

NTT's roll-out plan of broadband ubiquitous services over NGN

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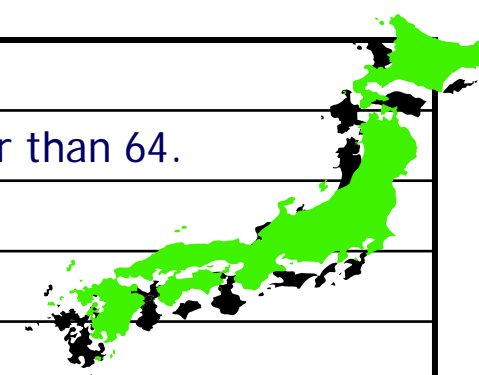
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Japan today in 2005 (as of September 2005)

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<i>ITEMS</i>	<i>NUMBER</i>	<i>NOTE</i>
Population	127.8 M	11/2005, 20% is older than 64.
Householders	50.4 M	03/2005
Fixed lines	59.6 M	03/2005
ISDN	8.0 M	10 M at peak in 2001
Mobile	91.8 M	03/2006, 79.8 M have internet access, 70% of total population
3G	48.3 M	70% growth last year
W-CDMA	26.5 M	DoCoMo & Vodafone
cdma2000	21.8 M	au
PHS	4.7 M	03/2006, 6.7 M at peak in 1997
Broadband	20.6 M	06/2005, 40% of householders
DSL	14.1 M	16% growth last year
Optical	3.4 M	94% growth last year 84% coverage in 2004
VoIP	8.3 M	OAB type has started.





IP phone services in Japan

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PC1: December 2000

Dedicated software used between PCs connected to an IP network
E.g., Bit arena
100 – 150 ISPs

PC2: November 2001

PC to PSTN phone
E.g., Windows messenger
100 – 150 ISPs

PC3: November 2002

050 prefix enables a call from PSTN to IP phone
E.g., ISPs

PC4: October 2004

P2P type software
E.g., Livedoor provides Skype in Japan

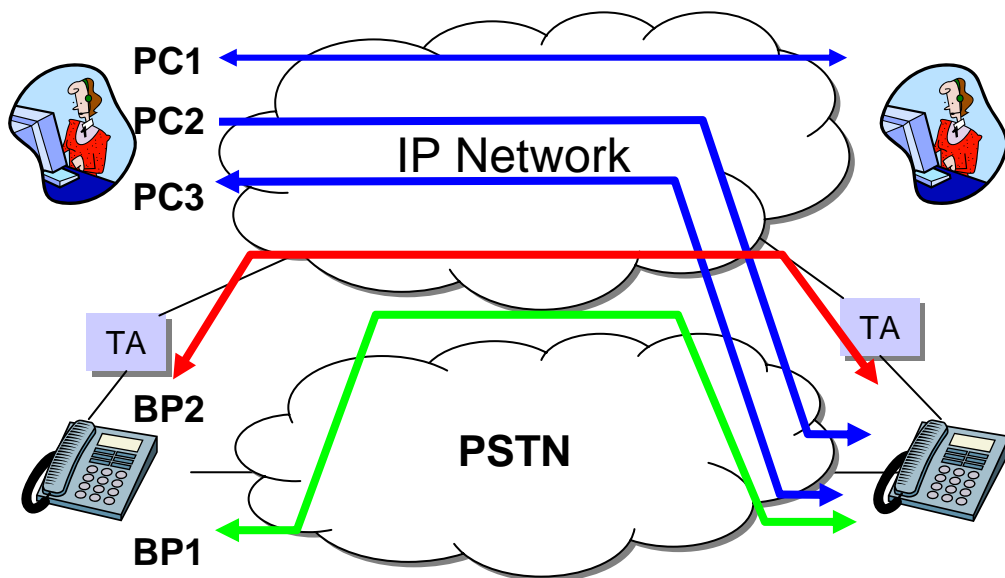
BP1: April 2001

PSTN call via IP transit network
E.g., Fusion Communications.

BP2: April 2002

Calls between black phones with VoIP terminal adaptors via an IP network
E.g., BB phone by YBB

All Internet



NGN

BP3: February 2005

Emergency call from IP phone
E.g., Hikari Denwa by NTT-East



NGN public announcements from carriers

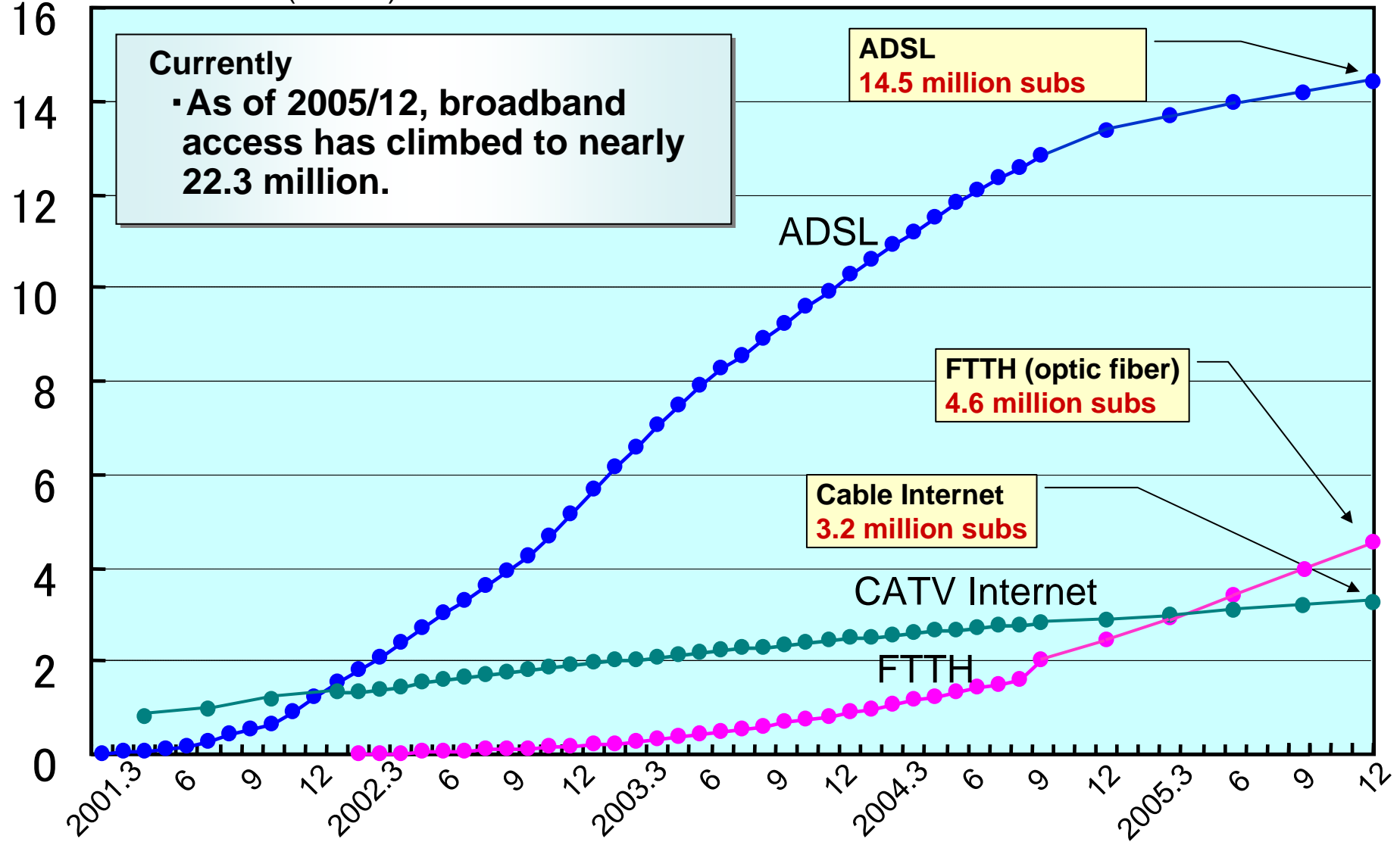
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- KDDI in 09/2004
 - Introduction of softswitches and high-quality IP networks to replace existing PSTN switches completely by 03/2008.
 - New platform to provide flexible revenue-creating applications
- NTT in 11/2004
 - 30 M lines (50% of total PSTN lines) are to be shifted to FTTH.
 - Exploration of nontraffic business beyond legacy telecommunication markets.
- NTT in 11/2005
 - Specific plan to achieve NGN towards 2010.
 - http://www.ntt.co.jp/ir/events_e/results/2005.html



Growth in Broadband Access in Japan

ITU-T Subscribers (million)



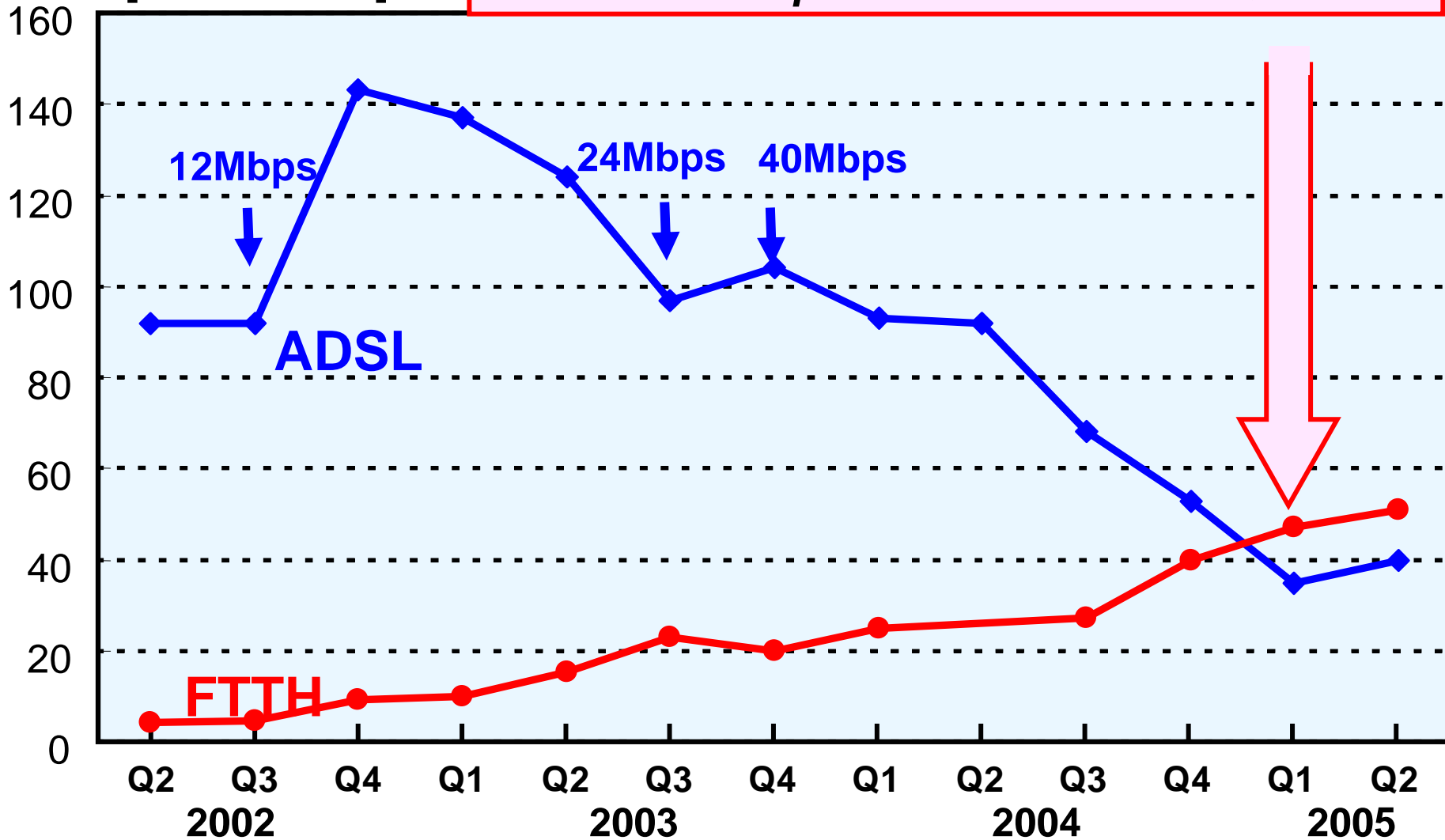
*Source: Ministry of Internal Affairs and Communications



Increase of Broadband Users per Quarter

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Users [10 thousand]

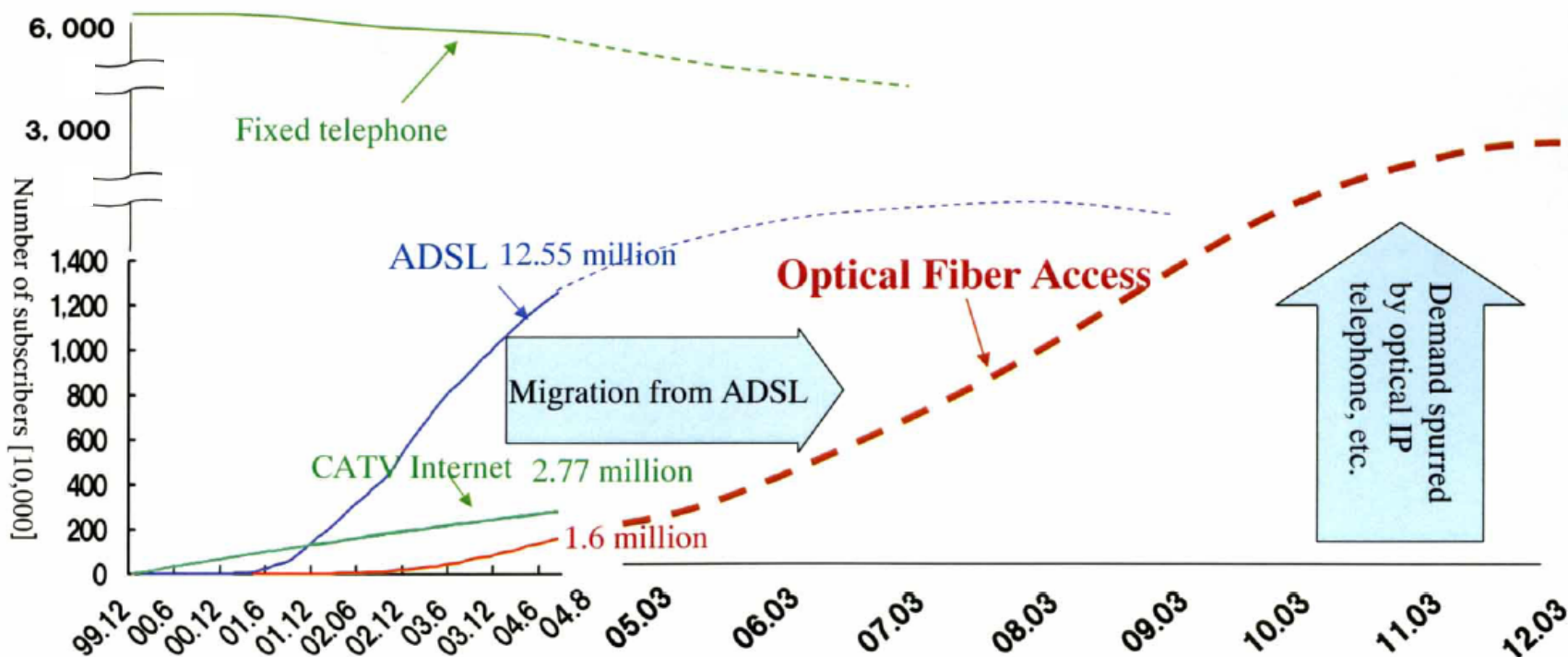
FTTH users surpass ADSL users in 1Q 2005.





Milestone of Optical Fiber Access

- NTT will promote the migration from fixed to IP telephone services and provide a variety of ubiquitous broadband services with high-speed and interactive features with objective of achieving a target of 30 million customers using optical fiber access and next-generation network services.



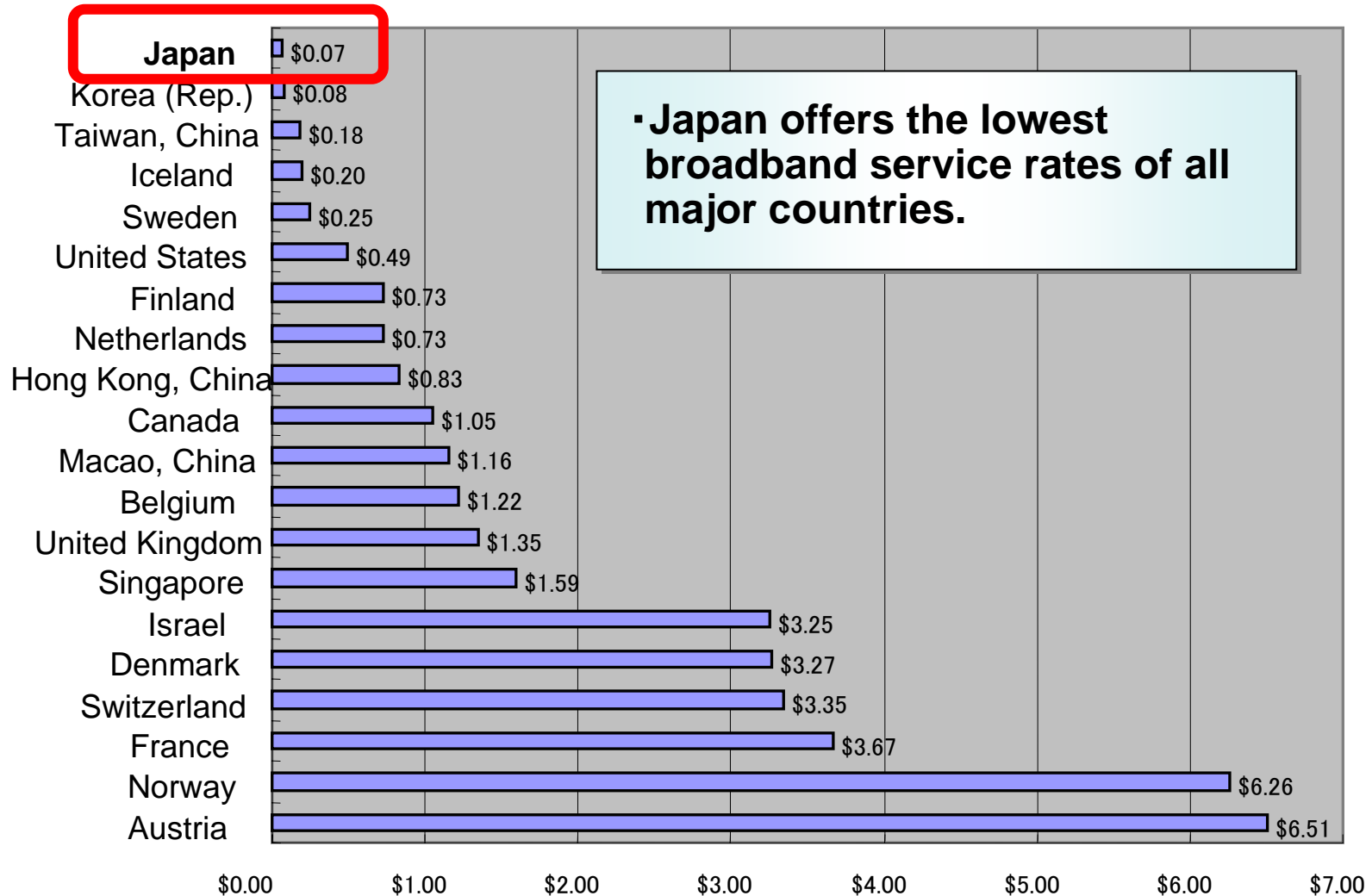
(Source: Produced by NTT based on documents by Ministry of Internal Affairs and Communications)



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Broadband Price per Unit Speed

Price per 100 kbps (USD)



from "ITU Internet Reports 2005:The Internet of Things" (Nov 2005)

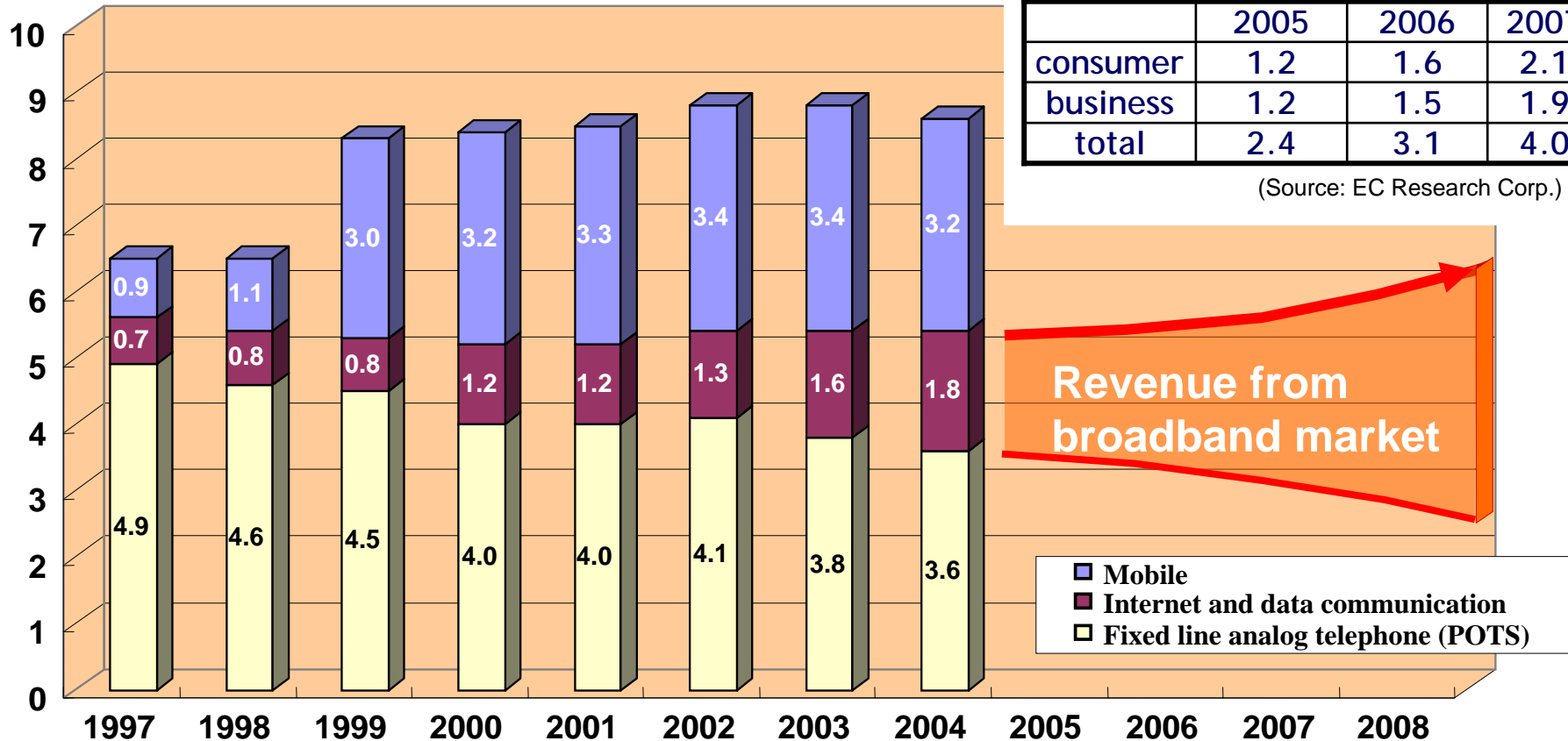


Revenue Shift from Mobile/POTS to NGN

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Current revenue of NTT Group

(Trillion yen)



Japanese broadband market

(Trillion yen)

	2005	2006	2007
consumer	1.2	1.6	2.1
business	1.2	1.5	1.9
total	2.4	3.1	4.0

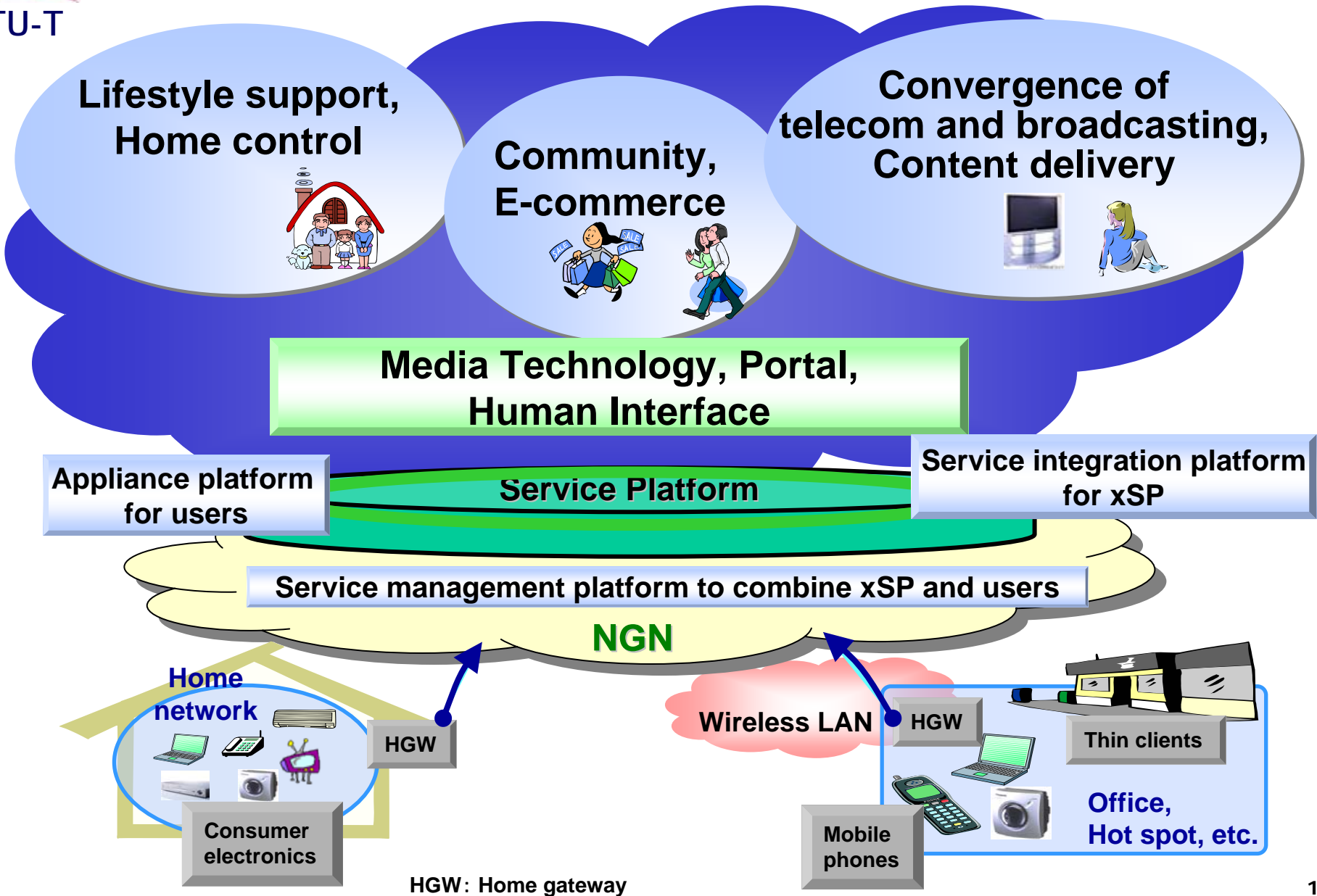
(Source: EC Research Corp.)

Revenue from broadband market

- Mobile
- Internet and data communication
- Fixed line analog telephone (POTS)

Broadband market will grow to 4 trillion yen by 2007. Broadband communication over NGN will bring NTT group new revenue.

Application Services in NGN

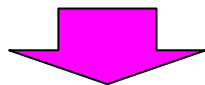




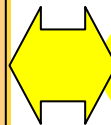
NTT Actions in Changing Market Environ

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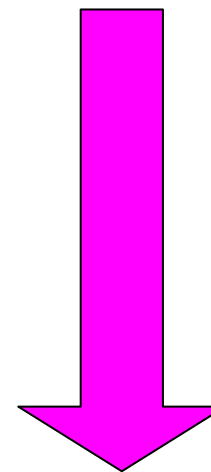
Build an **NGN** that is **high-quality, flexible, and secure**



Develop and implement a **ubiquitous broadband service** with **FMC, etc.**

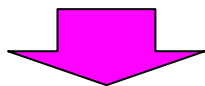


e- Japan Strategy
u- Japan Initiative

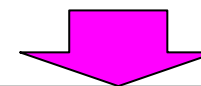


Expand business opportunities using ubiquitous broadband service

Seamlessly upgrade from fixed phone to **IP phone** from metal wire to **optical fiber**



Strengthen our **competitiveness** and **financial base**





Roadmap to Building a Next Generation Network

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