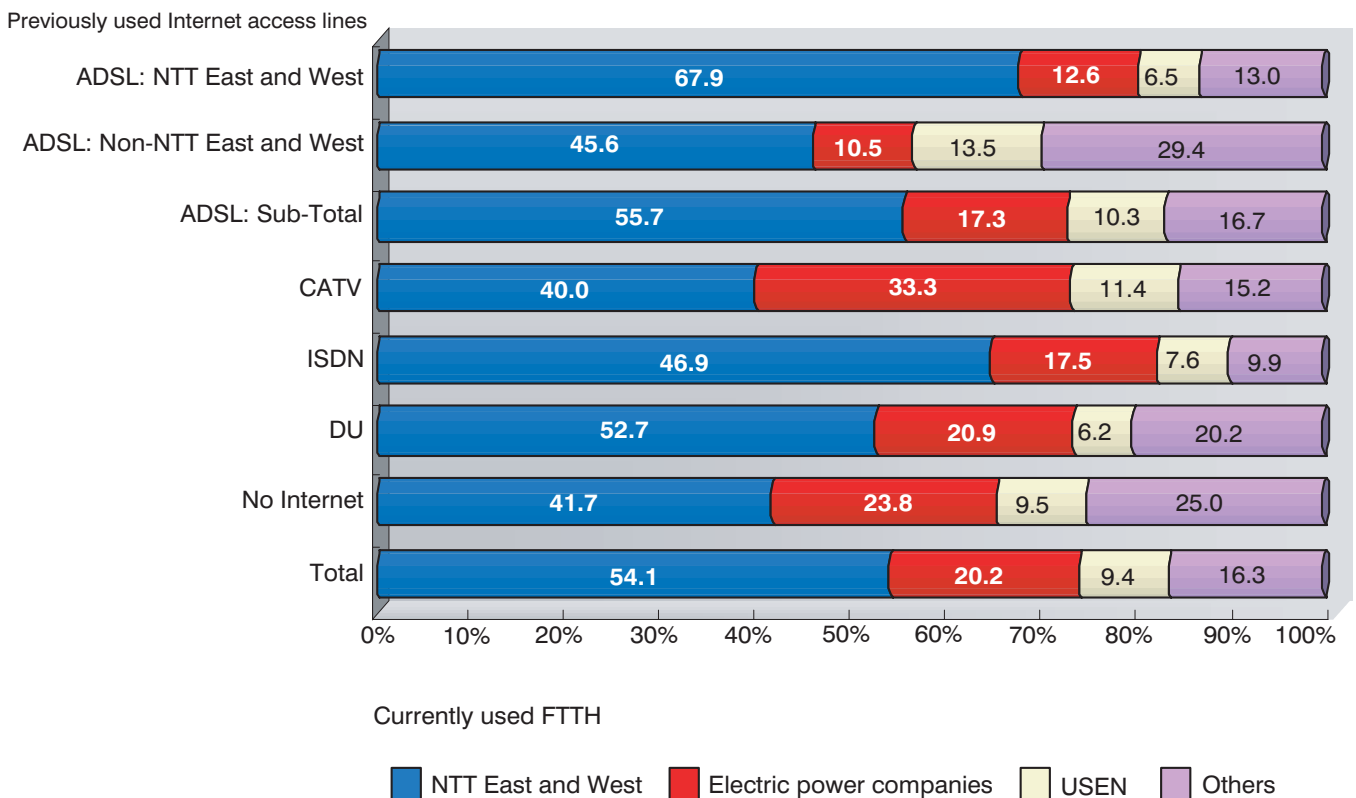
Analysis of the usage survey

shows that many users are migrating from NTT East and West's ADSL and ISDN to NTT East and West's FTTH. In addition, even users of Internet access lines other than NTT East and West are showing a tendency to migrate to NTT East and West's FTTH (Ref. Graph 7). It is likely that this is the structural reason that is pushing up NTT East

and West's share.

It is desirable for the migration to FTTH to pick up speed, but despite powerful competition emerging in the ADSL market due to unbundling regulations, there is the problem of the movement to migration to FTTH having a negative impact on competition in the market (migration dilemma).

**Graph 7 Previous and current Internet access lines used by FTTH users**



**Future outlook**

Major changes are likely to continue in the future with the convergence of communications and broadcasting, the convergence of fixed and mobile, the move to broadband, the move to IP and the large-scale penetration of FTTH. The role of the competition review is first to grasp

accurately such rapid changes, to analyze the market in a detailed and accurate tendency and with no time lag, and to distribute this information widely. And it is necessary that it should be appropriately reflected in formulating policy.

Therefore, previous review should be taken into account, it is

desirable to constantly revise the review methodology so as to implement detailed review that could be, for example, by retail or wholesale category, or by user group, in order to respond to the diversification of the market, as well as carrying out each year fixed observation-focused review.

# Putting in place mobile communications equipment for disaster management -- Preparing the groundwork for use of an effective independent mobile communications system for use in disasters --

## The role of MIC during disasters

In view of the importance of information and communications at disaster times, and based on the basic disaster prevention plan, MIC is working to meet the needs to install an infrastructure for the storing and purchasing of communications equipment, in order to maintain communications means for disaster information communications for disaster prevention and emergency disaster countermeasures.

In concrete terms, in cases of extraordinary disasters such as earthquakes, MIC is taking measures to maintain necessary and vital communications by distributing communications equipment free of charge to local public bodies as well as disaster relief personnel, so that relief activities can be conducted quickly and smoothly thanks to the rapid gathering and communication of damage information in the early stages.

## Details to date

An actual implementation was seen at the site of the Great Hanshin-Awaji Earthquake which occurred in 1995, where mobile communications equipment was purchased and distributed free of charge to local public bodies in order to maintain means of communication for disaster relief.

However, with age and deterioration, less and less of that equipment is available for use with each passing year. So, in order to make it usable and improve its reliability, the decision was taken to purchase and

maintain mobile communications equipment in a planned way starting in FY2006.

## Actual activities through FY2005

During the 11 disasters including floods and volcanic eruption that took place between the Great Hanshin-Awaji Earthquake and Mid Niigata Prefecture Earthquake, free distribution of MCA and simple radio was implemented to ensure communications of disaster-related information and victims support information between local disaster relief headquarters and disaster relief personnel, as well as the exchange of relief information between workers at shelters.

## Outline of measures for FY2006

Two bases are being set up in Tokyo and Osaka, in cooperation with private-sector companies, for administering storage, and will have 100 units (50 MCAs and 50 simple radios). At the time of an earthquake or other disaster and on request from the regional bureau of telecommunications or disaster relief headquarters, they will hand over the mobile communications equipment free of charge to local public bodies or disaster relief personnel so that relief activities can be conducted quickly and smoothly thanks to the rapid gathering and communication of damage information in the early stages to maintain necessary and vital communications (see image).

## Plans for future installations

In anticipation of large-scale natural

disasters such as Tokyo Inland Earthquake, Tokai Earthquake, Tonankai/Nankai Earthquakes, or typhoons, a system is being put in place to take proper disaster prevention measures. In concrete terms, as the communications equipment used in disaster relief operations is used in particularly difficult conditions, equipment breakdown is being taken into consideration and, from FY2007, a request will also be put in for maintenance costs. There is also a plan to have in place by FY2011, taking into consideration the structure of communications and usage performance in times of disaster, the 400 units that will be needed (200 MCAs and 200 simple radios).

In addition, after FY2012, the plan will continue to be revised. (Public Protection and Disaster Relief Radiocommunications office, Fixed Radio Communications Division, Radio Department, Telecommunications Bureau, MIC)

Note 1: MCA (Multi Channel Access System). One of the commercial-use radio communications systems that allows a large number of users to use numerous frequencies efficiently. Highly-resistant to interference, it enables simultaneous command communications and data transfers using its multicast function. One of its characteristics is that it does not require a radio operator license.

Note 2: Simple radio: Commercial-use radio that can be used by a large number of people for various needs. Multiple users can simultaneously use multiple frequencies. One of its characteristics is that it does not require a radio operator license. There are also no communications costs.

**Preparing the groundwork for use of an effective independent mobile communications system for use in disasters**

