

Japan's Broadband Policy

The world's most advanced IT nation

Society in which every Japanese national
can enjoy the benefits of IT

Society in which the promotion of economic structural reforms and
strengthening of international competitiveness of industry are realized

Society in which all Japanese can enjoy comfortable, and affluent
daily lives and local communities with diversity and vitality are realized

Society in which international contributions to the realization of an
advanced information and telecommunications network society
on a global scale are made

Policy Framework for Promoting the IT Revolution

Structure of the Government Strategy

IT Basic Law
(Implemented in January 2001)



IT Strategy Headquarters
(January 2001)

Approach of the IT Strategy Headquarters

e-Japan Strategy (IT Strategy Headquarters, January 2001)

Goal : The most advanced IT nation within 5 years



e-Japan Priority Policy Program (March 2001)

Materializaion of the e-Japan Strategy, State measures to be implemented promptly and steadily



e-Japan 2002 Program (June 2001)

Annual program for e-Japan Strategy and e-Japan Priority Policy Program

e - J a p a n Strategy

1 . Establishment of an ultra high-speed network infrastructure and promotion of competition

- Enable all the people who need it to have ultra high-speed access networks (30-100Mbps as a standard) at affordable rates. (Aim to provide high-speed constant access networks to at least 30million households and ultra high-speed constant access to 10million households)
- Enable all the people to have constant access to the Internet at extremely low rates within one year through the use of fixed-line, wireless and other kinds of networks.
- Promote the shift to the Internet networks equipped with IPv6.

2 . Facilitation of electronic commerce

- Facilitate e-commerce aggressively by 2002 through constructing the framework and market rules by which everyone can safely participate in it.

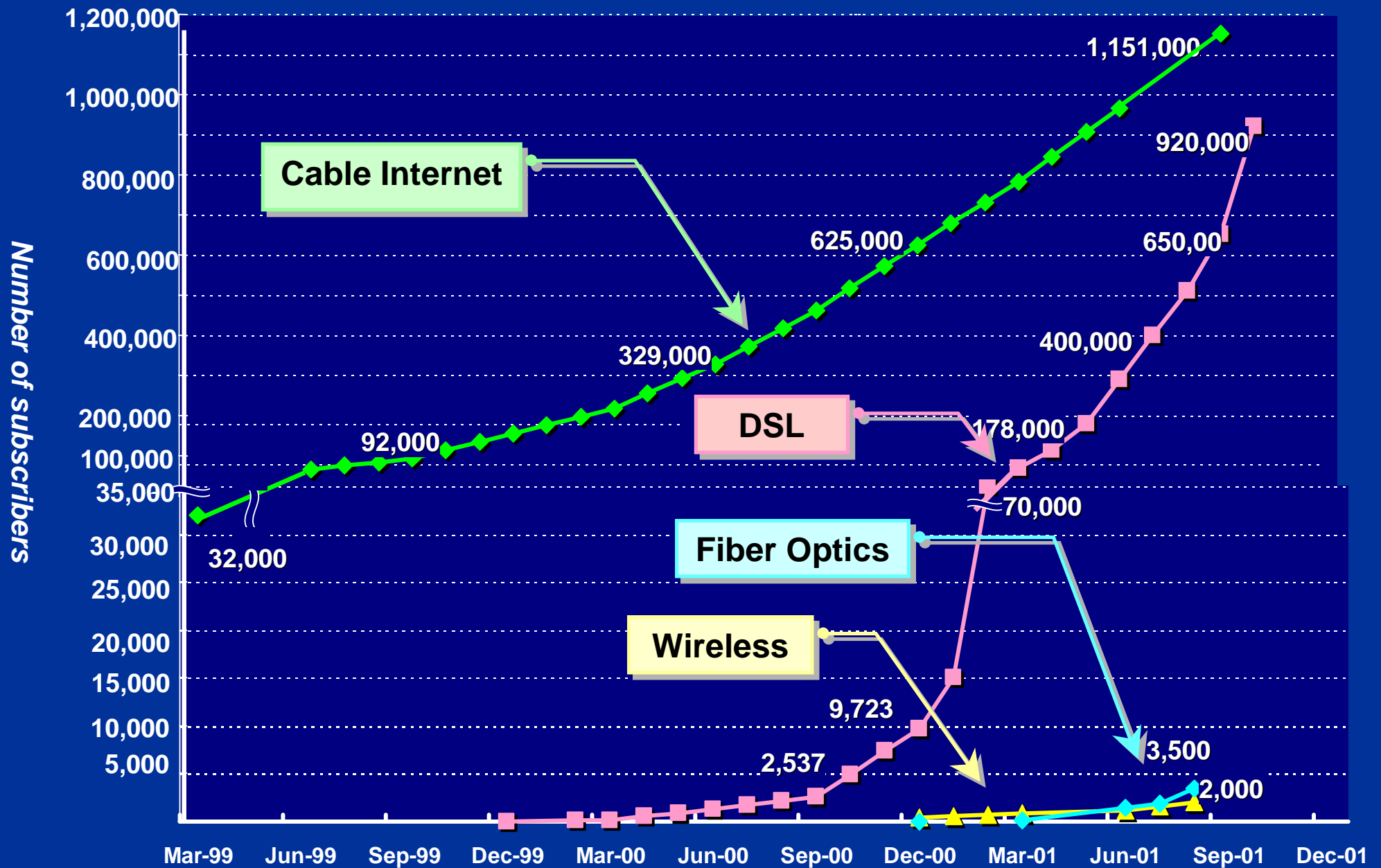
3 . Realization of electronic government

- Realize an e-government, which handles electronic information in the same manner as paper-based information, by fiscal 2003.

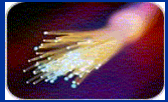
4 . Nurturing high-quality human resources

- Improvement of information literacy by making the Internet access available to schools and public sites.
- Fostering of IT instructors, technical experts and researchers and digital content creators.

Number of Subscribers for Broadband Services



Current Trends of Broadband Services



Fiber Optics Services

- NTT East and West started Test Services (February 2001).
⇒“B FLET’S Service” from August 2001.
(1 0 ~ 1 0 0 M b p s : U.S.\$40~U.S.\$75)
- YUSEN Broadband Networks started service in March 2001.
(100Mbps : U.S.\$50)
- Speed-Net, IP Revolution, K-OPTI.COM are also providing services.
- Entrances of other operators are expected.



DSL Services

- Services started in December 1999. Since then, Competition environment has been improved.
 - Rules for unbundling, collocation etc.
 - Government Assurances
- Since the entrance of YAHOO BB in June 2001, charges have been lowered and capacities have been broadened.

【Current Trend】

1. Ultra-high speed communications services for private users — 100Mbps, U.S.\$50
2. Lower charges for flat rate services — DSL : U.S.\$40~50⇒U.S.\$25 ~30

Leading Services!

DSL : Line Sharing
(November 2001)

Fiber Optics: for private users
(December 2000)



Wireless Services

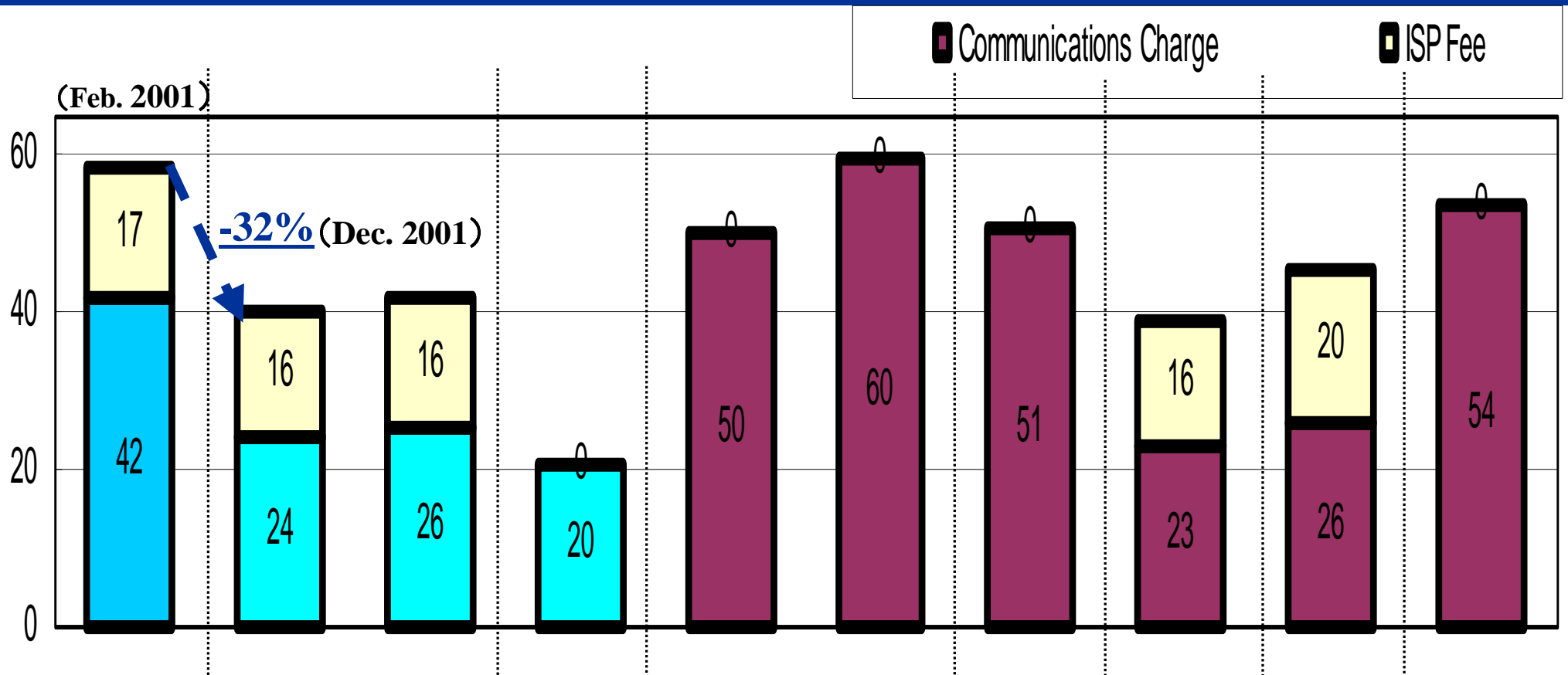
- In addition to 2.2GHz、2.6GHz、3.8GHz、6.6GHz、
- 2.4GHz services that does not require license have started.
 - Expected to be deployed as a high speed internet access media especially in housing complexes where installation of new facilities are difficult.



Cable Internet Services

- So far, the most deployed broadband media with 1.15 million of subscribers
- Stead expansion is expected accompanied by the joint services with cable television broadcasting services.

Comparison of DSL Charges (\$/24hour-1month)



\$ 59

1.5Mbps / 512kpbs

\$ 40

1.5Mbps / 512kpbs

\$ 42

8Mbps / 1 Mbps

\$ 20

8Mbps / 900kpbs

\$ 50

768kpbs / 128kpbs

\$ 60

1.5Mbps / 128kpbs

\$ 51

500kpbs / 250kpbs

\$ 49

500kpbs / 128kpbs

\$ 51

768kpbs / 128kpbs

\$ 54

512kpbs / 128kpbs

NTT East.

YahooBB

Verizon (New York)

BT (London)

FT (Paris)

DT (Germany)

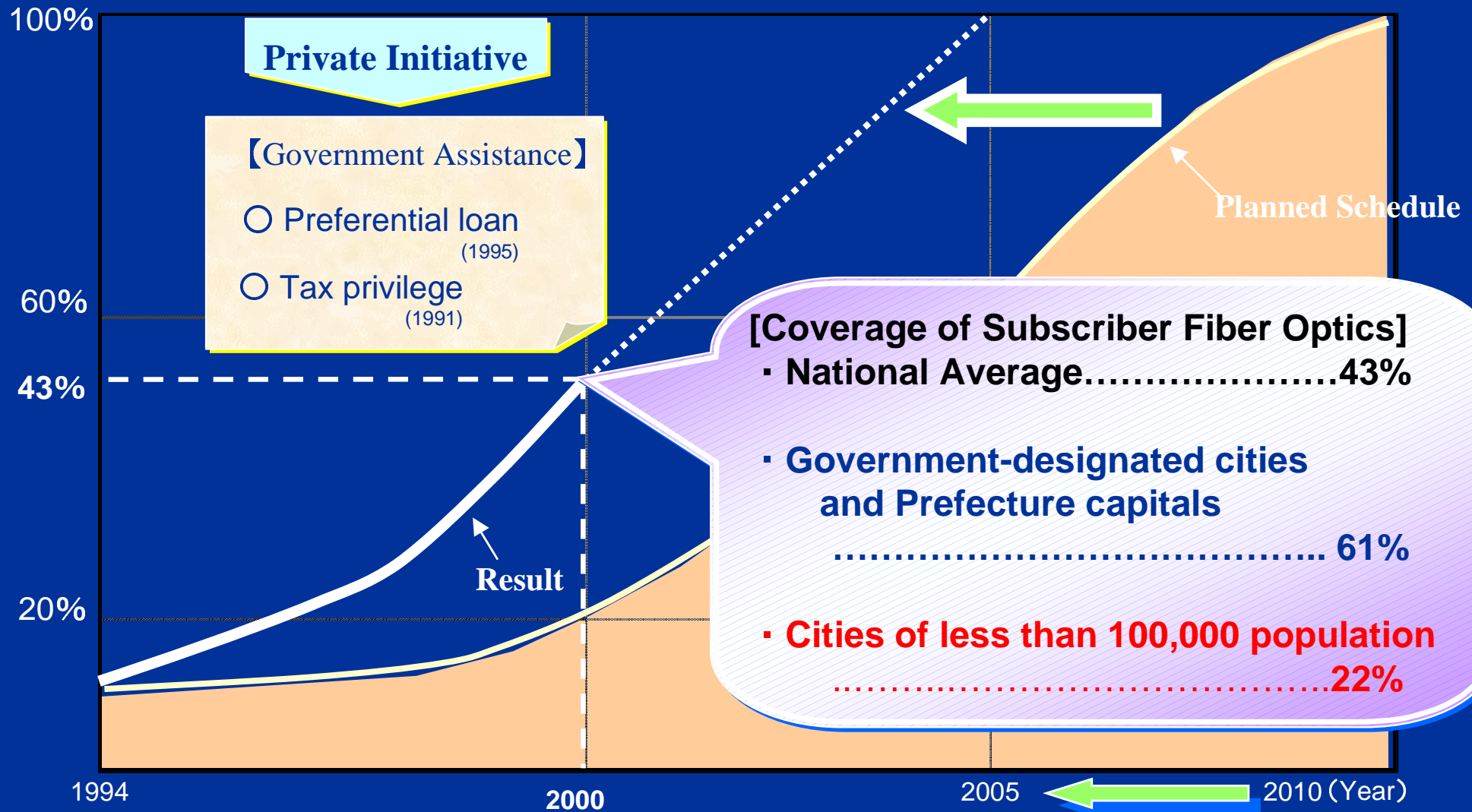
Swiss Com

Exchange rate: TTS on Oct. 1st 2001

1 U.S.\$=120.80JPY, 1 pound=180.37JPY, 1 F.Fr=16.80JPY, 1 D.M=56.33JPY, 1 S.Fr=74.28JPY

Subscriber Fiber Optics

- **Backbone Network** ⇒ Replacement to Fiber Optics is almost completed.
- **Subscriber Network** ⇒ About 43% of nationwide is covered. (FY2000)



National Broadband Initiative

Targets

- ***Create an environment that enables 24 hour connection to high - speed access networks from at least 30 million households and ultra-high speed access networks from 10 million households by FY 2005.***
- ***Improve digital divide caused by geographical constraints.***
- ***Deployment of LANs connecting public facilities through the nation.***

◇ **High Speed and ultra-high speed Network Infrastructure**

- Roles of Private Sector and Public Sector
- Schedule

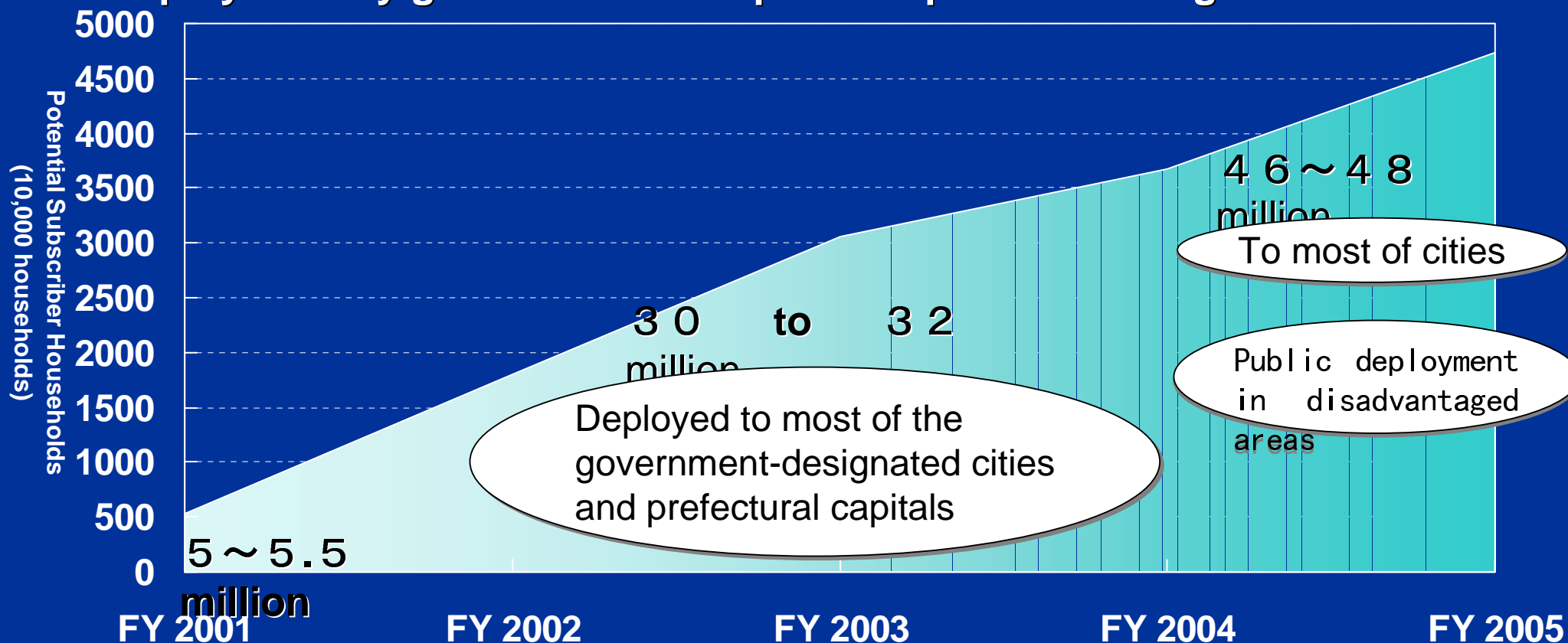
◇ **Predicted deployment of broadband Internet(subscriber household base)**

Estimates of the number of households with broadband, Internet access services, based on the expected growth of the Internet, rate of deployment, and charges under certain conditions, rate of deployment, and charges under certain conditions, etc.

◇ **Changes in lifestyle resulting from public applications realized through high speed and ultra-high speed networks**

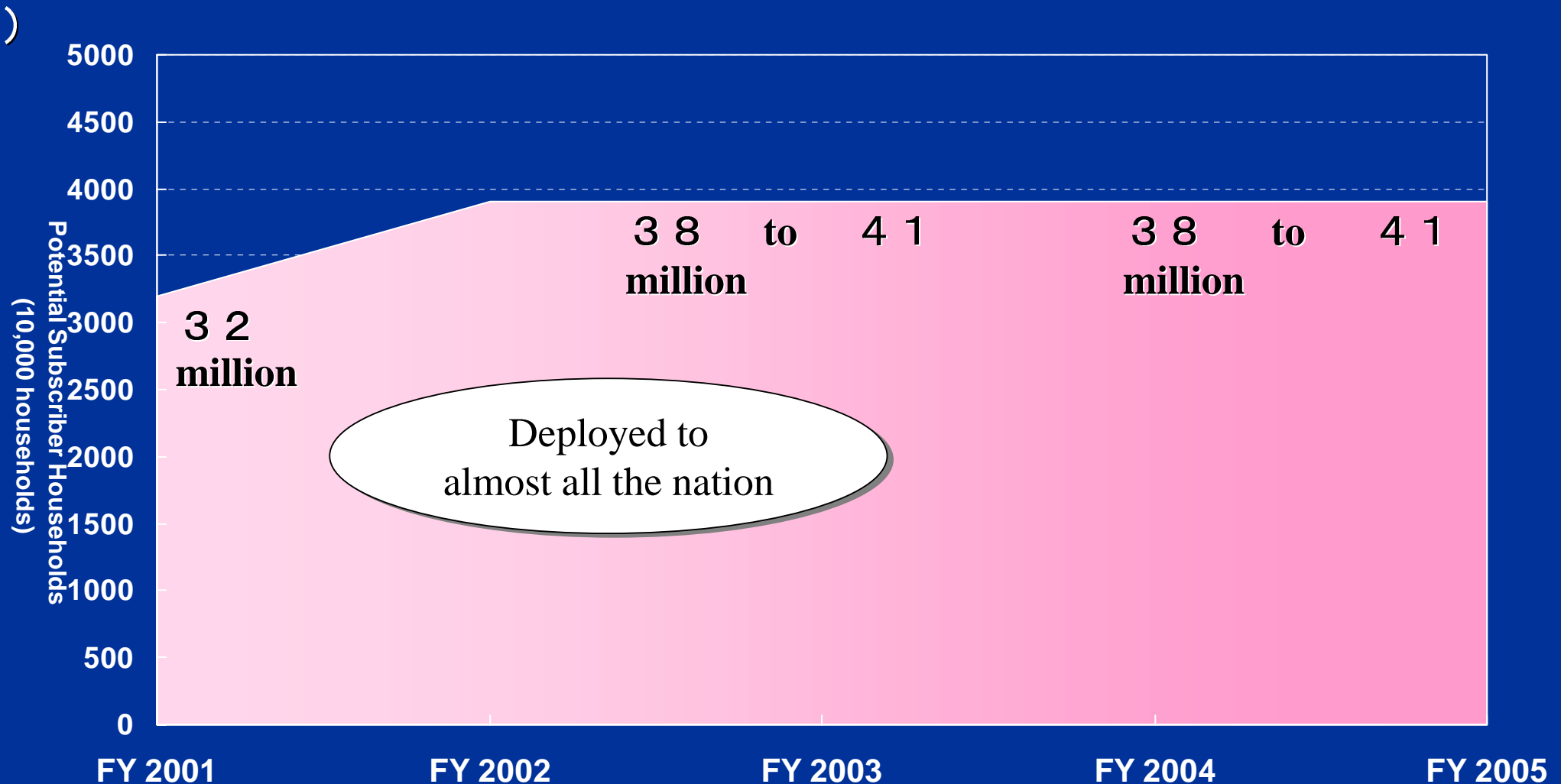
Fiber Optics-based Services

- Fiber Optics-based services by private sector are expected to deploy to most of government-designated cities and prefectural capitals by FY2003, and most cities by FY2005.
- In under-populated areas and other geographically constrained locations where deployment by private operator is not expected, public deployment by government is required to prevent the digital divide.



DSL (Digital Subscriber Line)

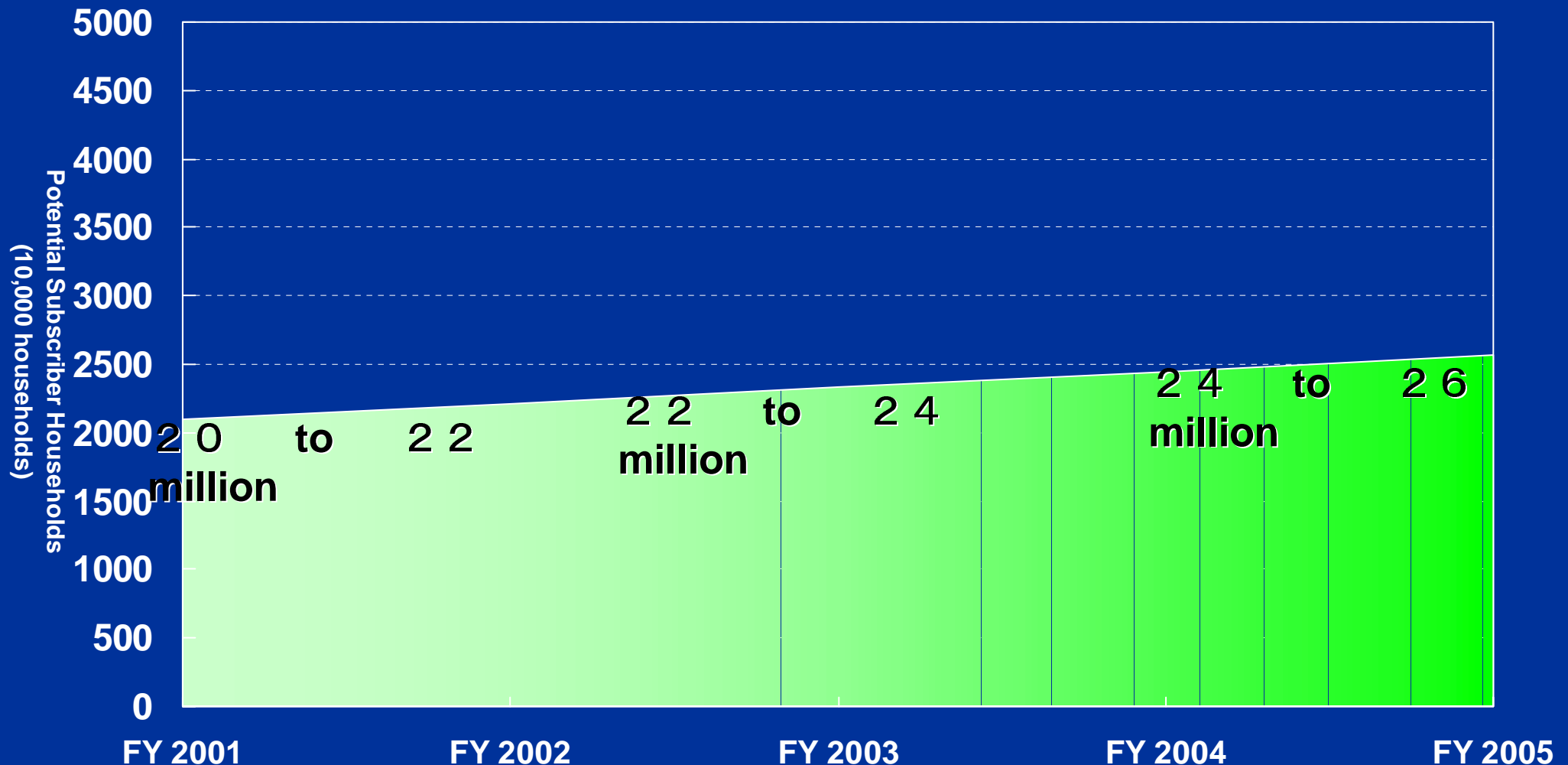
DSL services utilizing existing telephone circuit are expected to be deployed by private sector within FY2002. (However, there may be cases that services are not offered in areas where copper lines are removed, or quite far from group center unit.)



Cable Internet

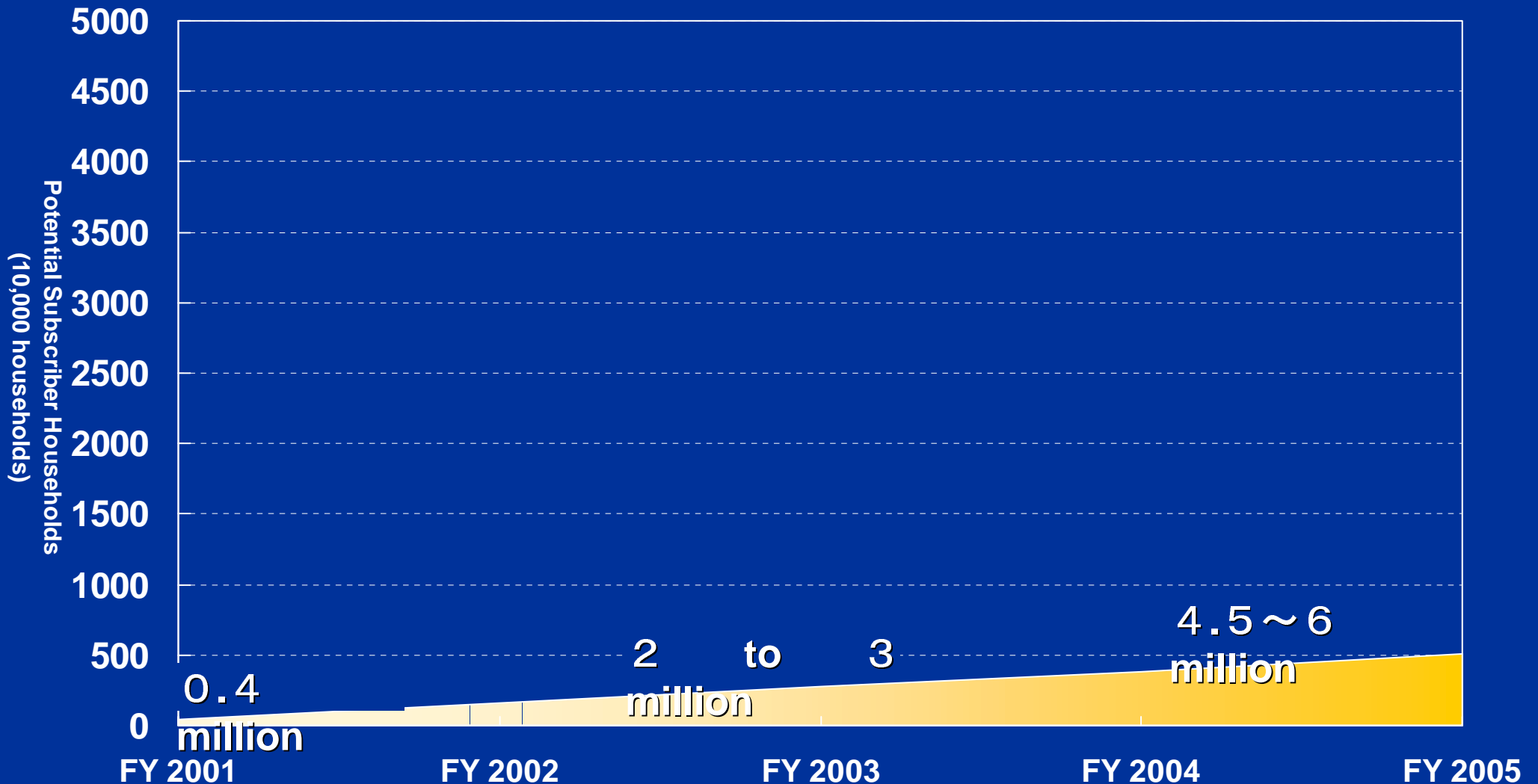
Cable Internet is the most deployed broadband media so far, with the joint service of cable television broadcastings.

And the service coverage is expected to continue expanding steadily.

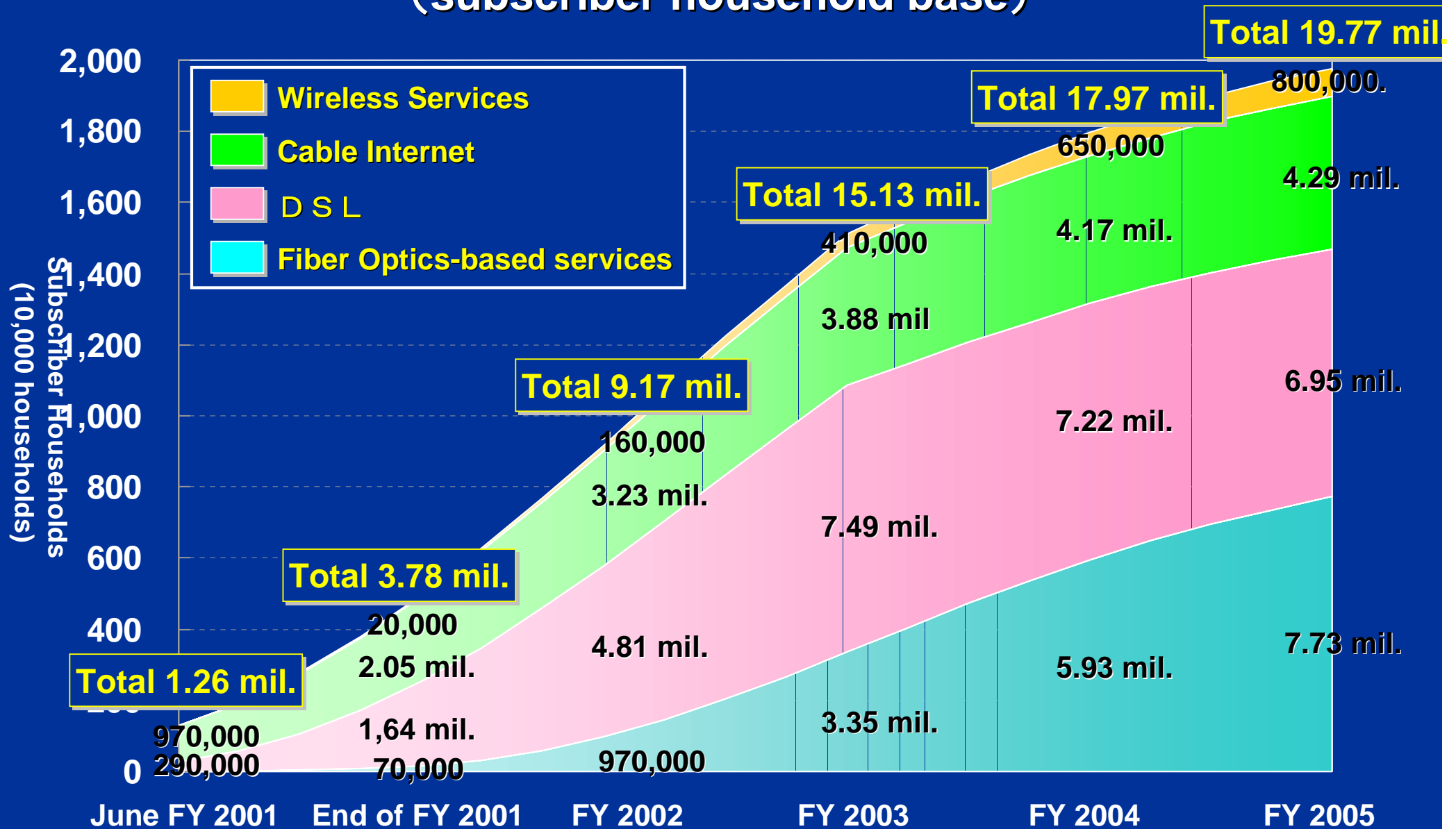


Wireless Services

Wireless broadband services are expected to be used mainly housing complexes and similar areas.



Predicted deployment of broadband Internet (subscriber household base)



Lifestyle changes resulting from public applications realized through broadband networks

Administration, notification and other procedures to administrative bodies

Current conditions

- o Application, notification and other procedures are conducted by post or at public offices



Electronic government and Electronic municipalities

- o It will make administrative services (all types of notification, tax payments and information acquisition) available via networks principally 24 hours a day while sitting in the comfort of one's home or office



Health, medical care and welfare

Medical care

- o Because medical specialists are concentrated in urban areas, it is difficult to receive advanced medical services in the provinces

Nursing care

- o Because of a lack of nursing caregivers in the provinces, it is difficult to receive sufficient nursing care services



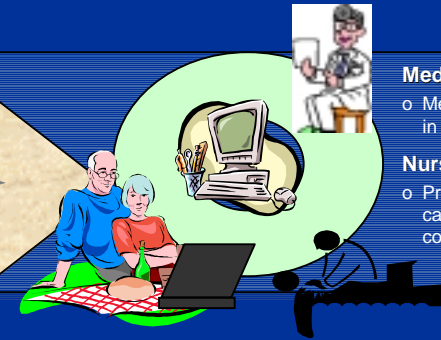
Telemedicine and Remote nursing care

Medical care

- o Medical care can be received while at home in areas with few medical specialists

Nursing care

- o Prompt and efficient nursing care services can be received through real-time coordination with nursing care facilities



Education and culture

Education

- o In the provinces, there are few universities and other institutions of higher education thereby restricting access to highly specialized education

Culture

- o Art galleries, museums and other cultural facilities are unevenly concentrated in urban areas



**Virtual universities
Virtual art galleries
and museums**

Education

- o Highly specialized education can be received while at home

Culture

- o Art galleries and museums can be appreciated virtually in three dimensions in areas with few cultural facilities

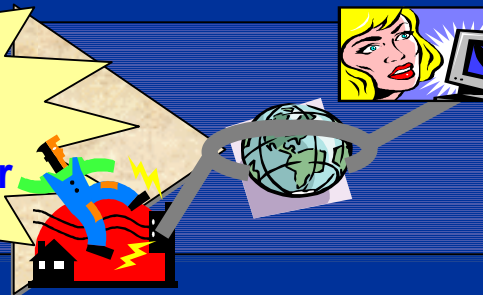


Disaster prevention

- o It is difficult to obtain accurate information in a time of disaster



**Safety assurance system
Provision of disaster information**



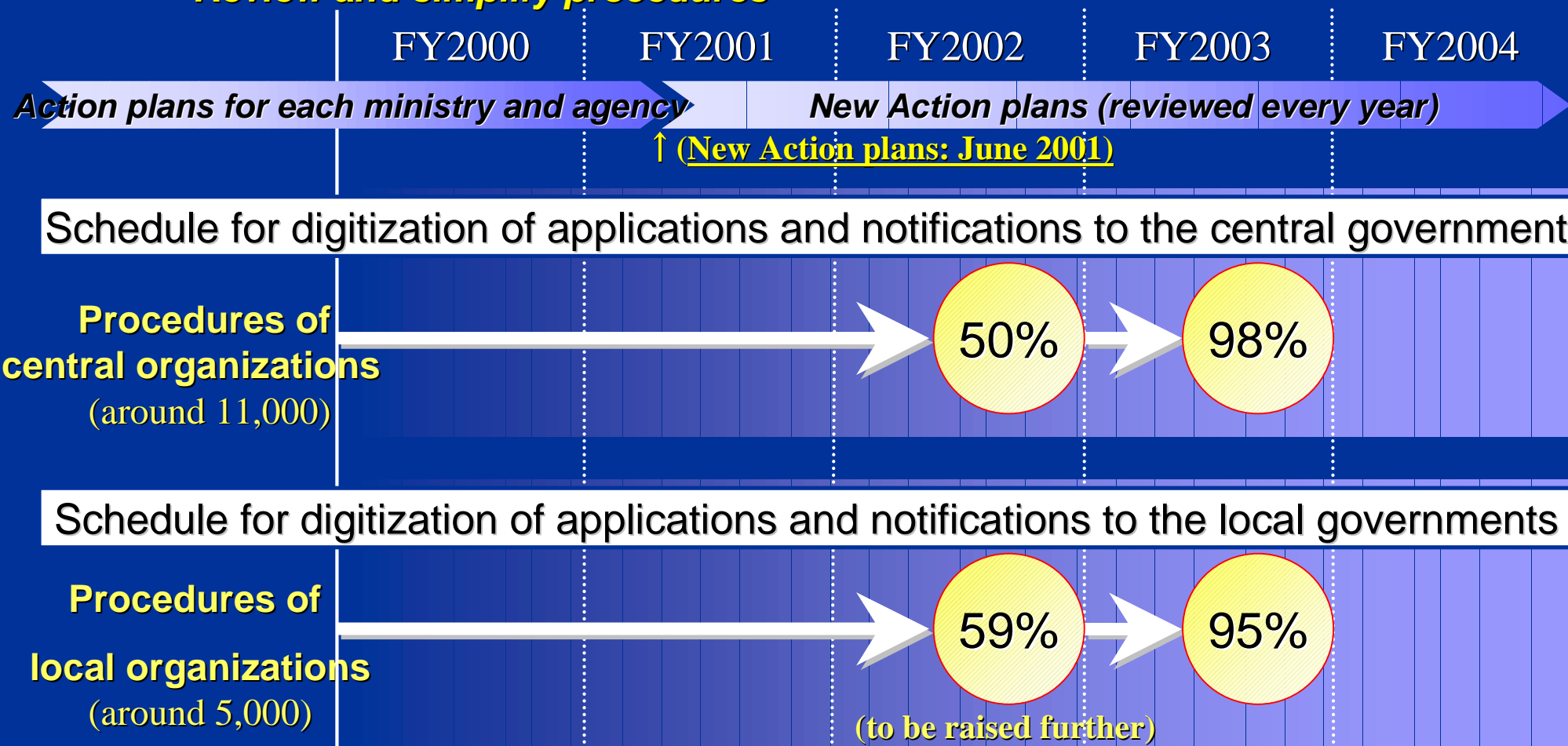
- o The safety of people affected by disasters can be promptly confirmed over the Internet

- o Forest fire conditions, river levels, volcanic activity and other conditions can be monitored by live-action images while sitting in the comfort of one's home

Schedule for the Realization of E-government and E-local government

Realize electronic government and electronic self-governing bodies by 2003

- **Make an online basis available for basically all procedures within FY2003**
- **Review and simplify procedures**



End
(Thank you!)