

Section 3

Enriching National Life and Resolving Social Problems

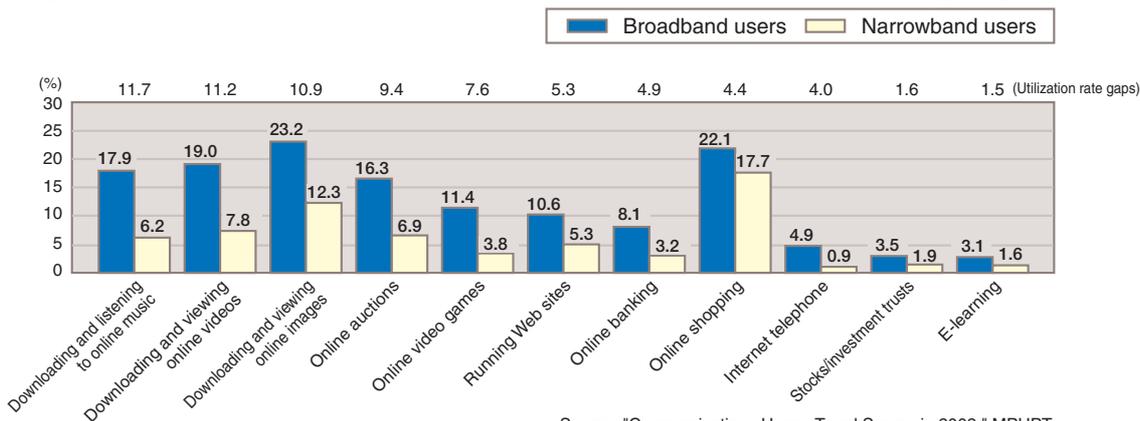
1. Advanced Use of the Internet

While broadband is rapidly diffusing in Japan, broadband users are found to be utilizing the Internet more than narrowband users in terms of purposes, frequency, and length of time. For example, broadband users mark higher utilization rates for all purposes of Internet use compared to narrowband users. In particular, their utilization rates are more than 10 points higher than those of narrowband users with respect to downloading and viewing/listening

to online music, videos, and images (Figure 1-25).

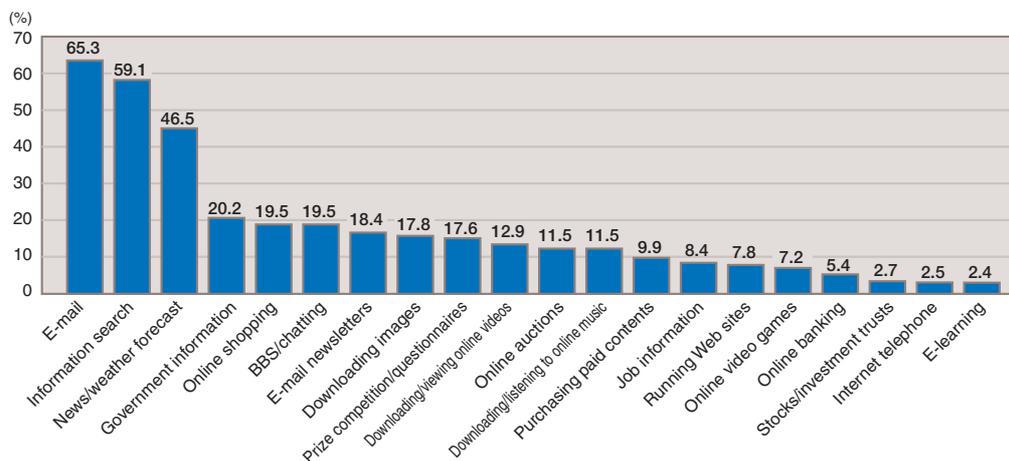
Looking at the utilization rate of the Internet accessed from home PCs by purpose, the rate is high for e-mail (65.3%), information search (59.1%), and news/weather forecasts (46.5%), indicating that e-mail and information gathering are the most popular forms of usage. Although the utilization rates for other purposes remain at about 20% or below, the Internet is being used for extremely diverse purposes (Figure 1-26).

Figure 1-25: Internet Utilization Rate of Broadband Users and Narrowband Users by Purpose



Source: "Communications Usage Trend Survey in 2002," MPHPT.

Figure 1-26: Purposes of Internet Use from PCs (multiple answers)



Source: "Communications Usage Trend Survey in 2002," MPHPT.

As for the purposes of Internet use from cell phones/PHS, use of “e-mail” (83.3%) was outstandingly high, followed by “downloading/listening to online music, such as ringer melodies” (45.8%) and “purchasing paid contents” (37.3%) (Figure 1-27).

2. Lifestyles Changing Through Use of the Internet

The fact that 59.1% of Internet users cite “information search” as the purpose of using the Internet shows that the Internet has undoubtedly become an important information gathering medium for users. When users were asked to name the two most frequently used information sources for gathering respective types of information, Internet Web pages were found to be a medium very frequently used in line with television and newspapers for acquiring various information. It can be said that the

Internet has become established as one type of information source for people (Figure 1-28).

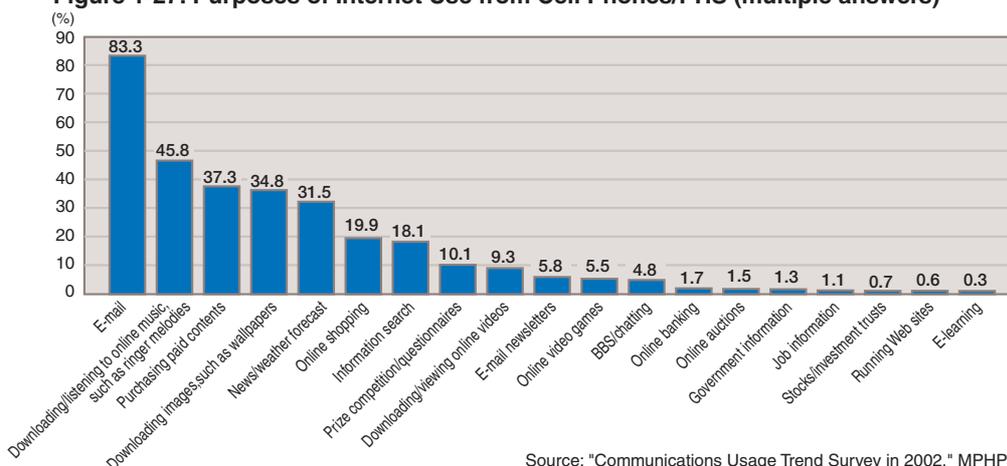
In the meantime, the utilization rate of online shopping by Internet users accessing from PCs is 19.5%. The top ranking items purchased through online shopping are books/CDs, PC-related products, and tickets, products of which content can be confirmed without looking at them first-hand, but many amusement products/sundries, fashion accessories, and jewelry are also frequently purchased (Figure 1-29).

3. Digital Divide and Its Resolution

(1) Current status of the gaps in use of the Internet/broadband

There are gaps in the Internet utilization rates according to generation, gender, city size, and householder’s income of the users. Although the utilization rate has

Figure 1-27: Purposes of Internet Use from Cell Phones/PHS (multiple answers)



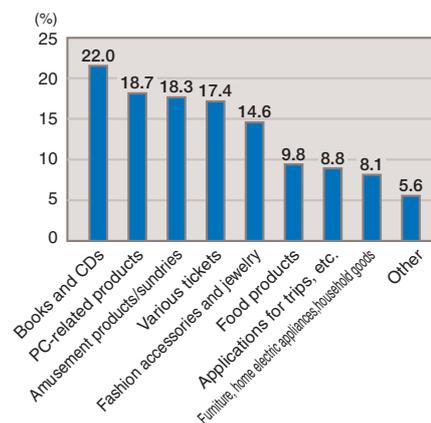
Source: “Communications Usage Trend Survey in 2002,” MPHPT.

Figure 1-28: Most Frequently Used Information Sources (up to two answers)

	1st	2nd	3rd	4th
General news	TV (89.5%)	Newspapers (57.7%)	Web pages (40.5%)	Radio (5.4%)
Details on social events	Newspapers (58.7%)	TV (57.0%)	Web pages (45.4%)	Magazines (11.9%)
Emergency information	TV (82.4%)	Web pages (55.0%)	Radio (21.0%)	Newspapers (12.2%)
Amusement products information	Web pages (83.3%)	Magazines (44.7%)	Books (16.9%)	TV (16.2%)
Information on illnesses	Web pages (61.8%)	TV (30.1%)	Books (29.9%)	Newspapers (16.8%)

Source: “Survey on Utilization of IT in National Life”.

Figure 1-29: Items Purchased Through Online Shopping (multiple answers)



Source: “Communications Usage Trend Survey in 2002,” MPHPT.

increased over the previous year for all of the attributes as of the end of 2002, the gaps still remain (Figure 1-30).

Such gaps based on the attributes of generation, gender, city size, and householder's income also exist in the broadband utilization rate (proportion of broadband users among all samples in the respective attributes). With regard to the proportion of broadband users among Internet users accessing from home PCs, the gap exists by gender, householder's income, and city size. Among these, the gap by city size is the most notable; the utilization rate in towns and villages is less than half of that in the 23 wards of Tokyo/government-designated cities/prefectural capitals. However, the gap by generation, which was found to be the widest with respect to use/non-use of the Internet, was insignificant among Internet users accessing from home PCs (Figure 1-31).

(2) Factor analysis of the gaps in the use of the Internet/broadband

There are gaps in the use of the Internet by generation, gender, city size, and householder's income. In order to compare the effect these four factors have on the use/non-use of the Internet, analysis was conducted by using Quantification Theory II.

As a result, "generation" had the most impact on the use/non-use of the Internet with the older population tending to use the Internet less (Figure 1-32).

In addition, as a result of conducting a similar analy-

sis to compare the effect of each attribute on the use of broadband among Internet users, the most influencing factor on the use of broadband was found to be city size. However, the generation factor, which had the most influence on the use/non-use of the Internet had little impact on the use/non-use of broadband among Internet users (Figure 1-33).

4. Information and Communications that Contribute to Resolving Social Problems

Today, Japan holds many social concerns and problems, such as concerns about the prolonged economic slump, the aging of the population, deterioration of the global environment, food and health, as well as public security. However, information and communications can be utilized to resolve or mitigate these social concerns and problems.

When a survey was conducted on the social, regional, and personal concerns and problems, which people saw a particular need to be addressed, many people cited the increasing bankruptcy/unemployment, the battered social systems pertaining to the aging of the society, global environment issues, food safety, their own health conditions with respect to lifestyle-related diseases, and the increasing burden of nursing care due to the aging of the population (Figure 1-34).

Figure 1-30: Transitions in Internet Utilization Rate by Attribute

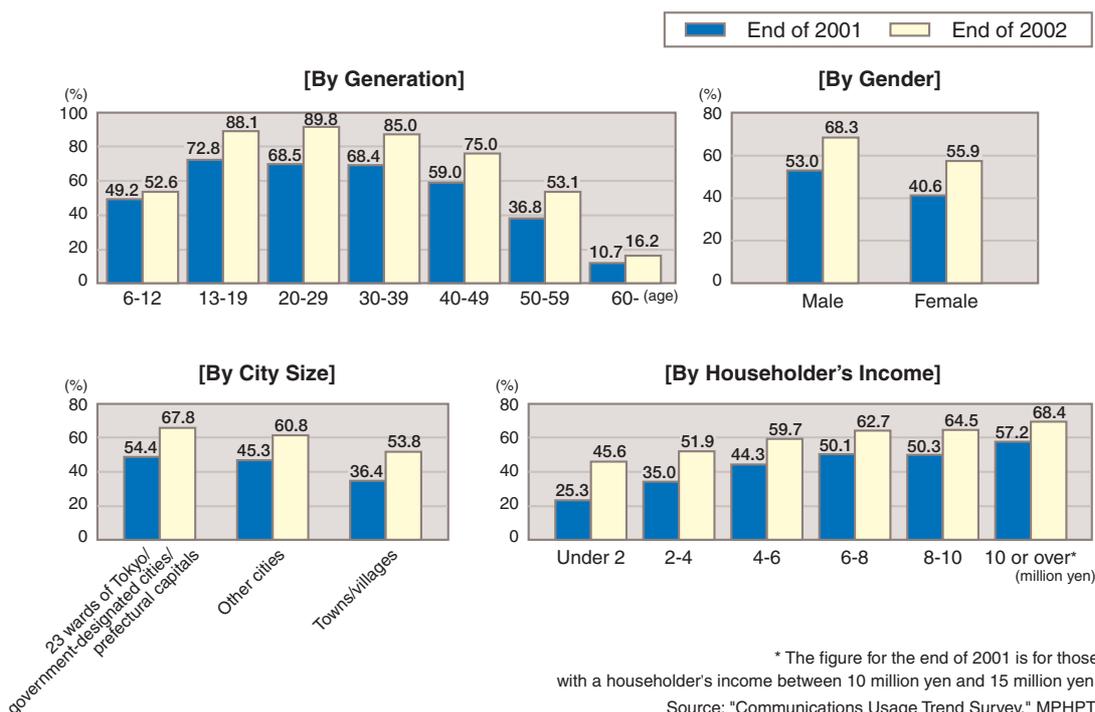
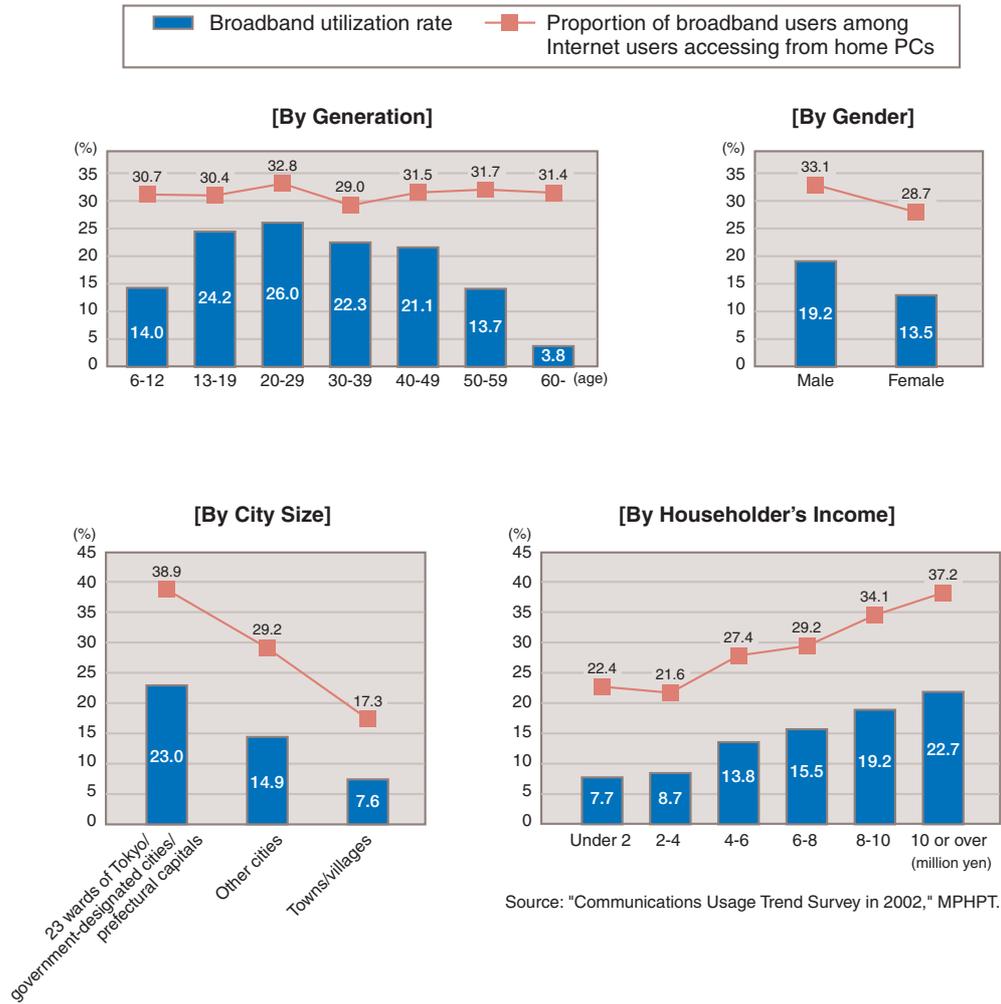


Figure 1-31: Broadband Utilization Rate by Attribute



Source: "Communications Usage Trend Survey in 2002," MPHPT.

Figure 1-32: Effect of Each Attribute on Internet Use

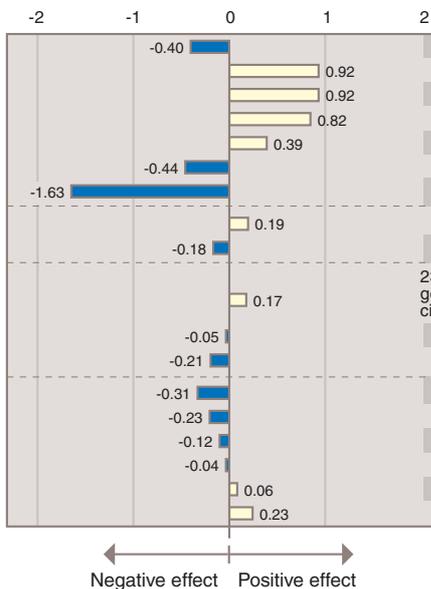
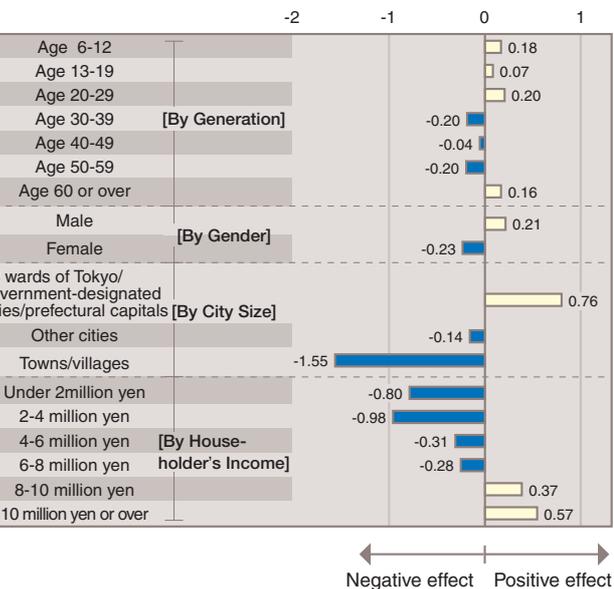
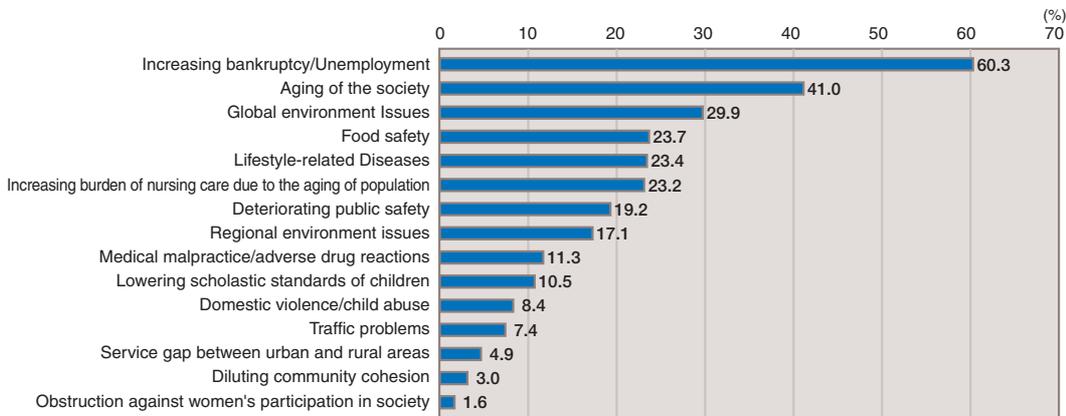


Figure 1-33: Effect of Each Attribute on Broadband Use among Internet Users



Source: "Communications Usage Trend Survey in 2002," MPHPT.

Figure 1-34: Japan's Concerns and Problems Particularly Needing to Be Addressed (up to three answers)



Source: "Survey on Utilization of IT in National Life."

(1) Food traceability systems

Problems that would undermine consumer confidence in food, such as food poisoning and tampering, have been occurring frequently in recent years.

To counter such problems, food traceability systems have been proposed to provide consumers with detailed information on individual food products and to make it easier to find the cause and recall problematic food products when an incident occurs. A food traceability system is a system of attaching an ID to individual food products in the production phase to allow anybody to trace the distribution route of those food products via the Internet based on the attached ID.

In a consumer intention survey on the food traceability system, 33.6% of respondents answered that they would buy food products using this system even for prices higher than ordinary food products. According to this result, the needs for food traceability systems are estimated to be worth 104.2 billion yen.

(2) Monitoring systems for energy conservation

The power consumption in the home sector has increased by about 1.9 times over the 16 years from 1985 to 2001. Today, further energy conservation efforts are required to respond to global environmental issues, such as resource depletion and global warming.

A monitoring system for energy conservation is a system that enables energy saving by monitoring the individual energy consumption amount and status for lighting, air-conditioning, audio/visual equipment, and other equipment at home and offices by using information and communications technology.

In an intention survey on the monitoring system for energy conservation, 36.7% of households accessible to the Internet from home PCs answered that they would like to use the system. If the system were diffused according to this intention, 4.6% (equivalent to 282.6 billion yen annually on an electric charge basis) of the power current-

ly consumed at home nationwide could be expected to be saved.

(3) Development of occupational skills through e-learning during times of unemployment

The unemployment rate reached 5.2% and the number of unemployed marked 3.49 million in February 2003 due to the stagnation of the economy. In the present job market, mismatches between the skills of job-seekers and the positions that are vacant are presenting a problem as a cause of delaying employment. In order to eliminate such mismatches and promote reemployment of the unemployed, more unemployed people need to receive occupational training and acquire the skills necessary for getting a job.

At present, public vocational training organizations and various entrusted organizations provide occupational training to the unemployed, but in addition to such conventional training that requires the trainees to visit the training sites, educational/training opportunities through e-learning have started to be provided mainly to people with physical restrictions, such as those who have jobs and the physically-challenged, allowing the trainees to learn at home.

In an intention survey on the system for developing occupational skills through e-learning on an assumption of losing one's job, 30.4% of the respondents answered that they would like to use such a system even if a fee was charged. According to the result of this survey, the number of potential users of the system for developing occupational skills through e-learning at times of unemployment (number of the unemployed) is estimated to be 1.29 million.

(4) E-learning for lifelong education via the Internet

In line with the aging of the population and maturation of society, and because the skills required at workplaces are rapidly changing due to digitization and global-

ization, there are growing needs for lifelong education, which is an independent learning activity conducted throughout one's life.

A remote learning system using information and communications (e-learning) is a system that allows people to study through the educational programs of a variety of Japanese and overseas educational institutions at home at anytime.

In an intention survey of Internet users on e-learning using the Internet, 18.2% of respondents indicated an intention to use such a system. According to this result, the number of potential Japanese users of e-learning via the Internet is estimated to be 6.84 million. E-learning via the Internet is expected to provide diverse learning opportunities and contribute to increasing the population engaged in lifelong education.

5. Promotion of e-Government and e-Local Governments

(1) Digitization status of procedures between citizens/companies and the government

E-government and e-local governments will enable all citizens and companies to enjoy administrative services

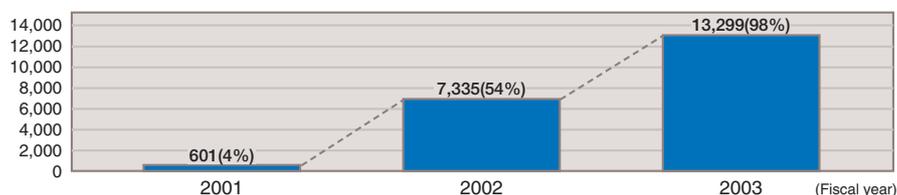
without being restricted by time or location and will realize pleasant and convenient national life and business activities. Coupled with reform of the operations and simplification/rationalization of the procedures, they will also contribute to simplifying as well as enhancing efficiency and transparency of administrative management. Up to now, the government has been making efforts to digitize administrative procedures and improve access to administrative information.

With regard to digitization of administrative procedures, all ministries and agencies have completed installation of the necessary systems including certification systems and general-purpose reception systems by the end of fiscal 2002. Among the procedures of national administrative organizations, 7,335 procedures (implementation rate: 54%) are scheduled to be digitized by the end of fiscal 2002 and 13,299 procedures (implementation rate: 98%) are scheduled to be digitized by the end of fiscal 2003 (Figure 1-35).

(2) Introduction of IT within administrative organs

The government has been developing its information and communications infrastructure, such as installation of LANs and PCs within ministries and establishment of

Figure 1-35: Number of Online Applications, Notifications, and Other Procedures Made Available by National Administrative Organizations (cumulative total)



Source: Based on "Action Plan 2002."

Figure 1-36: Transitions in the Installation of LANs in National Administrative Organizations

Category	FY 2001					FY 2002				
	Internal divisions	Facilities, etc.	Special organizations	Local branch offices	Total	Internal divisions	Facilities, etc.	Special organizations	Local branch offices	Total
Organizations subject to LANs installation	320	904	394	3,412	5,030	335	969	404	3,489	5,197
Organizations with LANs	320	865	215	1,702	3,102	335	965	273	2,047	3,620
Installation rate (%)	100.0	95.7	54.6	49.9	61.7	100.0	99.6	67.6	58.7	69.7
Organizations connected with the LAN of the main ministries/agencies		173	133	1,327	1,633		201	181	1,640	2,022
Connection rate (%)		20.0	61.9	78.0	58.7		20.8	66.3	80.1	61.6

*1 The "organizations subject to LAN installation" are those among the surveyed organizations for which LAN installation has been planned by ministries and agencies.

*2 The percentages for "installation rate" and "connection rate" are rounded off to the first decimal place.

*3 The "total" of the "connection rate (%)" shows the proportion to the total number of organizations with LANs excluding "internal divisions" (FY 2001: 2,782 organizations; FY 2002: 3,285 organizations).

networks between the main ministries/agencies and field agencies, from the viewpoint of speeding up and improving the efficiency of information transmission and information sharing.

As for LANs within ministries, LANs have been established in 69.7% of the overall national administrative organizations by fiscal 2002. The installation is nearly complete for internal divisions (100%) and facilities (99.6%). The introduction is also steadily making progress in special organizations (67.6%) and local branch offices (58.7%) (Figure 1-36).

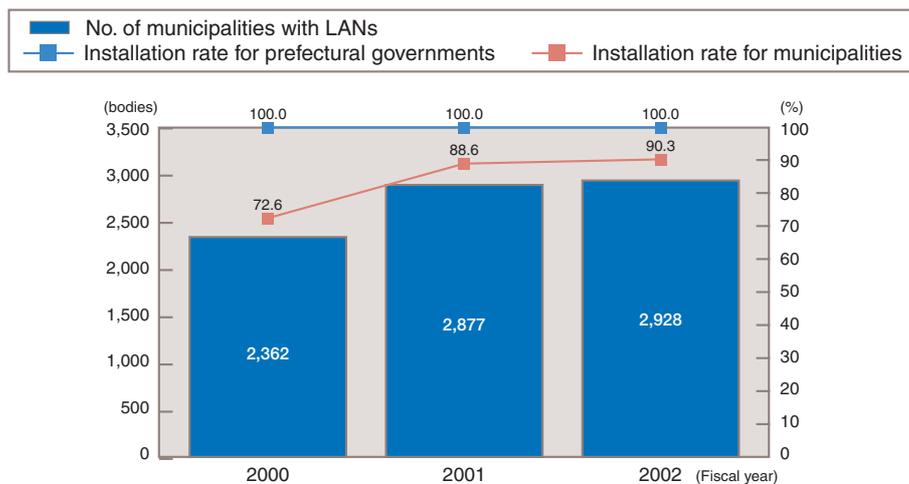
(3) Promotion of e-local governments

Local governments promote IT projects in an organized and comprehensive manner by clarifying a basic policy on IT promotion in the local area, and formulating a digitization plan for the local area (Local IT Plan), which systematically and exhaustively lists concrete measures.

By April 2002, 26.9% of local governments (a 3.6 point increase over the previous year) had formulated a Local IT Plan.

The number of PCs used in local governments in fiscal 2002 was 383,000 units in prefectural governments (a 19.7% increase over the previous year) and 744,000 units in municipalities (a 32.4% increase over the previous year). The installation rate of LANs within local governments was 100% for prefectural governments and 90.3% for municipalities, indicating rapid progress as in the case of PCs (Figure 1-37).

Figure 1-37: Transitions in the Installation Rate of LANs Within Local Governments



Source: Based on "Overview of Local Government Information Management."