

Communications Usage Trend Survey in 2004 Compiled

MIC has implemented and compiled the "Communications Usage Trend Survey" as of the end of CY2004, in order to grasp the usage trends in telecommunications and broadcasting services within households (those making up households), offices (establishments) and companies (enterprises). Outlines of the survey are as follows (refer to Annex 2):

[Highlights of the survey results]

<p>The number of Internet users is 79.48 million and the ratio of population coverage is 62.3%.</p> <p>The number of Internet users has increased to 79.48 million, an increase of 2.18 million over the previous year. The ratio of population coverage has increased to 62.3%, growing by 1.7 percentage points over the previous year.</p>
<p>The ratio of broadband user households surpasses the 60% mark.</p> <p>When taking a look at methods to access the Internet using PCs at home, the ratio of broadband circuit services has grown to 62.0%, increasing by 14.2 percentage points over the previous year. Those for other methods, including ISDN and PSTN, are continually decreasing.</p>
<p>The digital divide still remains.</p> <p>Along with the growth in the ratio of Internet users in their 50s or higher, generation gaps have gradually narrowed. However, differences in user environments, such as annual incomes, gender and sizes of municipalities, still exist.</p>
<p>One of two persons implements some kind of personal information protection measures.</p> <p>Of Internet users, 51.5% are implementing some kind of personal information protection measures. Of personal information protection measures, the most popular measure, accounting for 33.9% of all measures, is "not to post or leave personal information on the web."</p>
<p>Corporate Internet users who post their websites are implementing personal information protection measures.</p> <p>Among corporate Internet users who maintain intra-company networks and post their websites, the ratio of corporate Internet users who implement some kind of personal information protection measures has increased by 16.6 percentage points over the previous year to 56.5%. Of such measures, the most popular measure (30.9%) is "to improve human resources development within their companies," the second (23.4%) is "to assign chief information officers for protecting personal information."</p>
<p>IP telephony services have been gaining popularity in both households and companies.</p> <p>The ratio of household IP telephony users has increased by 5.4 percentage points over the previous year to 12.7%. The ratio of corporate IP telephony users has increased by 16.7 percentage points over the previous year to 27.8%.</p>

[Outlines of the survey]

The "Communications Usage Trend Survey," which is composed on the following 3 sections: "Households/household members," "Offices (establishments)" and "Companies (enterprises)," has been conducted annually since 1990 as a statistical survey authorized by MIC in accordance with the Statistical Report Coordination Law. The survey on "household members" was added in 2001. In 2002, the survey was conducted as indicated in the Table [Details of the survey]:

(*The section "Companies (enterprises)" was conducted as the annual survey on "Corporate Networks" in 1993, 1995 and 1996 separately, has been added in 1997 as a section of "Communications Usage Trend Survey".

[Details of the survey method]

	Households	Offices (Establishments)	Companies (Enterprises)
Survey period	As of January 2005		
Survey area	Nationwide	Nationwide	Nationwide
Object samples surveyed	Households (including single households) headed by someone aged 20 or older as of April 1, 2004	Establishments with more than 5 regular employees excluding the industries of "Postal Services" and "Telecommunications" as defined in JSIC	Enterprises with more than 100 regular employees, excluding the industries of "Agriculture," "Forestry," "Fisheries" and "Mining" as defined in JSIC.
Number of samples	6,400	5,600	3,000
Effective replies (Rate)	3,695 (12,670 people) (57.7%)	2,970 (53.0%)	1,865 (62.2%)
Items surveyed	Communications usage trend		
Sampling Method	Random sampling (Stratified Two-stage Sampling on city, town or village status)	Random sampling (Systematic Sampling on regular employee size for each industry)	Random sampling (Systematic Sampling on regular employee size for each industry)
Method of survey	Mail survey (real mail)		

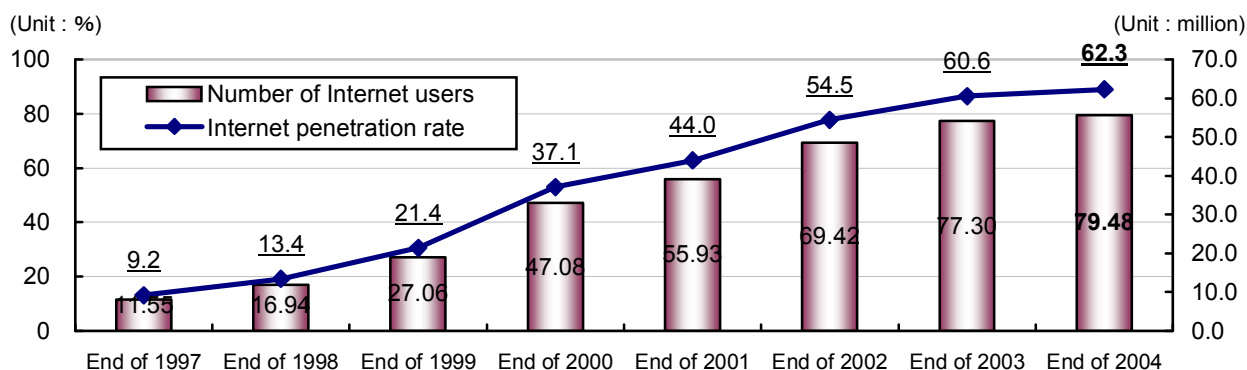
Communications Usage Trend Survey in 2004

Key Survey Results

1 Penetration of Internet users

◇ Number of Internet users and population coverage as of the end of 2004

The number of Internet users has increased by 2.18 million to 79.48 million compared to the previous year, and the population coverage was 62.3% (an increase of 1.7 percentage points over the previous year). The growth rate has slowed.



(Notes)

i) The number of Internet users indicated above covers:

- Users who access the Internet using one or more terminals among personal computers, cellular telephones, PHS terminals, PDAs, game consoles, TV units, etc.
- Aged over 6.

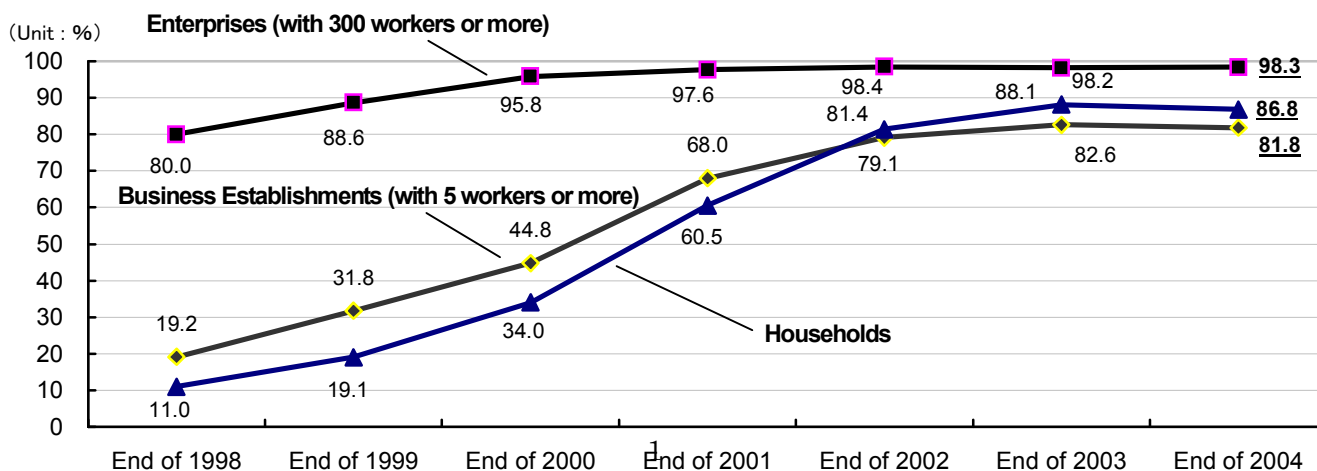
ii) The population coverage (62.3%) in Japan as of the end of 2004 is obtained by dividing the Internet user population of 79.48 million (estimated by this survey) by 127.64 million (total projected population as of October 2004: "Japan's Population Projections in the Future," the National Institute of Population and Social Security Research): the ratio of Internet users to the total population

iii) Figures from 1997 through 2000 are based on the "Information and Communications White Paper" (the title was changed from the "Communications White Paper" in 2000). Those from 2001 through 2004 are estimated ones from 2001 through 2004 are based on each annual "Communications Usage Trend Survey."

iv) Upon estimation, taking into account the increased use of the Internet by the elderly and pupils of elementary and junior high schools, age groups covered by this surveys have been extended year on year. Thus, estimated results shall not be compared with those before 1999 (aged from 15 to 69: until 1999; aged from 15 to 79: until 2000; and aged over six: since 2001).

◇ Internet penetration rates at households, offices (establishments) and companies (enterprises)

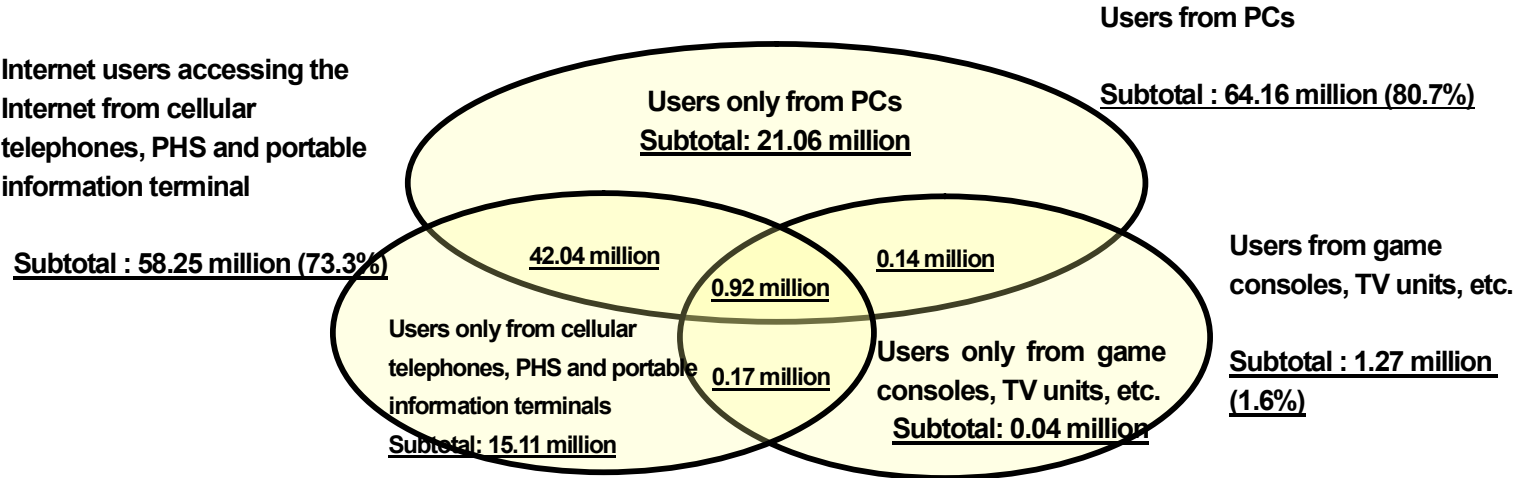
The penetration rates for households, offices (establishments) and companies (enterprises) are 86.8%, 81.8% and 98.3%, respectively. The growth rates are leveling off.



2 Personal Internet users

◇ **Ratio of terminal device types for access to the Internet with the purpose of personal use**

The highest-ranked method is using personal computers counting 64.16 million. The number of Internet users via cellular telephones, PHS and portable information terminals is 58.25 million (an increase of 13.41 million compared to the previous year), indicating the drastically growing number of mobile users. Those who use both personal computers and cellular telephones are one of two (54.1%).



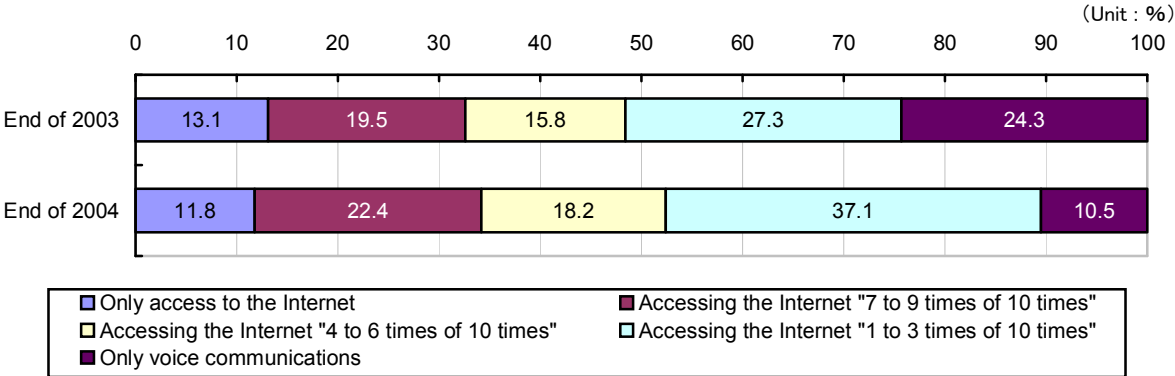
Note : Figures in () indicate the ratio of "Aged 6 or older" to the total number of Internet users. The total of figures in () may not be 100. Because the number of Internet users is rounded, the total of breakdowns may not necessarily tally with the total.

Grand total : 79.48 million

◇ **Ratio of "voice communications" to "access to the Internet" for users having mobile terminals (cellular telephones and PHS having access to the Internet)**

The majority of mobile terminal (cellular telephones and PHS having access to the Internet) users access the Internet "4 to 6 times of 10 times." Users who use only "voice communications" have been drastically decreasing.

Ratio of "voice communications" to "access to the Internet" for users having mobile terminals (cellular telephones and PHS having access to the Internet)



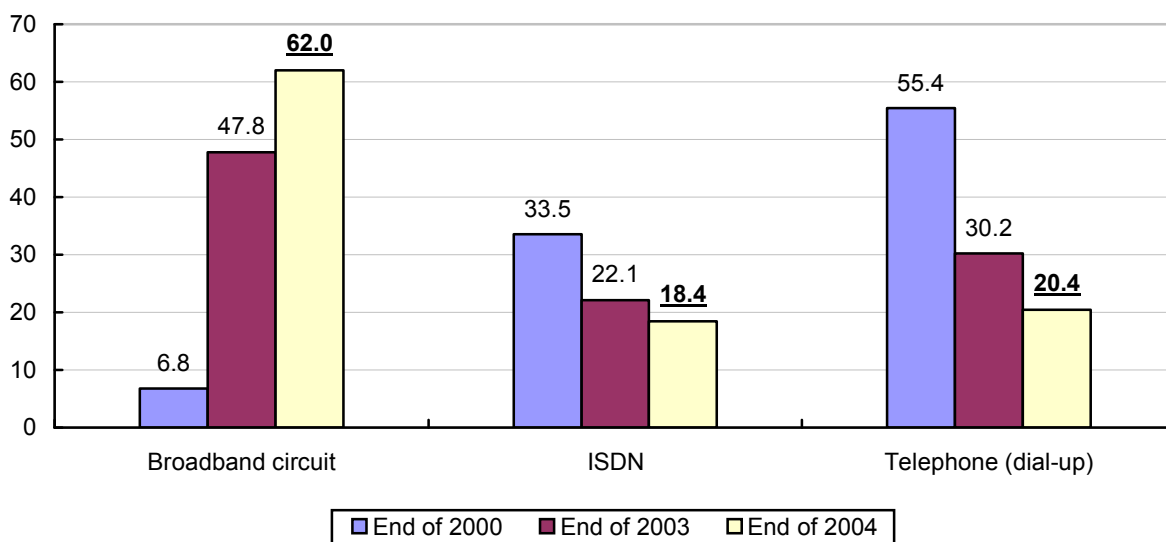
3 Current status of broadband penetration at households

◇ Access methods to the Internet via personal computers at households (at ones' own homes)

Broadband circuits increased by 14.2 percentage points (compared to the previous year) to 62.0%. On the contrary, ISDN and telephone (dial-up) circuits have declined in the numbers of circuits in comparison with the previous year.

Transitions in ratios of Internet access circuits at households (at ones' own homes)
(of Internet user households at "ones' own homes" via "personal computers") (multiple replies)

(Unit : %)



1 : "Broadband circuit" : cable TV circuit, FTTH circuit (fiber-optic circuit), wireless (FWA, etc.) circuit, DSL circuit and 3G telephone circuit (only in 2004, and only in cases where users access the Internet by connecting 3G cellular telephones to personal computers)

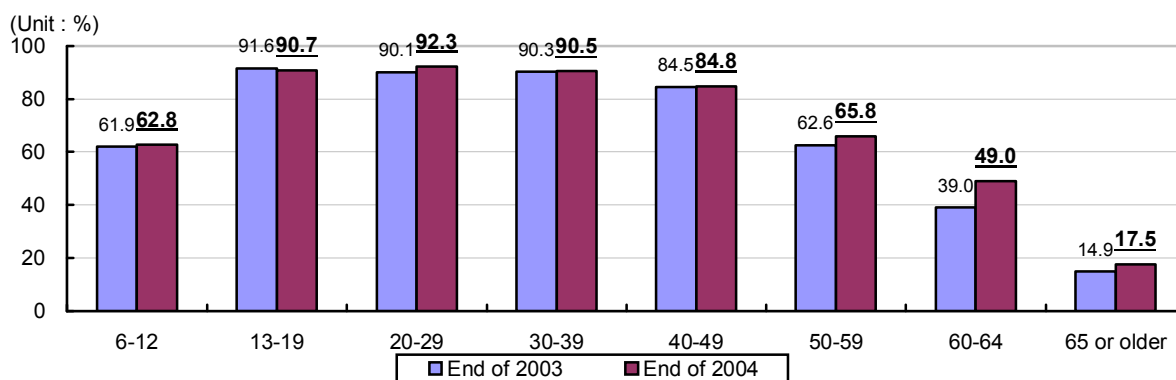
2 : Since multiple replies are allowed, the total may not necessarily tally with 100%. In addition to those listed above, there are such replies as "cellular telephone," "PHS," etc.

4 "Digital divide" in individuals (age group)

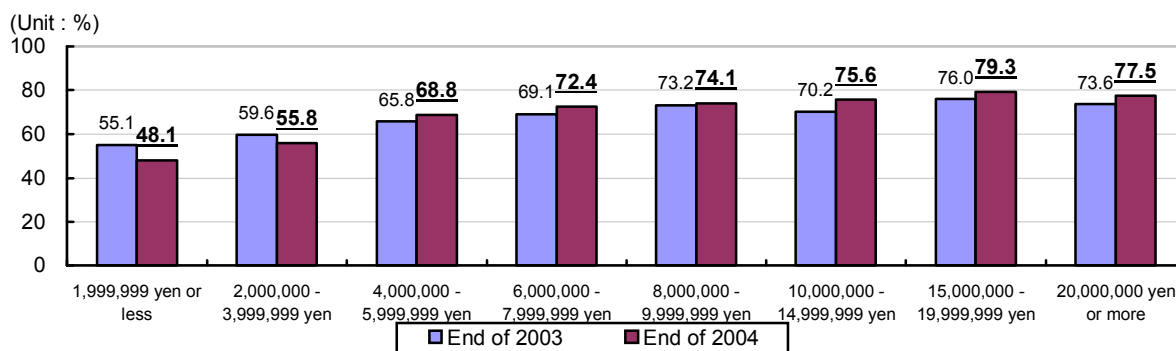
◇ Internet user ratio by attribute

The growth rate of Internet user ratio in their 50s or older is comparatively high. Differentials in Internet user ratio between generations have been slightly narrowed. However, differentials in Internet user ratio between such groups as annual income, gender and city size are still in existence.

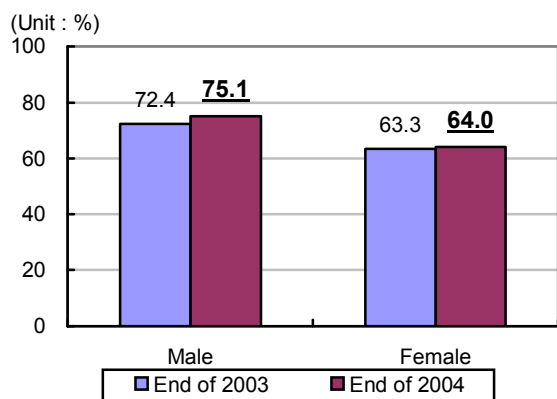
i) Transition in Internet user ratio by age group



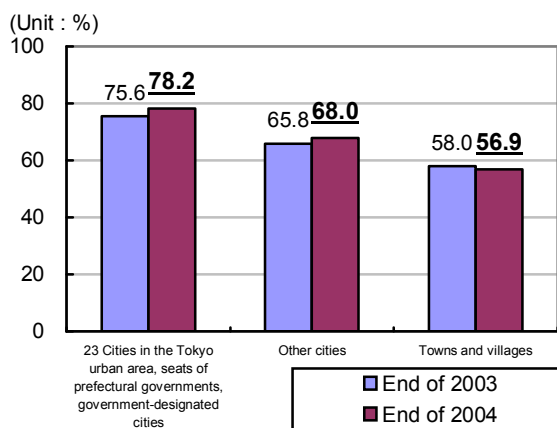
ii) Transition in Internet user ratio by household annual income



iii) Transition in Internet user ratio by gender



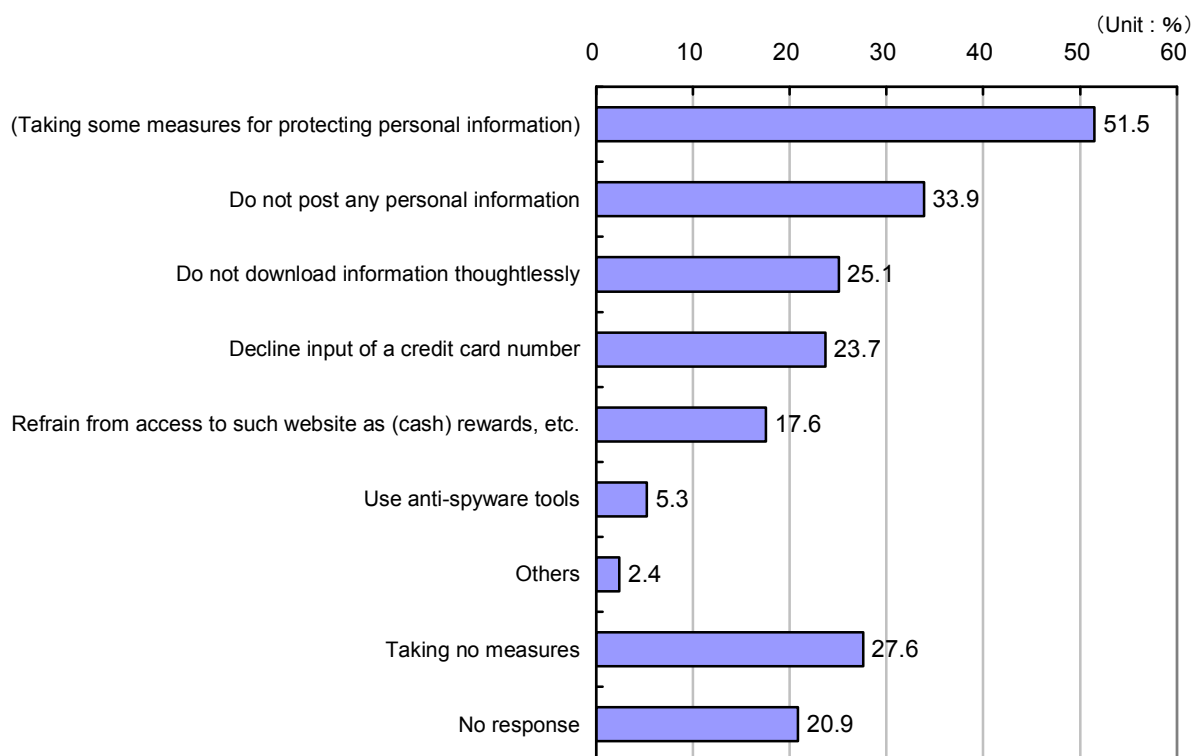
iv) Transition in Internet user ratio by city size



5 Measures taken for protecting personal information

◇ Of Internet users, one of two (51.5%) take some measures for protecting personal information. The most popular measures among others are "Do not post any personal information" (33.9%).

Measures taken for protecting personal information (multiple replies)



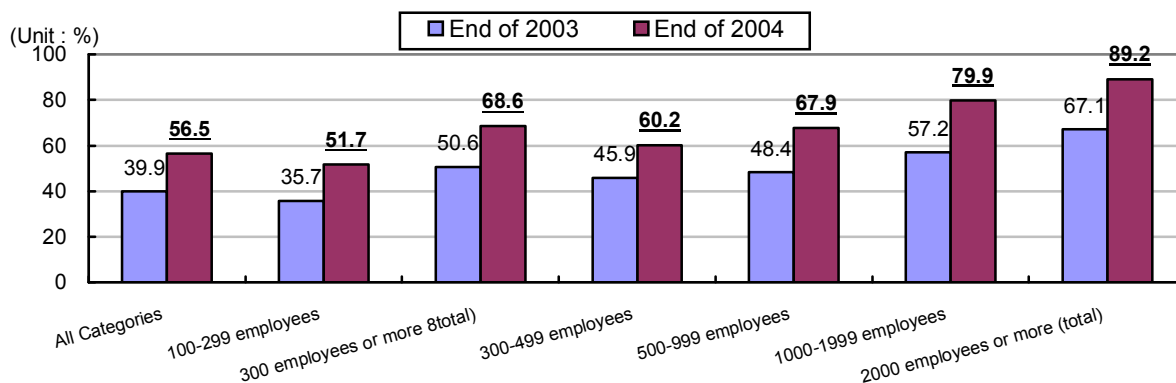
◇ **Current status of implementation of measures for protecting personal information at corporations**

Of corporations which are operating intra-company networks and access networks to the Internet, those which are taking some kind of measures for protecting personal information are 56.5%, an increase of 16.6 percentage points over the previous year, indicating a steady progress in efforts to address information protection.

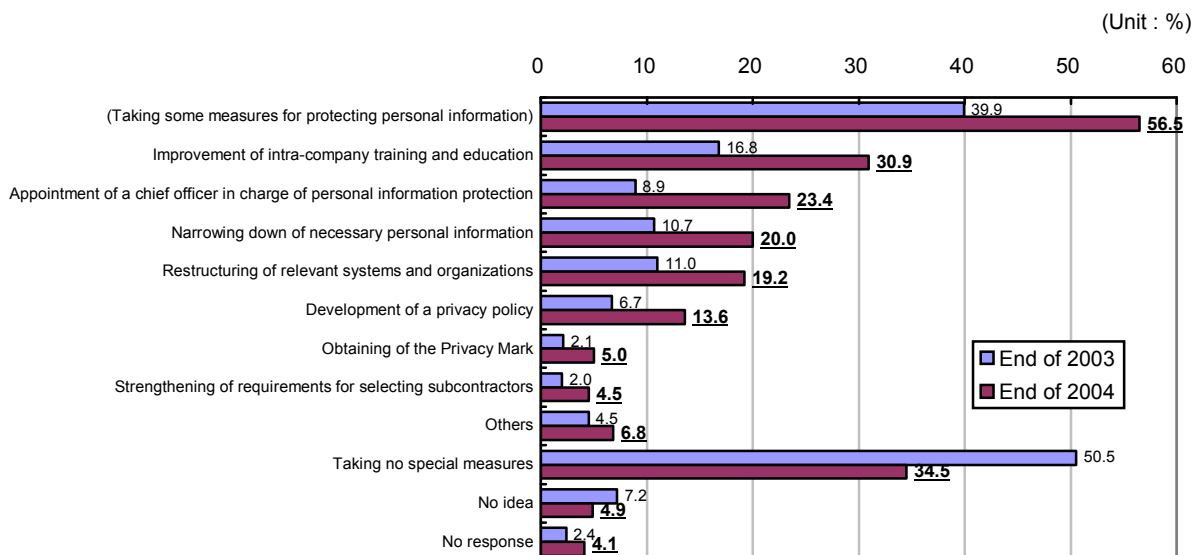
Taking a look at such ratio by number of employees, the bigger the higher. Of corporations with 2,000 employees or more, 89.2% of them are taking measures for protecting personal information.

When breaking down such protection measures, "improvement in intra-company training and education" is the highest 30.9%, followed by "appointment of a chief officer in charge of personal information protection" (23.4%) and "narrow down necessary personal information" (20.0%). "Obtaining the Privacy Mark under the Privacy Mark system" increased from 2.1% in the previous year to 5.0%.

Implementation ratio of measures for protecting personal information



Types of measures for protecting personal information (multiple replies)

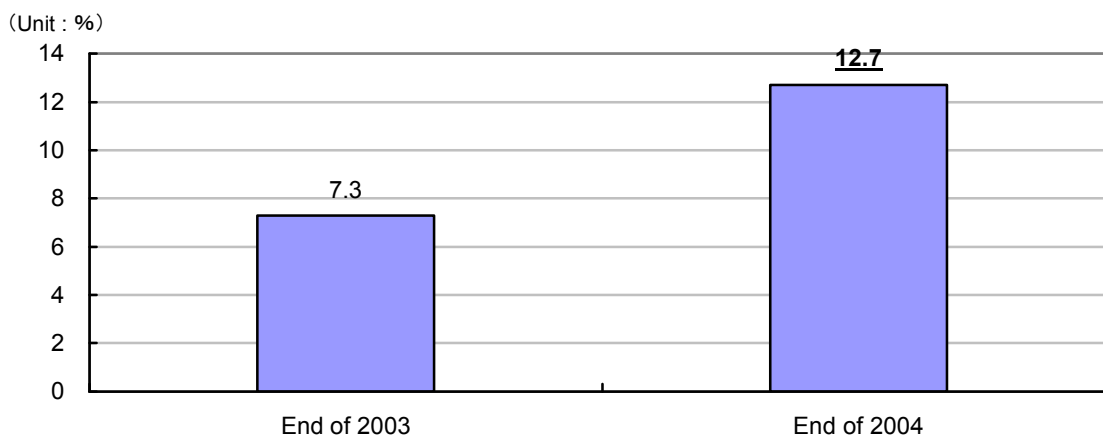


7 Current status of household IP telephony use

◇ Current status of household IP telephony users

The ratio of IP telephony users increased by 5.4 percentage points from the previous year to 12.7%.

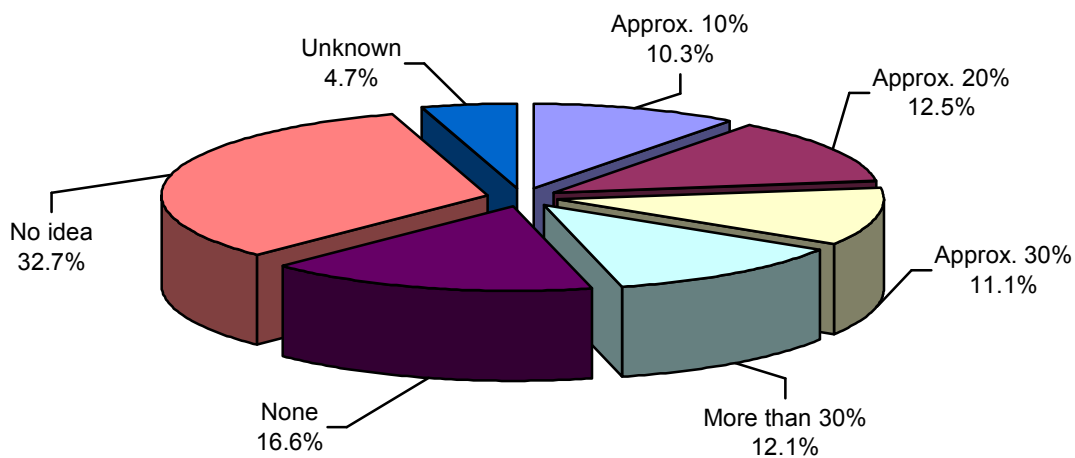
Ratio of household IP telephony users



◇ Effect of the introduction of IP telephony on reduction of household telephone charges

Of households, 46.0% acknowledge the effect of the introduction of IP telephony on reduction of household telephone charges.

The extent of effect of IP telephony introduction on reduction of household telephone charges

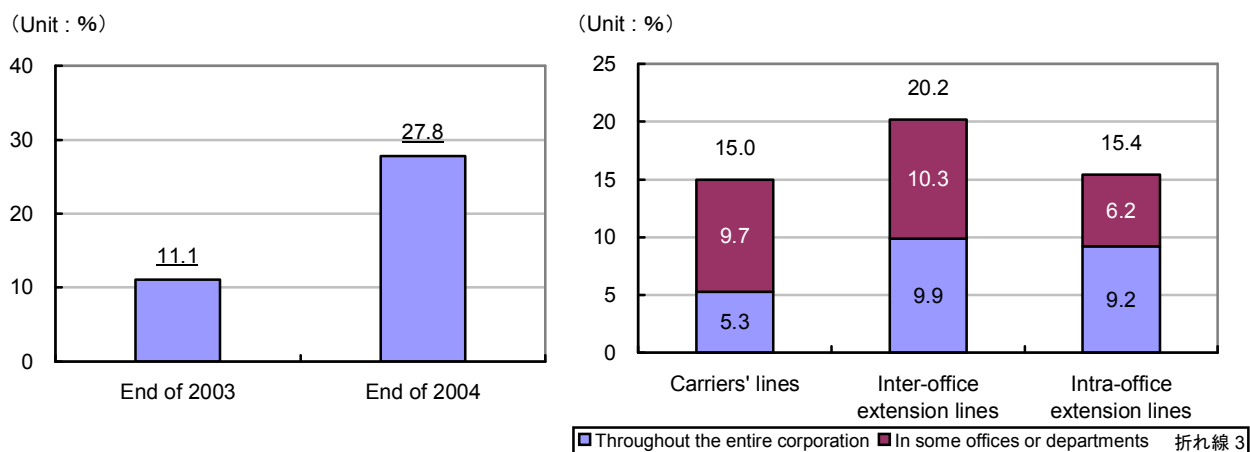


8 Current status of corporate IP telephony use

◇ Current status of corporate IP telephony use

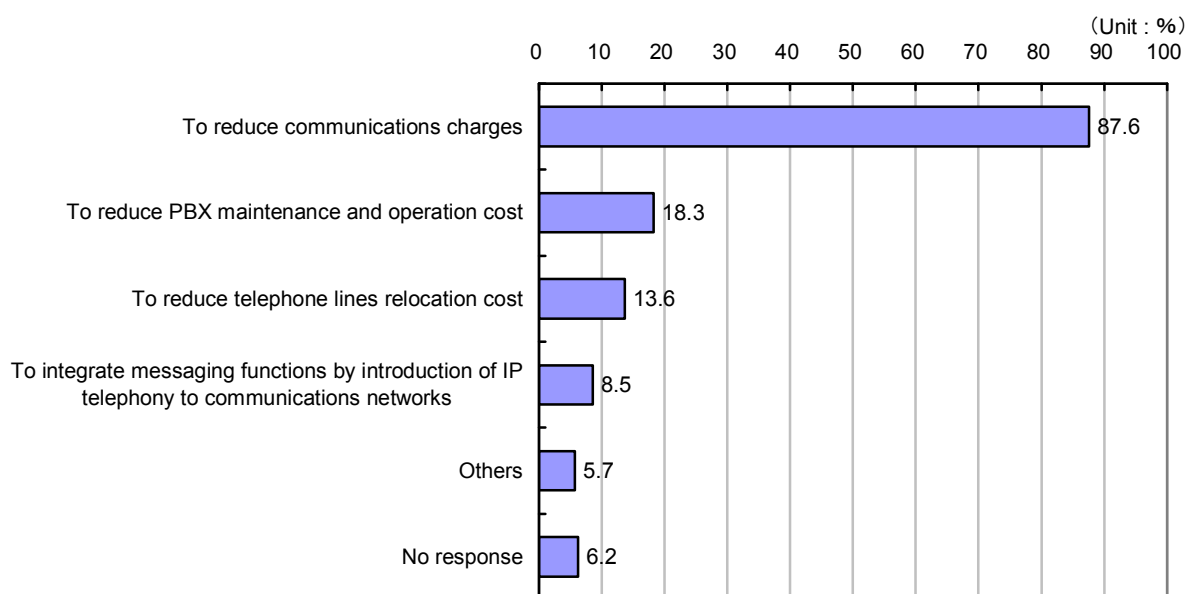
The introduction ratio of IP telephony at corporations almost doubled from the previous year, with an increase of 16.7 percentage points to 27.8%. Introduction to inter-office extensions is the highest of 20.2%, while that to carriers' lines is 15.0%.

Introduction ratio of IP telephony at corporations



◇ Reasons for introduction of corporate IP telephony

Of the reasons for the introduction of IP telephony at corporations, “to reduce communications charges” accounts for the highest percentage, followed by effects on reduction of hardware-related costs such as “PBX maintenance and operation cost” and “telephone lines relocation cost.”

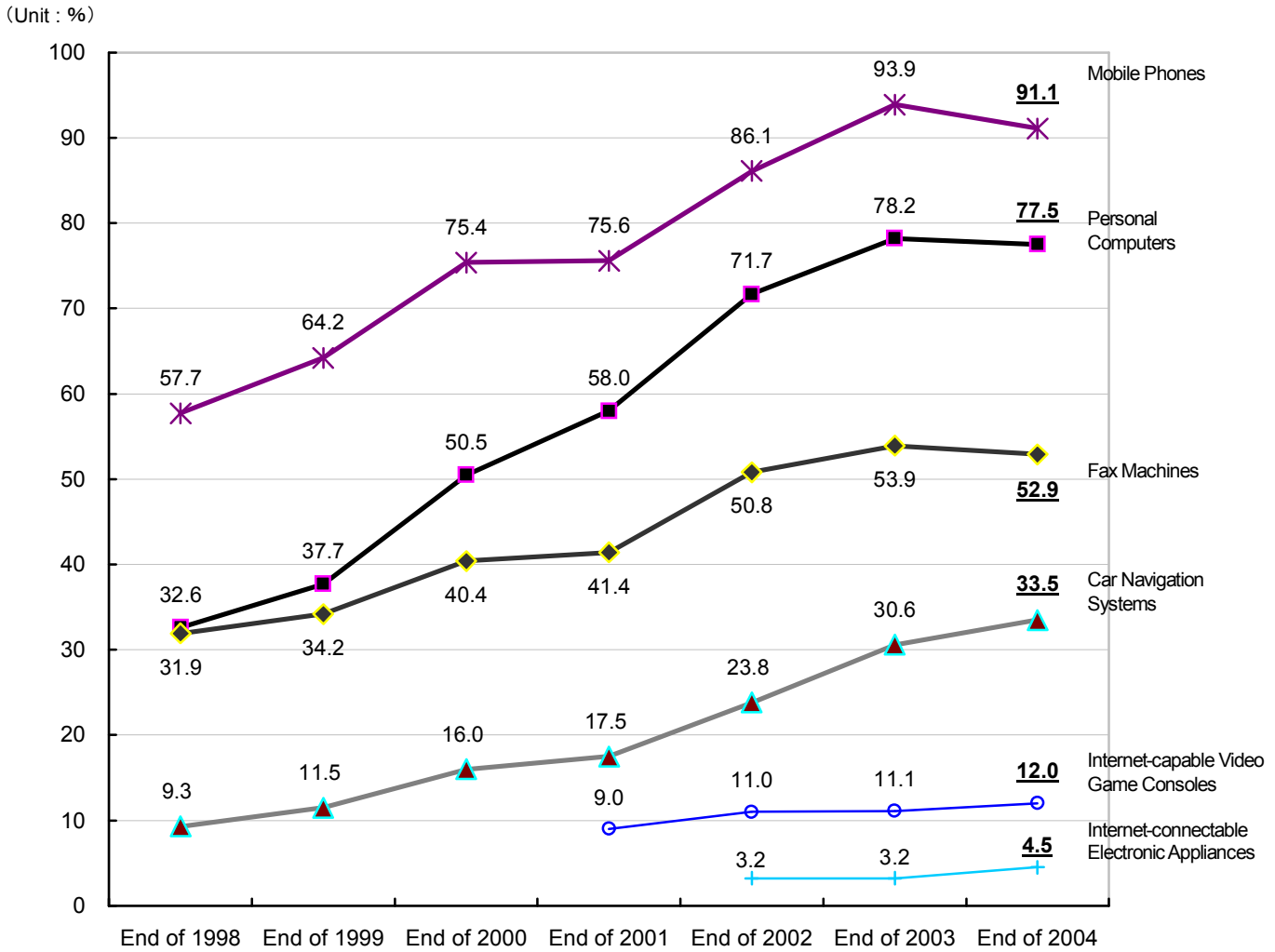


Other Survey Results

I Households and individuals

1 Current status of household ownership of IT devices

◇ **Current status of household ownership of ICT devices**
 Mobile telephones are used by 91.1% of households, while household ownership of personal computers is 77.5% and that of car navigation system is 33.5%.

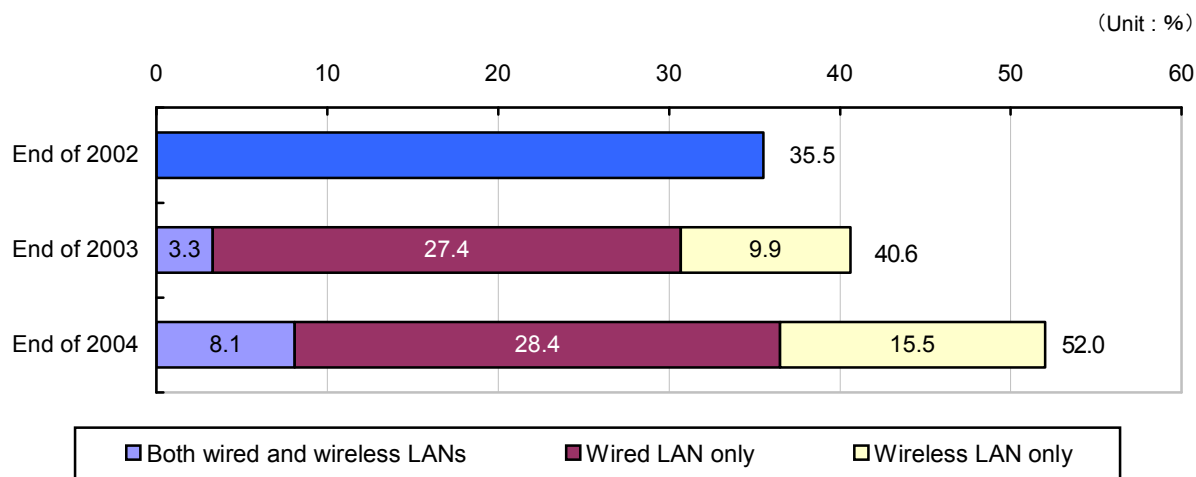


Note : Surveys on Internet-compatible TV game consoles and Internet-accessible consumer electronics have been taken since 2001 and 2002, respectively.

2 Current status of introduction of LAN to households

◇ Introduction ratio of LAN to households

The introduction ratio of LAN to the households owning 2 or more personal computers increased by 11.4 percentage points from the previous year to 52.0%.



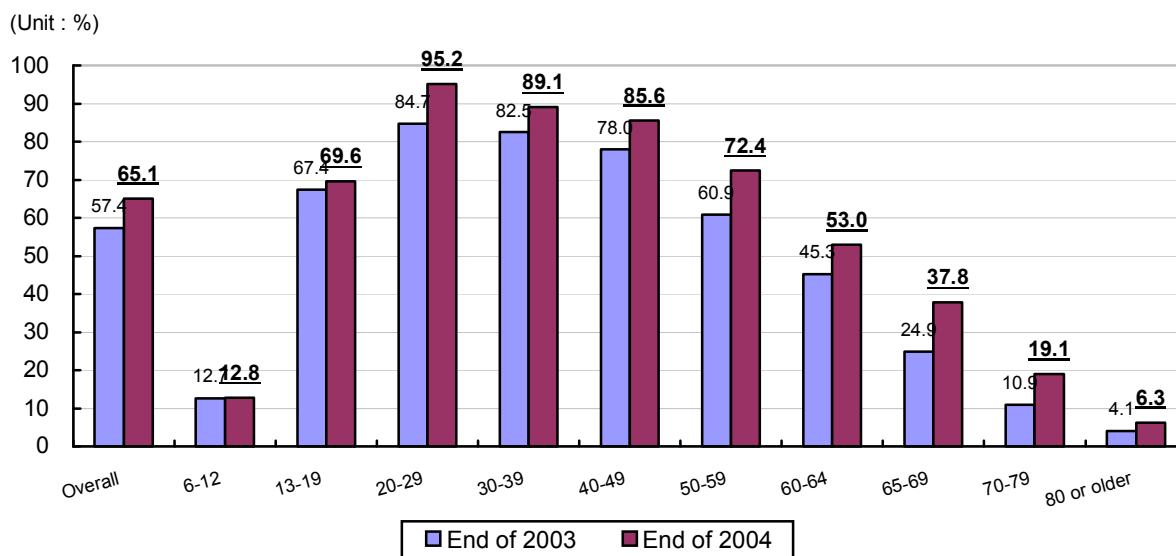
Note: Surveys on both wired and wireless LANs have been taken since 2003.

3 Current status of IT device use by individuals

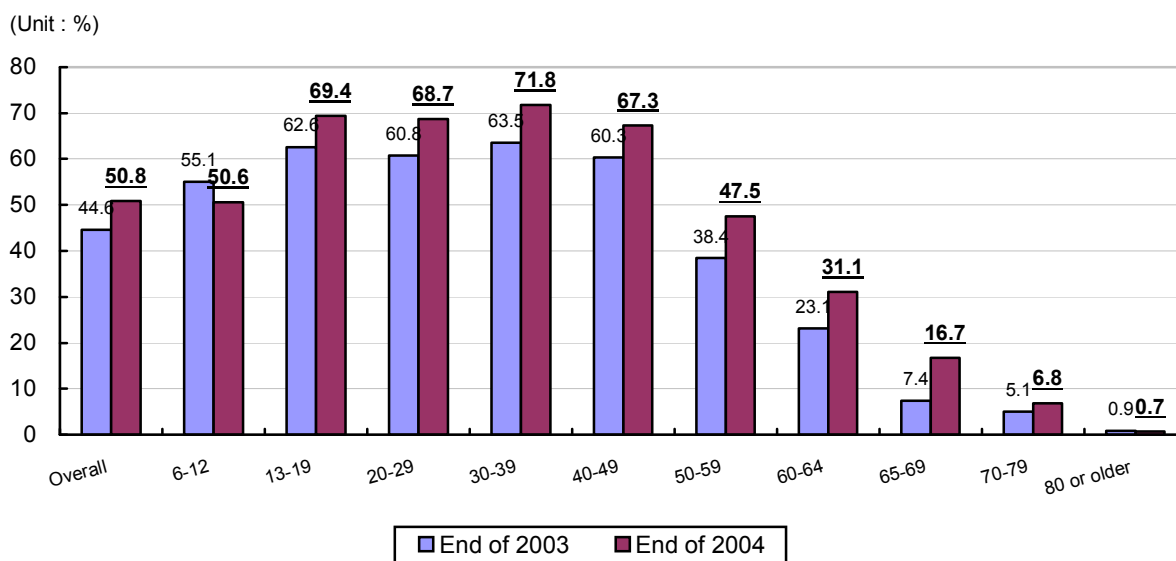
◇ Ratio of individual users of ICT devices by generation

Ratios of mobile telephone users and personal computer users increased in all generations. The growth ratios of such users in their 50s to 60s are relatively high, having slightly narrowed generation gaps in terms of ICT device use.

i) Ratio of mobile telephone use by individuals



ii) Ratio of personal computer use by individuals

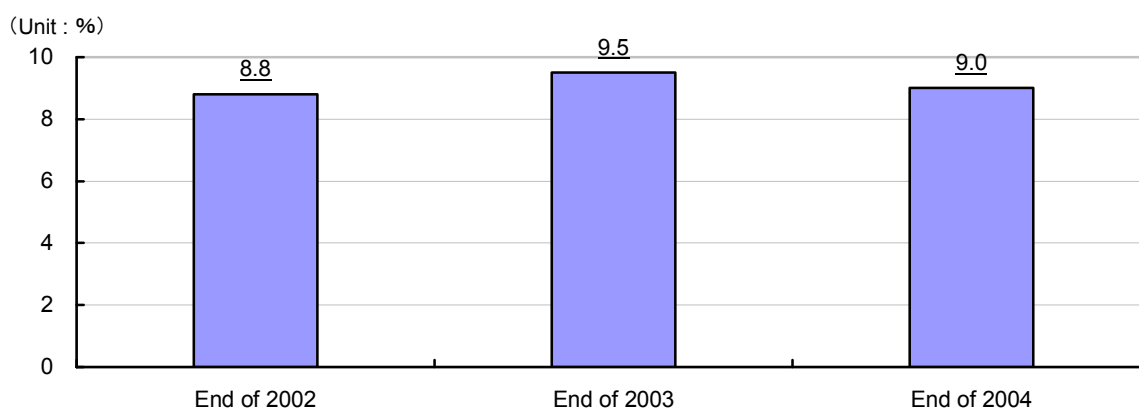


4 Current status of use of public wireless LAN service by individuals

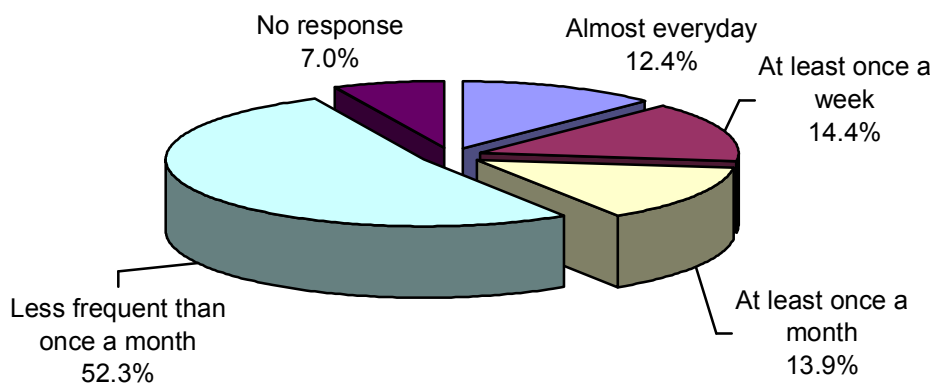
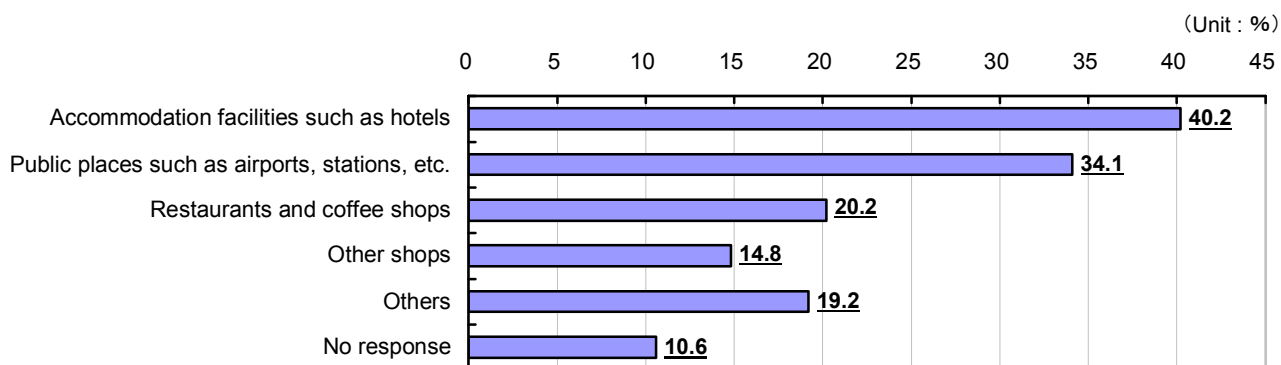
◇ Current status of use of public wireless LAN service, etc. by individuals

Of the Internet users, 9.0% subscribe for the public wireless LAN service. When looking at the place of using such service, “accommodation facilities such as hotels” (40.2%) and “public places such as airports, stations, etc.” (34.1%) account for the largest percentages. By frequency of use, those who use the service “almost everyday” account for 12.4%, with those who use the service once or more per week amounting to nearly 30% when combined with those who use the service “at least once a week.”

Current status of use of public wireless LAN service



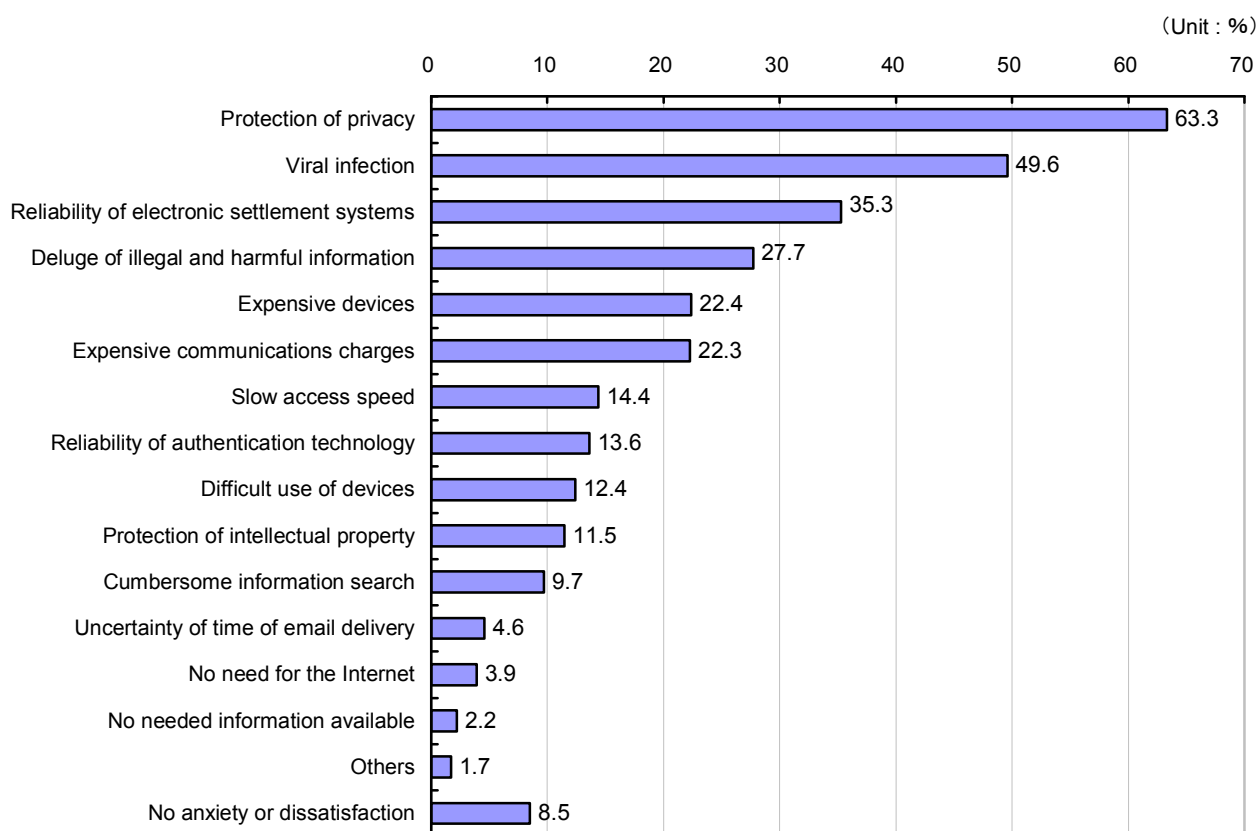
Place and frequency of use of public wireless LAN service



5 Anxieties and dissatisfactions of individuals when using the Internet, and actual damages

- ◇ Among anxieties and dissatisfactions of Internet users when using the Internet, “protection of privacy” is the highest of 63.3%, followed by “viral infection” of 49.6%. With “no anxiety or dissatisfaction” –accounting for a mere 8.5% – most users feel some extent of anxieties and dissatisfactions when using the Internet.

Anxieties and dissatisfactions of Internet users when using the Internet
(multiple replies allowed)

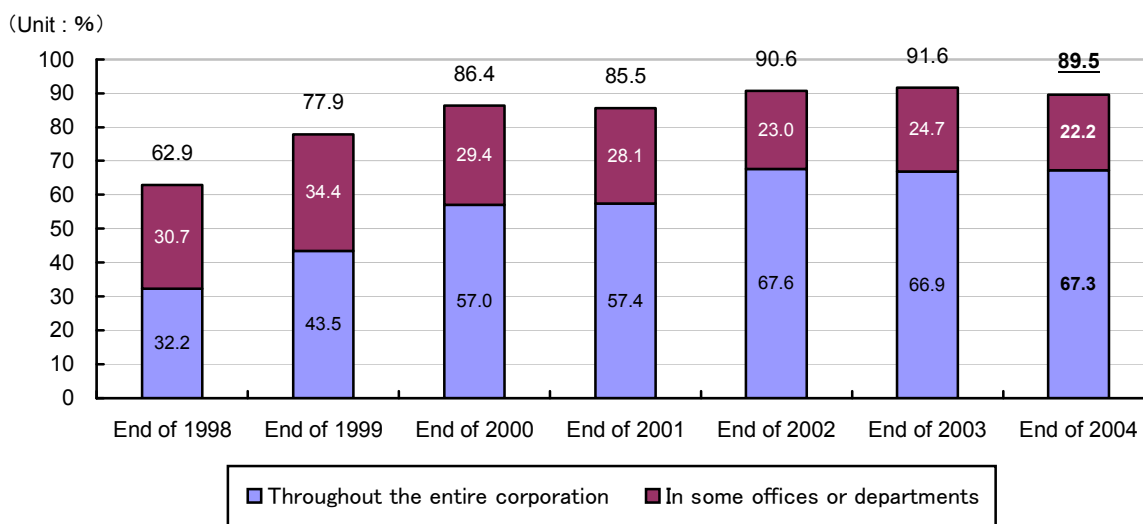


II Corporations

1 Current status of introduction of LAN at corporations

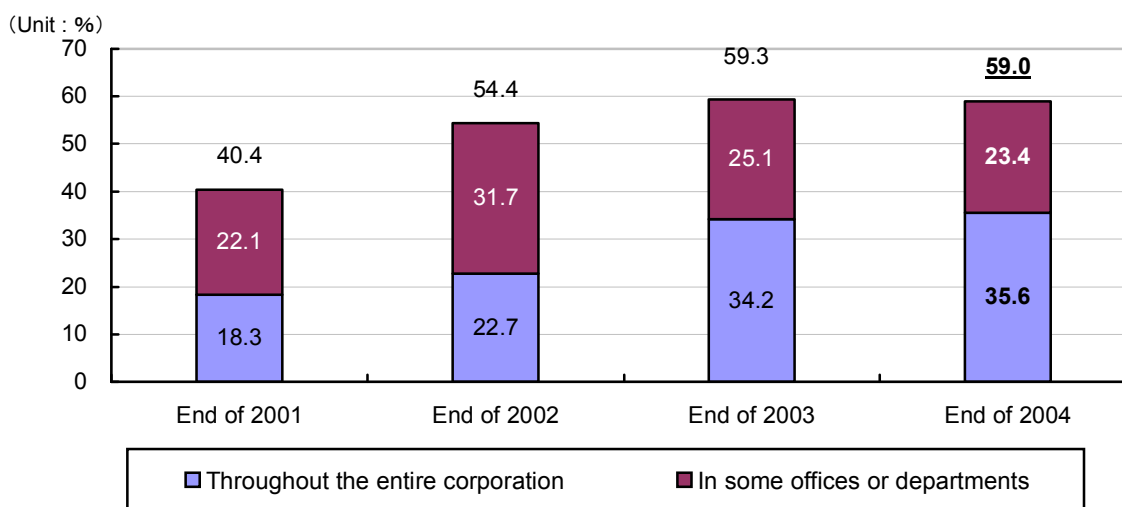
◇ Current status of introduction of LAN at corporations

Of corporations, 89.5% have installed LAN.



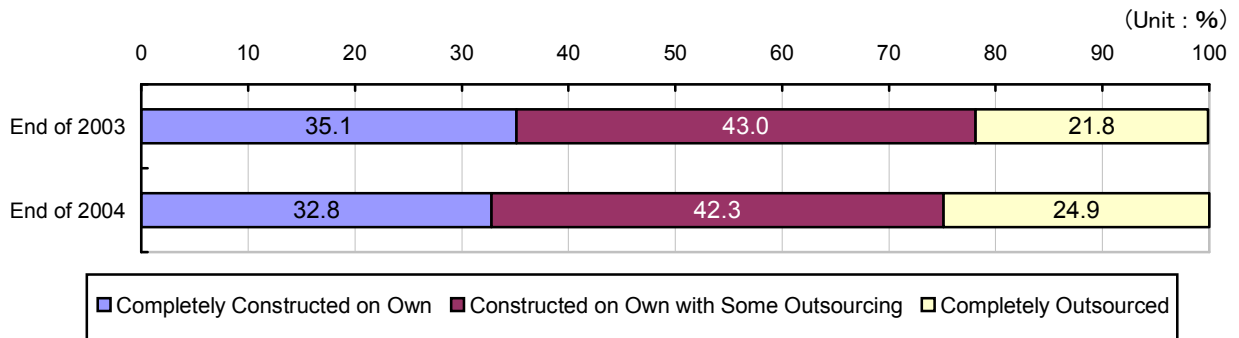
◇ Current status of introduction of WAN at corporations

Of corporations, those who have installed WAN account for 59.0%. By breakdown, those who have installed WAN “throughout the entire corporation” increased by 1.4 percentage points from the previous year.



◇ **Method of installing LAN at corporations**

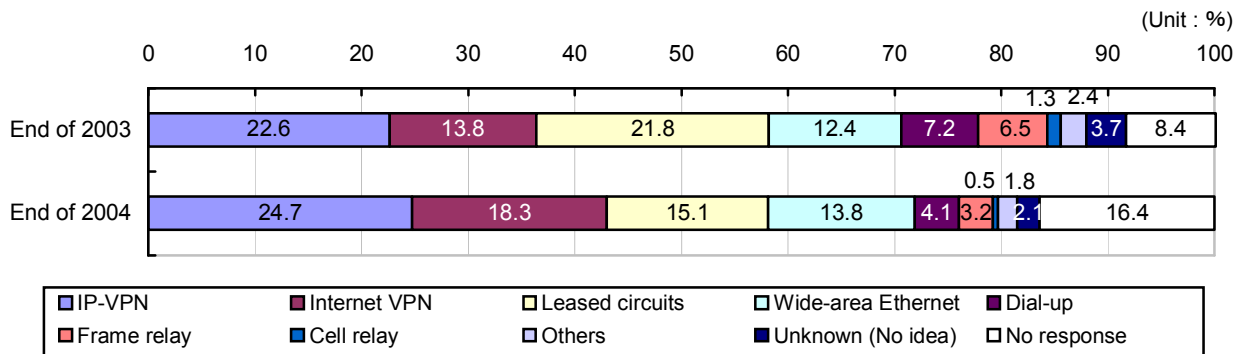
With further shift to outsourcing, corporations who “outsource” “all” or “part” of LAN installation increased by 2.4 percentage points from the previous year to 67.2%, meaning two out of three corporations outsource the installation.



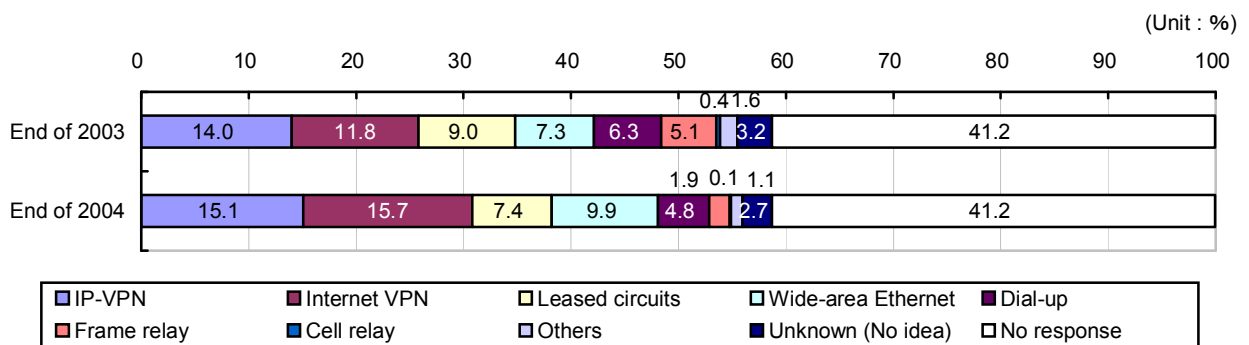
◇ **Communications services used for corporate communications networks**

Of communications services for backbone networks, “IP-VPN” ranked the first place, while for those sub-backbone networks, “Internet VPN” ranked the first place. With respect to both backbone networks and sub-backbone networks, use of “Internet VPN” and “Wide-area Ethernet” increased, while use of “leased circuits” and “frame relay” decreased, indicating a clear shift to new types of communications services.

<Backbone networks>

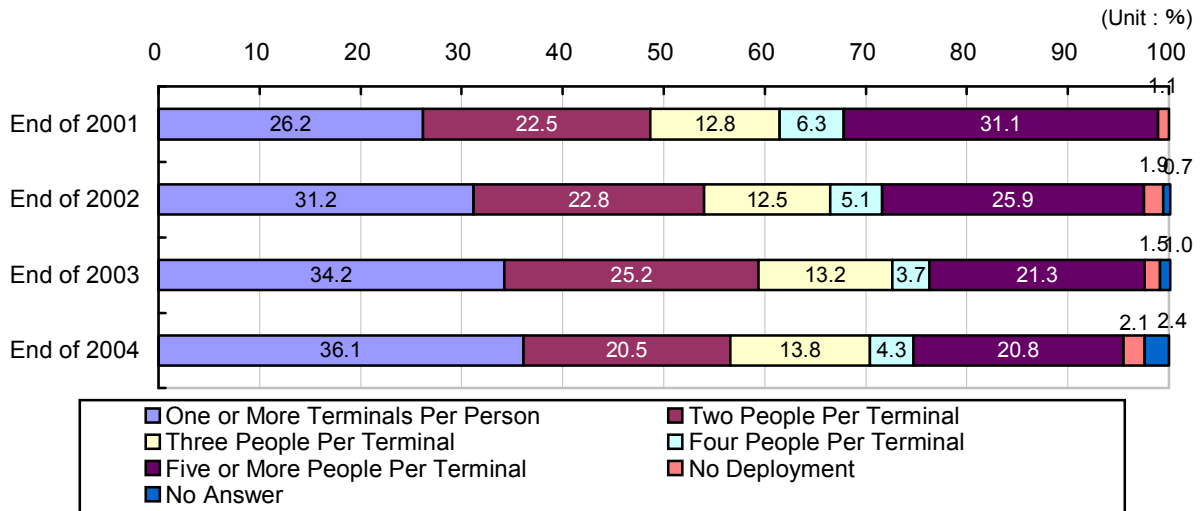


<Sub-backbone>



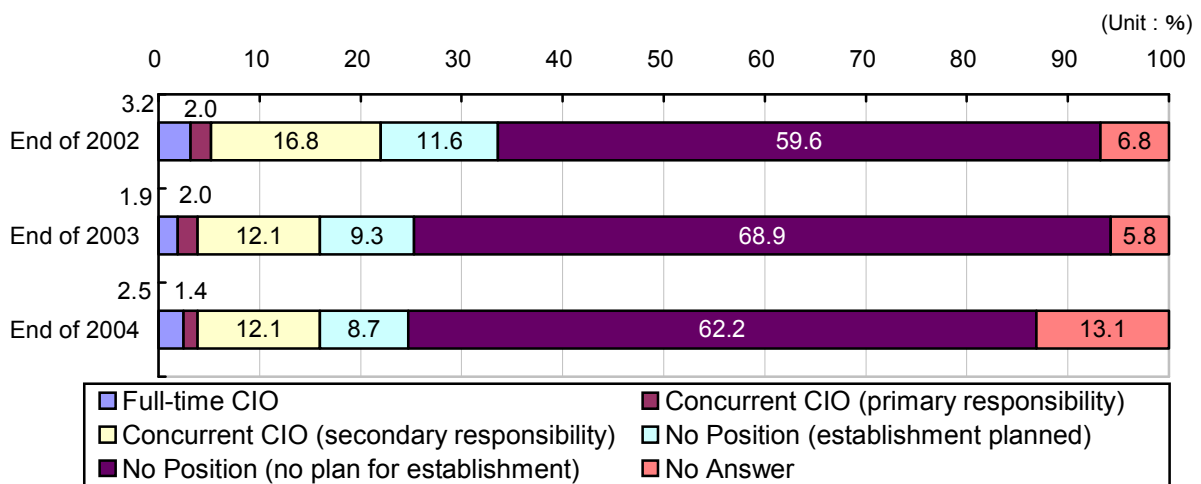
◇ **Current status of availability of access terminals at corporations to access the Internet and LAN**

“One access terminal or more for each employee” is the highest of 36.1%, indicating further progress in this trend.



◇ **Current status of appointment of Chief Information Officer (CIO)**

Of corporations, those who have appointed a “dedicated CIO” is 2.5%. Combined with corporations who have appointed a “CIO concurrently holding another position”, 16.0% of corporations have a CIO.

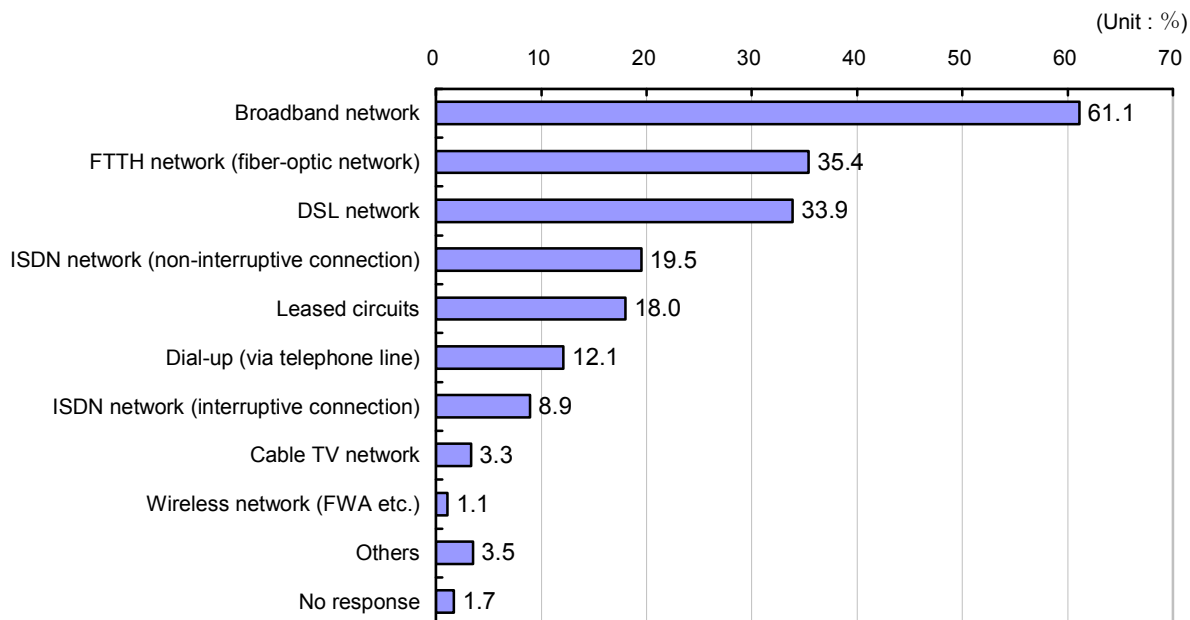


Note : CIO is an officer responsible for the coordination and administration of business strategy and information & communications strategy planning.

2 Current status of Internet use at corporations

◇ Internet access lines at corporations

Of the corporations using the Internet, those who use broadband networks account for 61.1%.

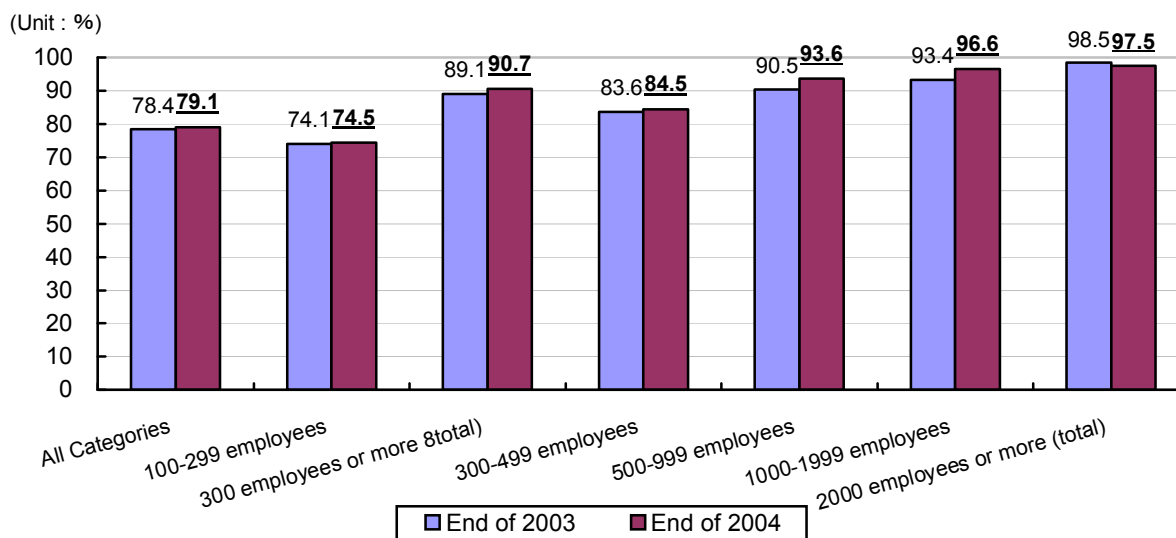


Note : A "broadband network" means a cable TV network, DSL network, fiber-optic network (FTTH network), wireless network (FWA, etc.)

Note : Since multiple replies are allowed, the total may not necessarily tally at 100%.

◇ Ratio of corporations having established own websites

Approximately 80% of corporations have established their own websites. When looking at those corporations by the number of employees, the larger number of employees they have, the more likely they have established their websites.



3 Current status of introduction of telework at corporations

◇ Current status of introduction of telework at corporations

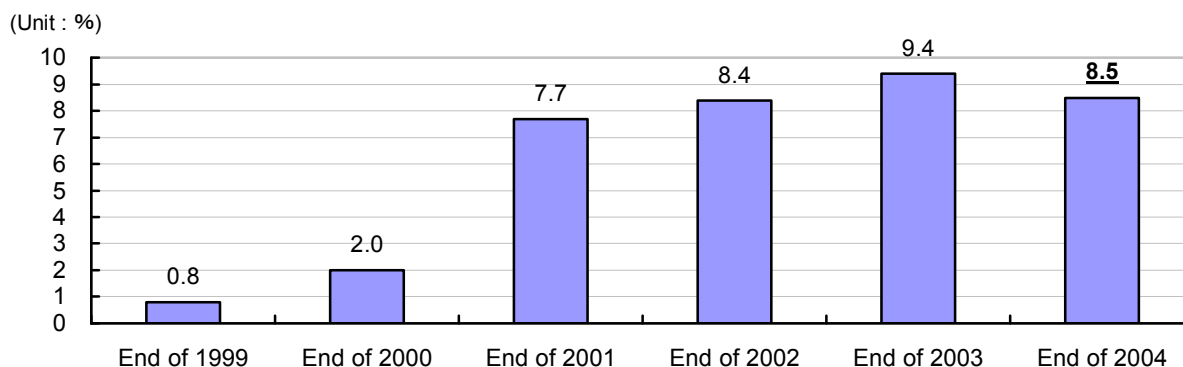
The introduction ratio of telework at corporations decreased by 0.9 percentage point from the previous year to 8.5%.

Of the corporations who have introduced telework, those corporations whose less than 5% of employees use telework account for over 50%. Meanwhile those corporations whose 10% or more of employees use telework account for over 30%.

Of the purposes of the introduction of telework, “to improve efficiency (productivity) in routine work” is the highest of 61.4%, followed by “to reduce employees’ commuting time” of 48.4%.

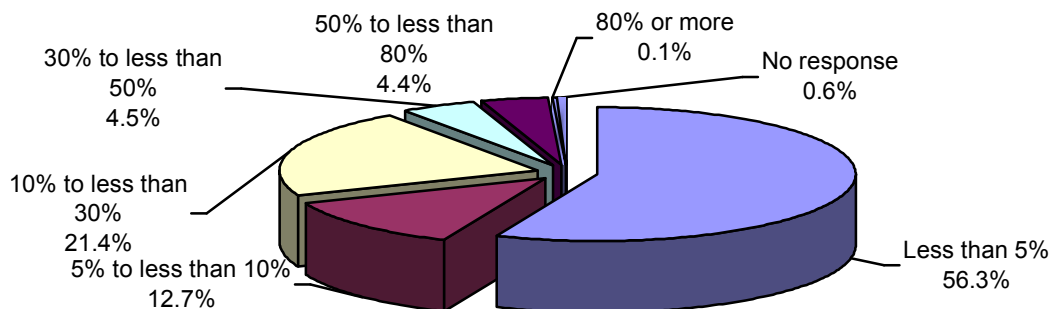
Of the corporations who have introduced telework, 90% or more of them acknowledge that telework is “effective”.

The ratio of telework introduction at corporations

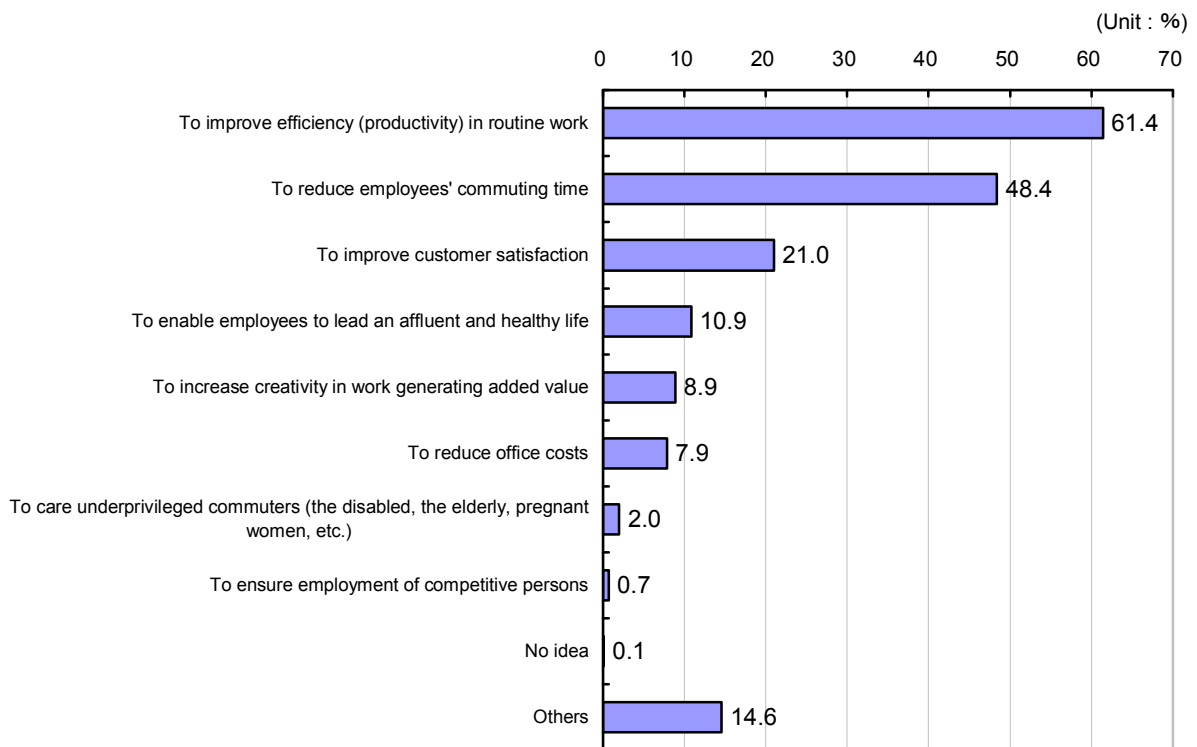


Note "Telework" : means a work style that enables employees to work at a place remote from the corporate headquarters as if they were in the headquarters by use of communications network. Specific forms of telework include working at home, mobile work (which means work involving frequent traveling as of sales representatives) and satellite office (which means work at an office far from headquarters).

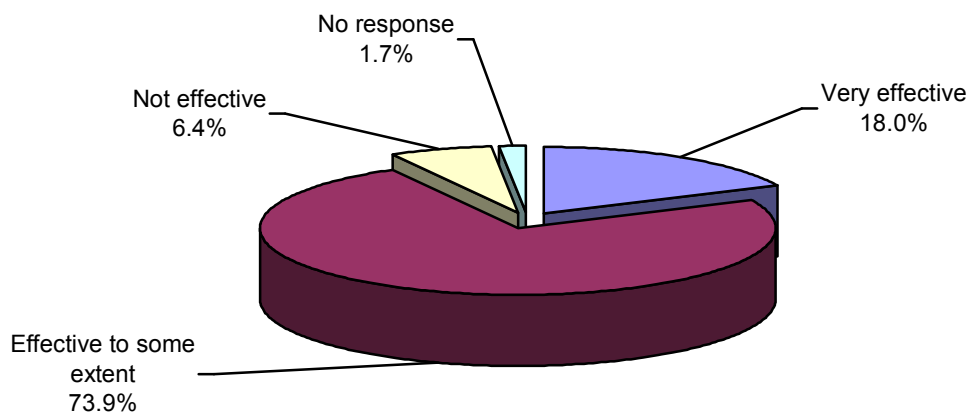
Ratio of employees using telework



Purpose of introduction of telework (multiple replies)



Effect of introduction of telework

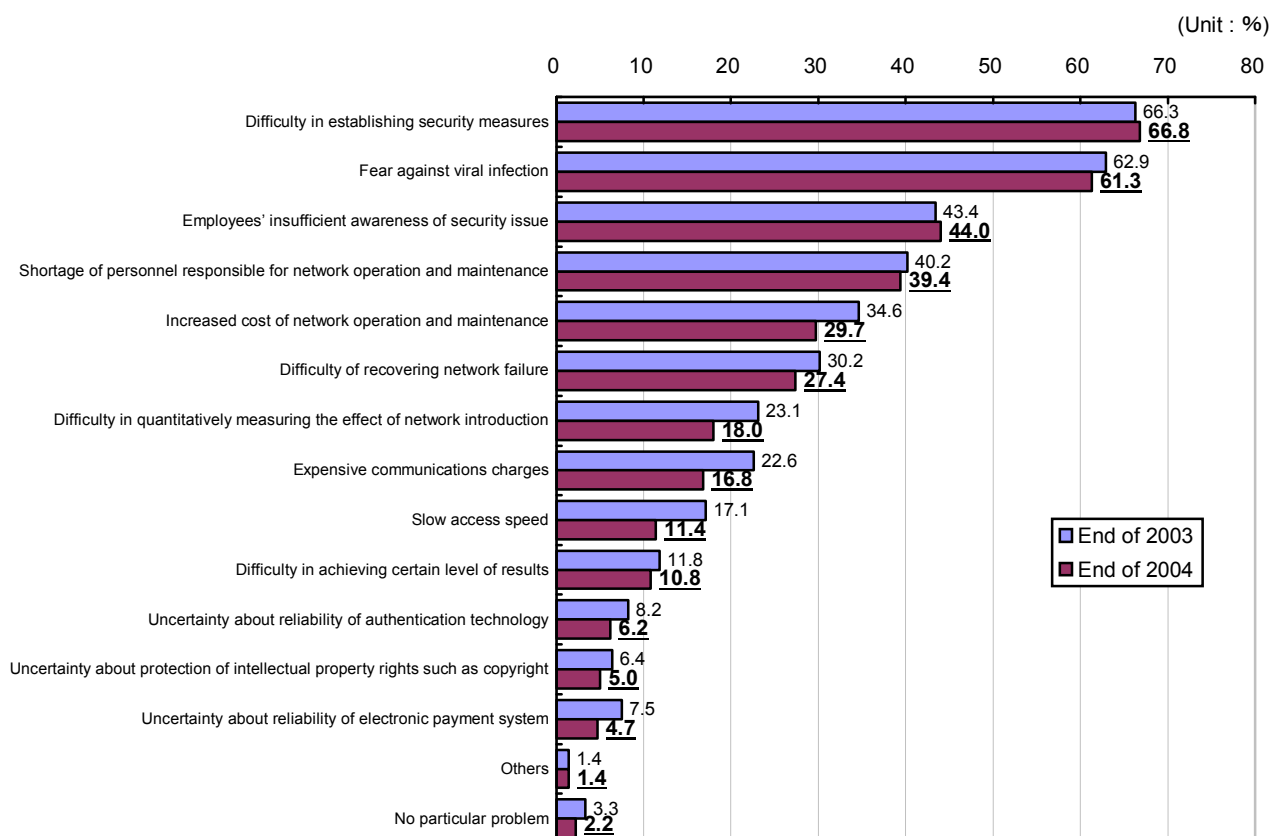


4 Problems in using information and communications network at corporations

◇ Problems in using information and communications network and those preventing use of information and communications network at corporations

Of such problems, “difficulty in establishing security measures” is the highest of 66.8%, followed by “fear against viral infection” of 61.3%. “Security issues” ranked the high places as the last year, while a considerable number of corporations listed human resources issues such as “awareness of employees” and “shortage of personnel responsible for network operation and maintenance”.

Problems in using information and communications network and those preventing use of information and communications network at corporations (multiple replies)



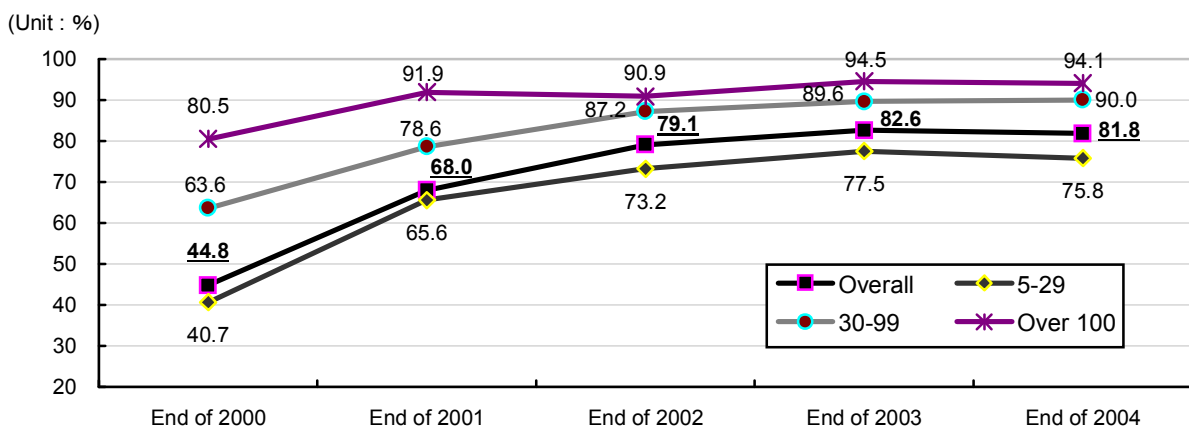
III Offices

1 Current status of Internet use at offices

◇ Ratio of Internet use at offices

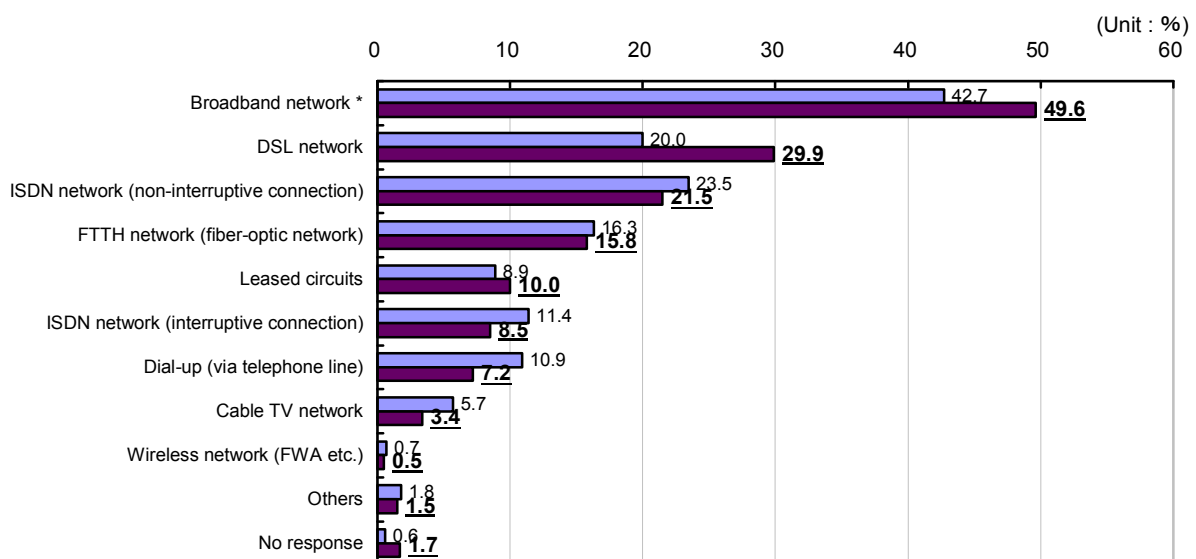
The ratio of offices using the Internet remains almost the same as the last year. The larger number of employees the offices has, the more likely they have access to the Internet.

Changes in the ratio of offices using the Internet



◇ Access lines to the Internet at offices

Of the offices having access to the Internet, those using broadband network increased to 49.6% from the previous year of 42.7%.



Note : The figure for Broadband network is the total of figures for cable TV network, DSL network, FTTH network (fiber-optic network) and wireless network (FWA, etc.)

2 Current status of ownership of information and communications devices at offices

◇ Current status of ownership of information and communications devices at offices

Of the offices, 67.0% of them possess mobile telephones, while 93.2% and 97.8% of them possess PCs and facsimile, respectively.

