

16 Communications

Telecommunications Market

Japan's domestic telecommunications business was the monopoly of Nippon Telegraph and Telephone Public Corporation until April 1985, when NTT became a private company and Japan's telecommunications market was opened up to other companies. In July 1999 NTT was reorganized under a holding company, which has accelerated mergers and the entry of foreign capital into the telecommunications industry and stimulated more competition among phone companies.

The mobile phone market is growing rapidly. As of the end of 2005, the number of cellular phone users was 90.2 million. The major players in the domestic mobile phone market are NTT DoCoMo with a 55.9% market share, au (KDDI) with 23.7%, and Vodafone with 16.8%. In February 1999 NTT DoCoMo started the mobile online service i-mode. Faced with i-mode's great success, other competitors followed suit. The number of subscribers to such services reached 78.25 million by the end of 2005.

NTT DoCoMo in October 2001 launched the world's first third-generation mobile phone service FOMA, which enables users to enjoy large-capacity and high-speed communication of text, music, and video. As of the end of 2005, there were 20.13 million subscribers to this service. In April 2006 "one-segment broadcasting service," or "one seg" for short, which brings terrestrial digital broadcasts to mobile phones, was introduced, enabling people on trains, for example, to enjoy digital TV programs in high definition.

The number of Internet users at the end of 2004 was about 79.48 million, up 2.8% from the previous year. The government in January 2001 announced an "e-Japan Strategy," aimed at establishing one of the world's most advanced Internet networks within five years. The strategy set the target of providing ultra high-speed constant access (ex. optical fiber) to 10 million households and high-speed access (ex. xDSL, cable TV) to 30 million households by fiscal 2005. According to the Ministry of Internal Affairs and Communications, as of the end of 2004, the ratio of broadband users of all households connected to the Internet was 62.0%, an increase of 14.2 percentage points.

According to a survey conducted by the Ministry of Economy, Trade and Industry, the size of Japan's business-to-business electronic commerce market was ¥102.7 trillion in 2004. The size of business-to-consumer e-commerce expanded by 28% over the previous year to ¥5.64 trillion.

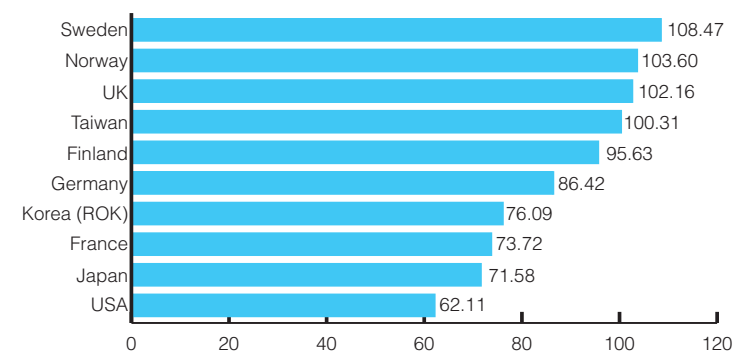
Major Means of Communication Within Japan

| FY | Telephone (million subscribers) | Mail (billion items) | Telegram (million items) | Pager (million subscribers) | Cellular phone (million subscribers) |
|------|------------------------------------|-------------------------|-----------------------------|--------------------------------|---|
| 1995 | 61.1 | 24.3 | 41.4 | 10.6 | 10.2 |
| 1996 | 61.5 | 25.0 | 40.2 | 10.1 | 20.9 |
| 1997 | 60.5 | 25.3 | 37.6 | 7.1 | 31.5 |
| 1998 | 58.6 | 25.5 | 36.2 | 3.8 | 41.5 |
| 1999 | 55.6 | 25.7 | 34.1 | 2.1 | 51.1 |
| 2000 | 52.3 | 26.1 | 31.1 | 1.4 | 60.9 |
| 2001 | 51.0 | 26.2 | 28.8 | 1.1 | 69.1 |
| 2002 | 51.2 | 25.7 | 27.2 | 1.0 | 75.7 |
| 2003 | 51.6 | 24.8 | 25.3 | 0.8 | 81.5 |
| 2004 | 51.6 | 23.5 | 21.8 | 0.6 | 87.0 |

Source: Ministry of Internal Affairs and Communications.

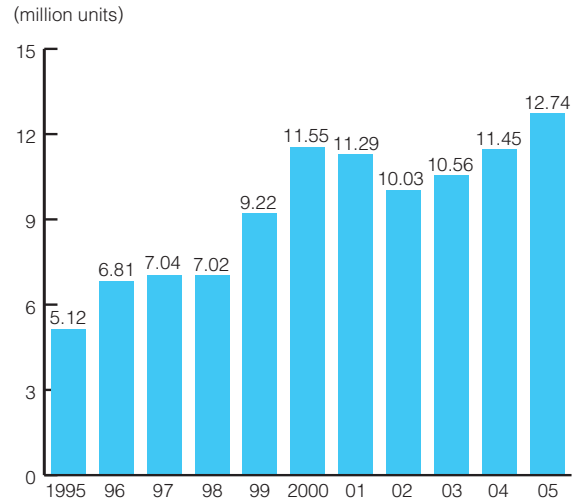
Note: Figures for telephone, pager, and cellular phone subscribers are as of the end of the fiscal year.

Cellular Phone Subscribers per 100 Inhabitants by Country, 2004



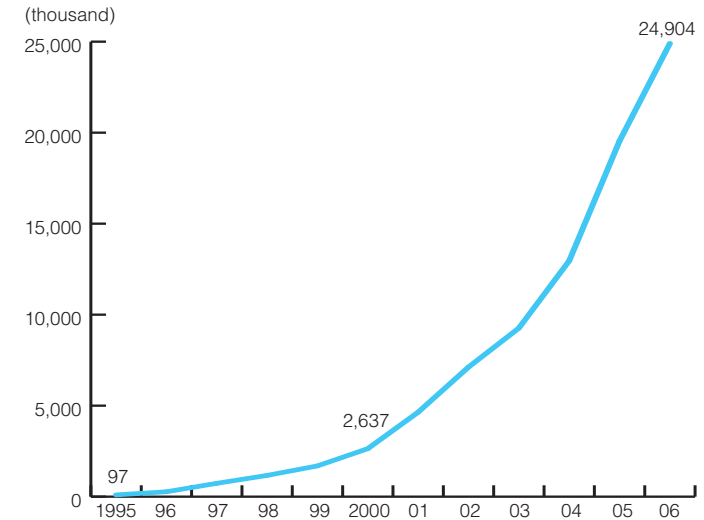
Source: International Telecommunication Union.

Domestic Personal Computer Sales



Source: Japan Electronics and Information Technology Industries Association.

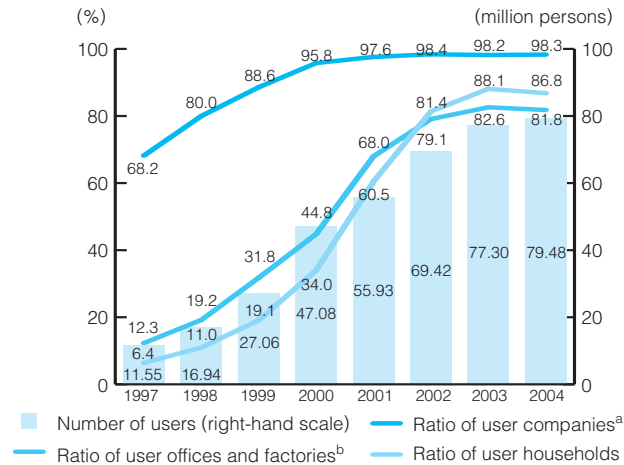
Internet Hosts in Japan



Source: Based on data from the Internet Software Consortium (<http://www.isc.org/>).

Note: Figures are as of January.

Diffusion of the Internet in Japan



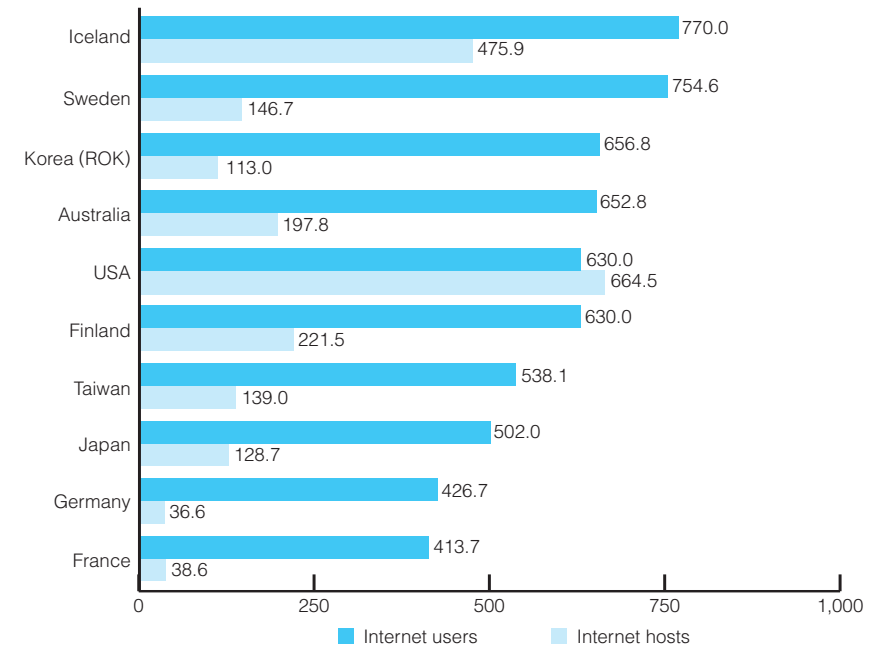
Source: Ministry of Internal Affairs and Communications.

Note: As of end of year.

a. Companies with 300 employees or more, excluding those in agriculture, forestry, fisheries, and mining.

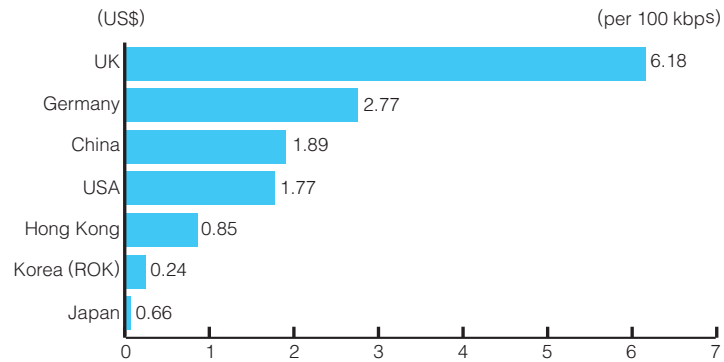
b. Offices and factories with 5 employees or more, excluding those in posts and telecommunications.

Internet Users and Hosts per 1,000 Inhabitants by Country, 2004



Source: International Telecommunication Union.

Broadband Fees in Major Countries, 2003



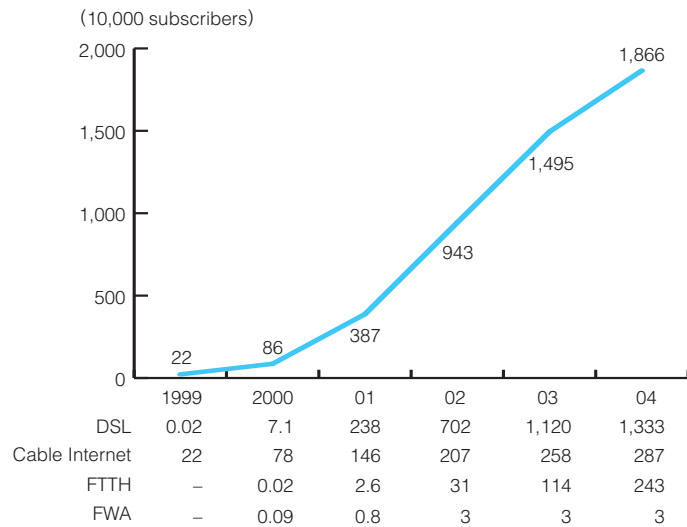
Source: Ministry of Internal Affairs and Communications, *Joho tsushin hakusho* (White Paper on Information and Communications), 2005.

Broadband Subscribers in Major Countries, 2003

| | Broadband subscribers (10,000) | Broadband subscribers per 100 inhabitants |
|-------------|--------------------------------|---|
| USA | 2,715 | 9.3 |
| Korea (ROK) | 1,118 | 11.7 |
| Japan | 1,492 | 23.3 |
| China | 1,052 | 0.8 |
| Canada | 465 | 14.7 |
| Germany | 456 | 5.5 |
| France | 336 | 5.6 |
| Taiwan | 302 | 13.4 |
| UK | 182 | 3.1 |

Source: Ministry of Internal Affairs and Communications, *Joho tsushin hakusho* (White Paper on Information and Communications), 2005.

Trends in Broadband Subscribers



Source: Ministry of Internal Affairs and Communications, *Joho tsushin hakusho* (White Paper on Information and Communications), 2005.

Note: DSL = digital subscribers line; FTTH = fiber to the home; FWA = fixed wireless access.