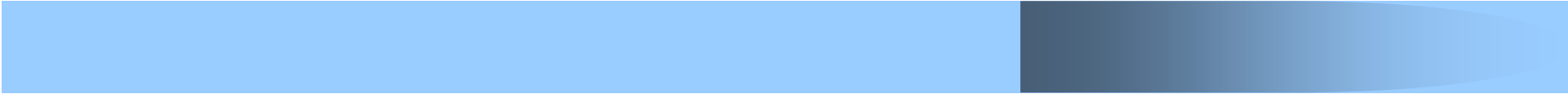


MOMO Global Summit'07

Present Status of Mobile Technologies and Business in Japan

10 September, 2007, Helsinki, Finland
11 September, 2007, St. Petersburg, Russia

Hitomi Murakami, Ph. D
Professor, Seikei University

- 
- 1. Deployment of Broadband Access in Japan**
 - 2. Transition of Mobile Phone Subscriber**
 - 3. Transition of data speed and cost**
 - 4. Change of ARPU**
 - 5. Flat Rate Service**
 - 6. Expansion of Mobile Contents Market**
 - 7. Applications: Location Services and Remote Medicine**
 - 8. Concluding Remarks**

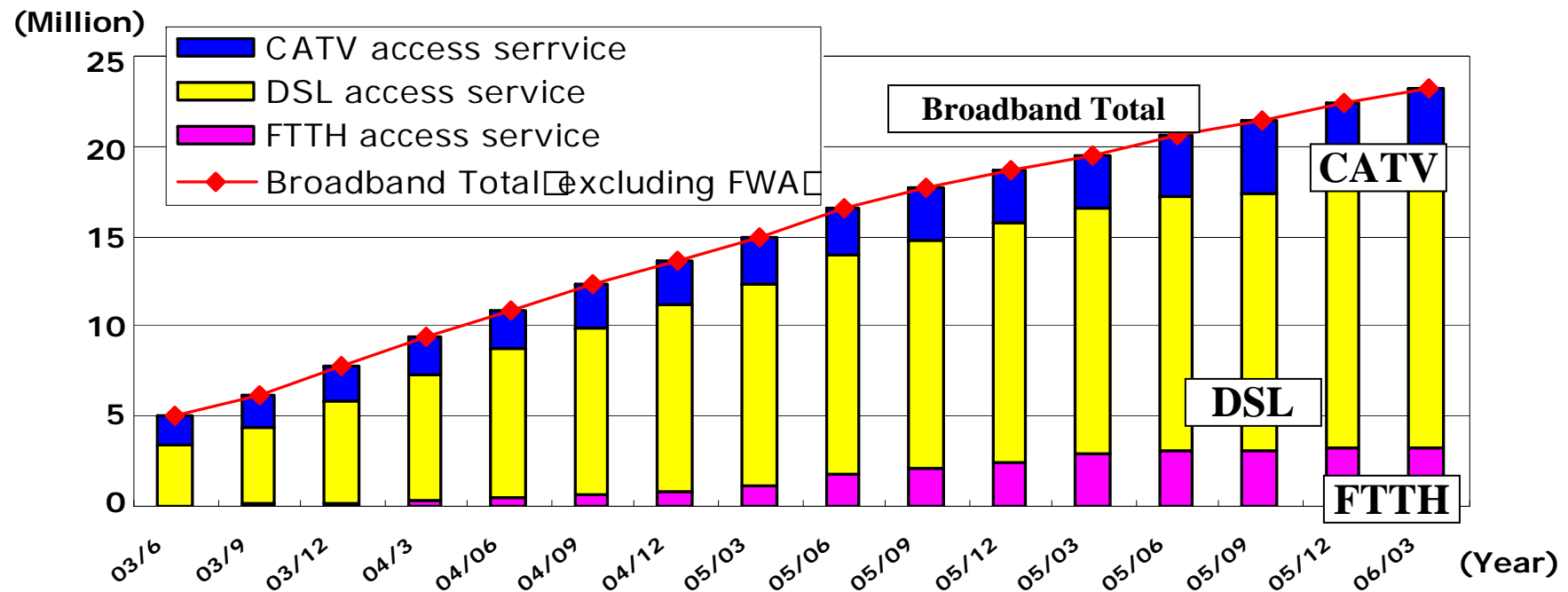


1. Deployment of Broadband Access in Japan

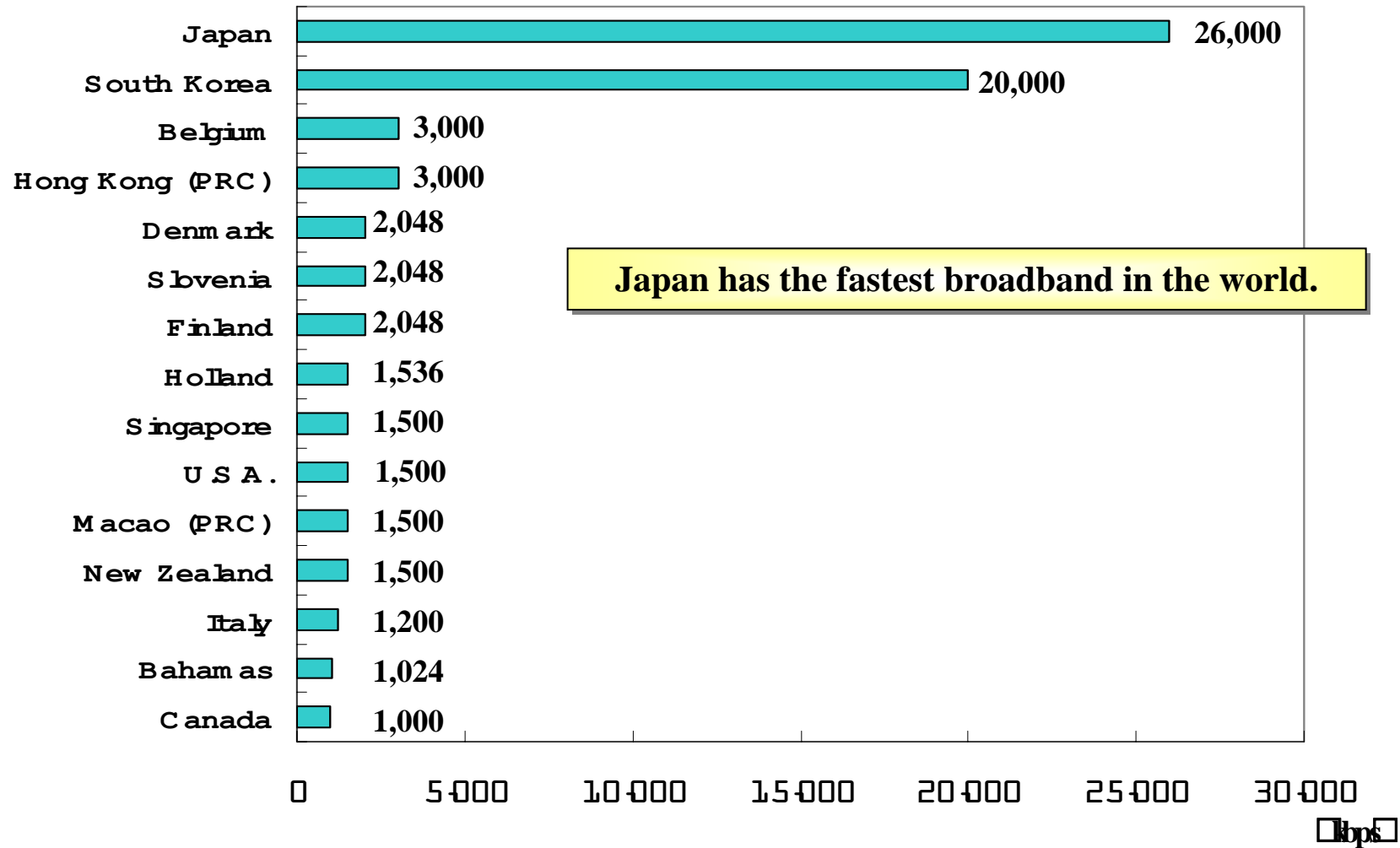
Current state of wired broadband access in Japan

– subscriber numbers –

- Subscriber numbers for broadband – and especially DSL – have dramatically risen in the past two years.
- Fiber optic access service for general households was introduced in Japan in March 2001, prior to any other market in the world.

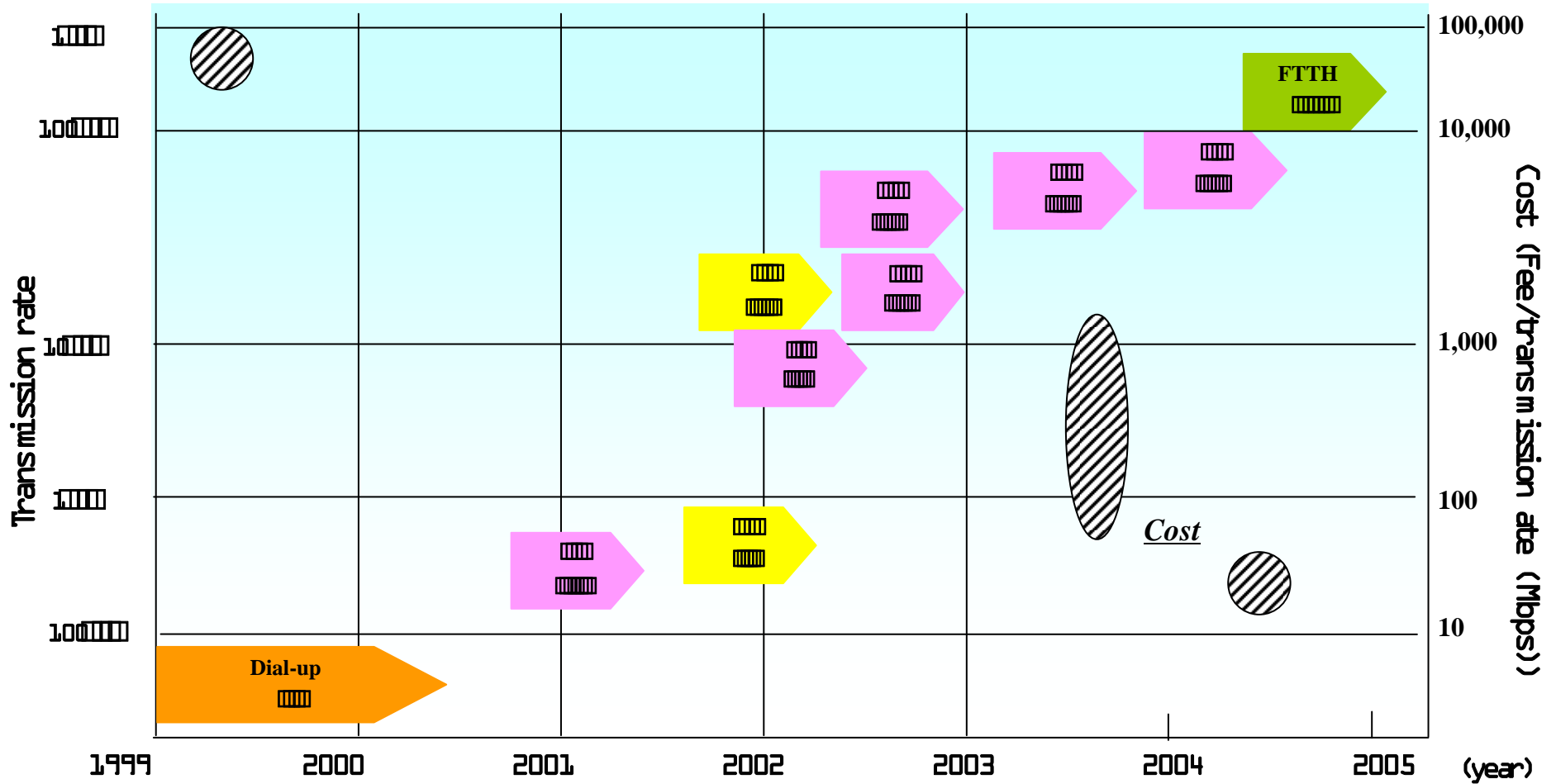


Broadband transmission speed



ITU Internet Reports 2001 Birth of Broadband September 2001

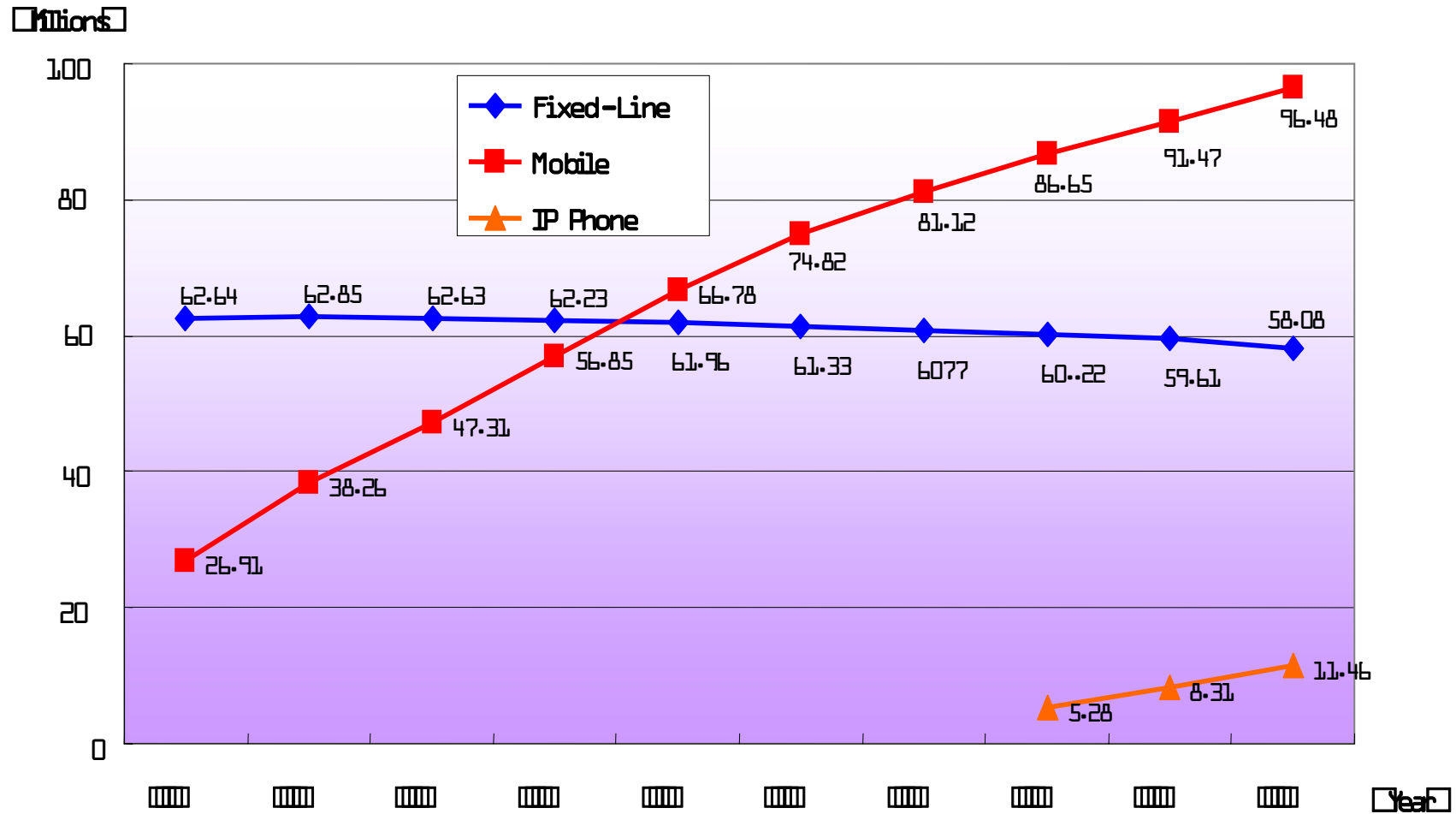
The diversification and acceleration of Internet access lines



2. Transition of Mobile Phone Subscriber

Telephone Network Subscribers

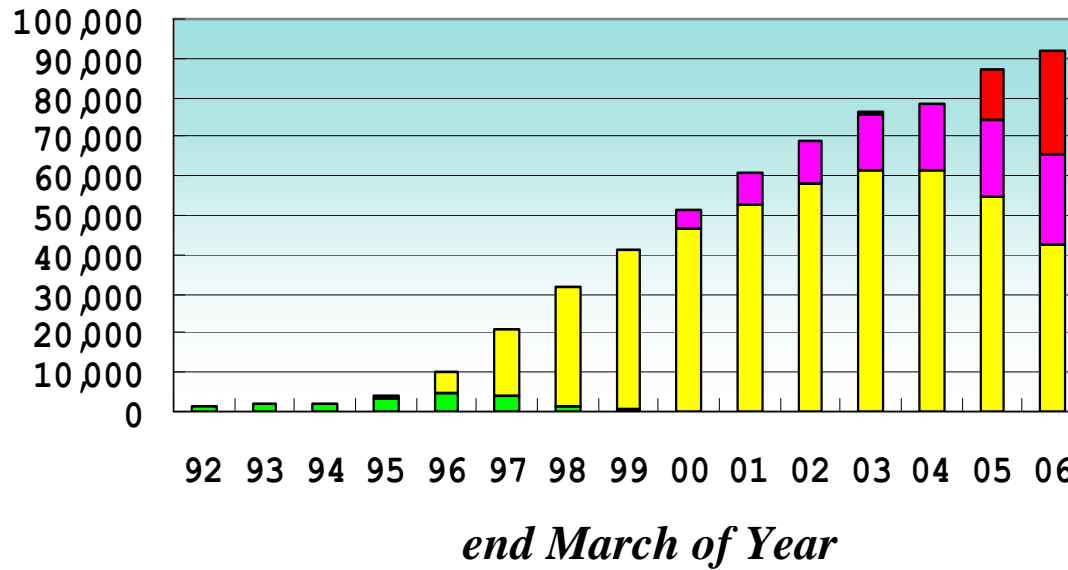
Trend of Japan's Telecommunications



Cellular Subscriber Growth

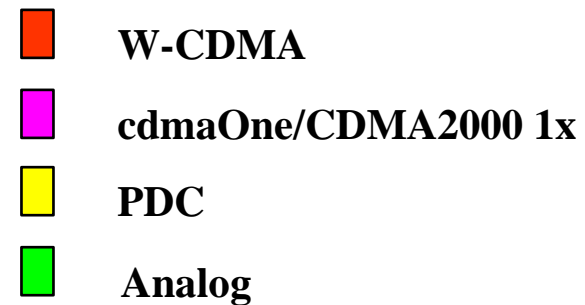
Trend of Japan's Telecommunications

No. of Subscribers (x1000)



105,000K terminals including PHS at July 2007.

More than 50% of Subscribers are moving to 3G and 3.5G terminals.

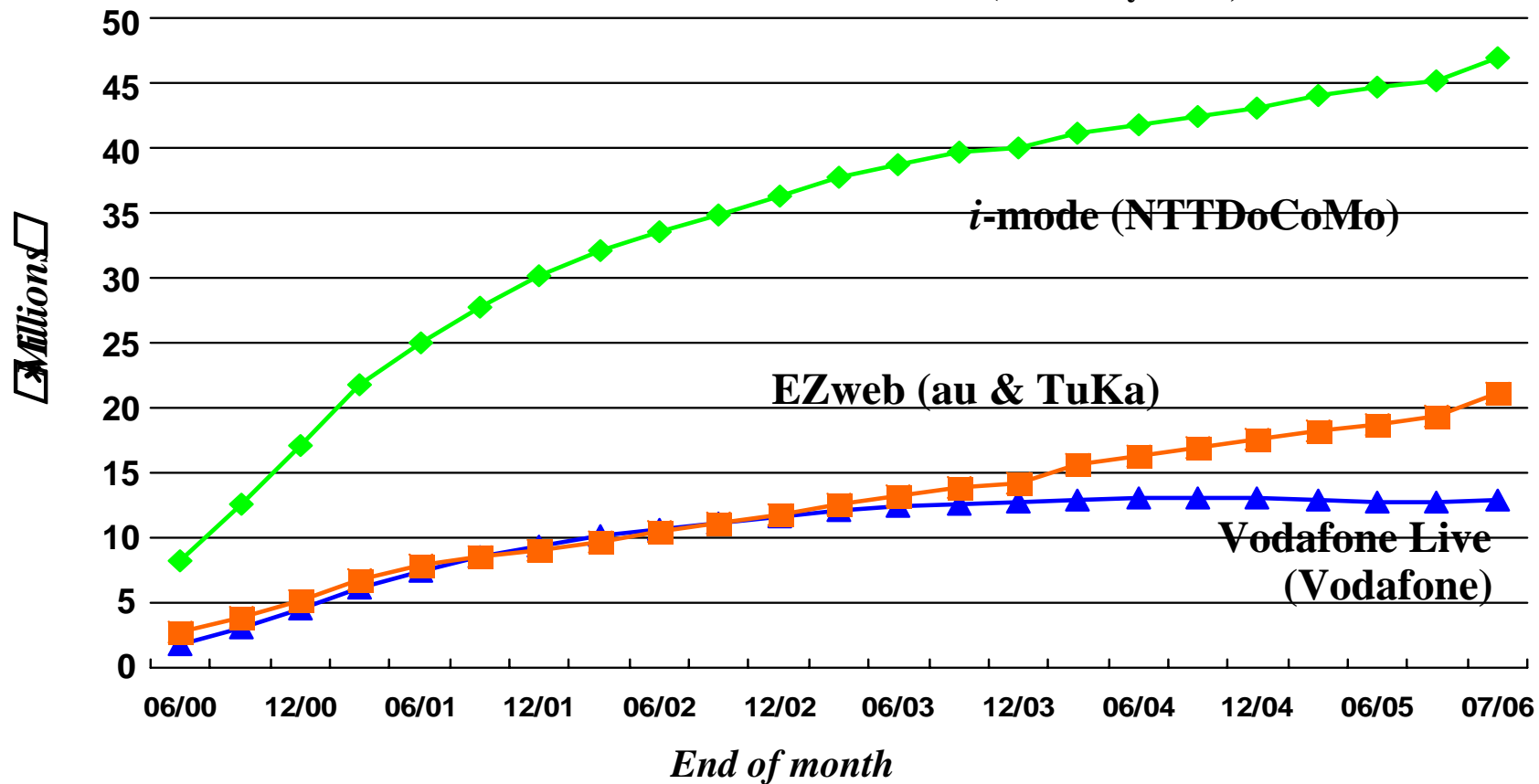


Mobile Internet Subscriber Growth

Trend of Japan's Telecommunications

Total 10.57 million → **90.3 million**
More than 9 times growth

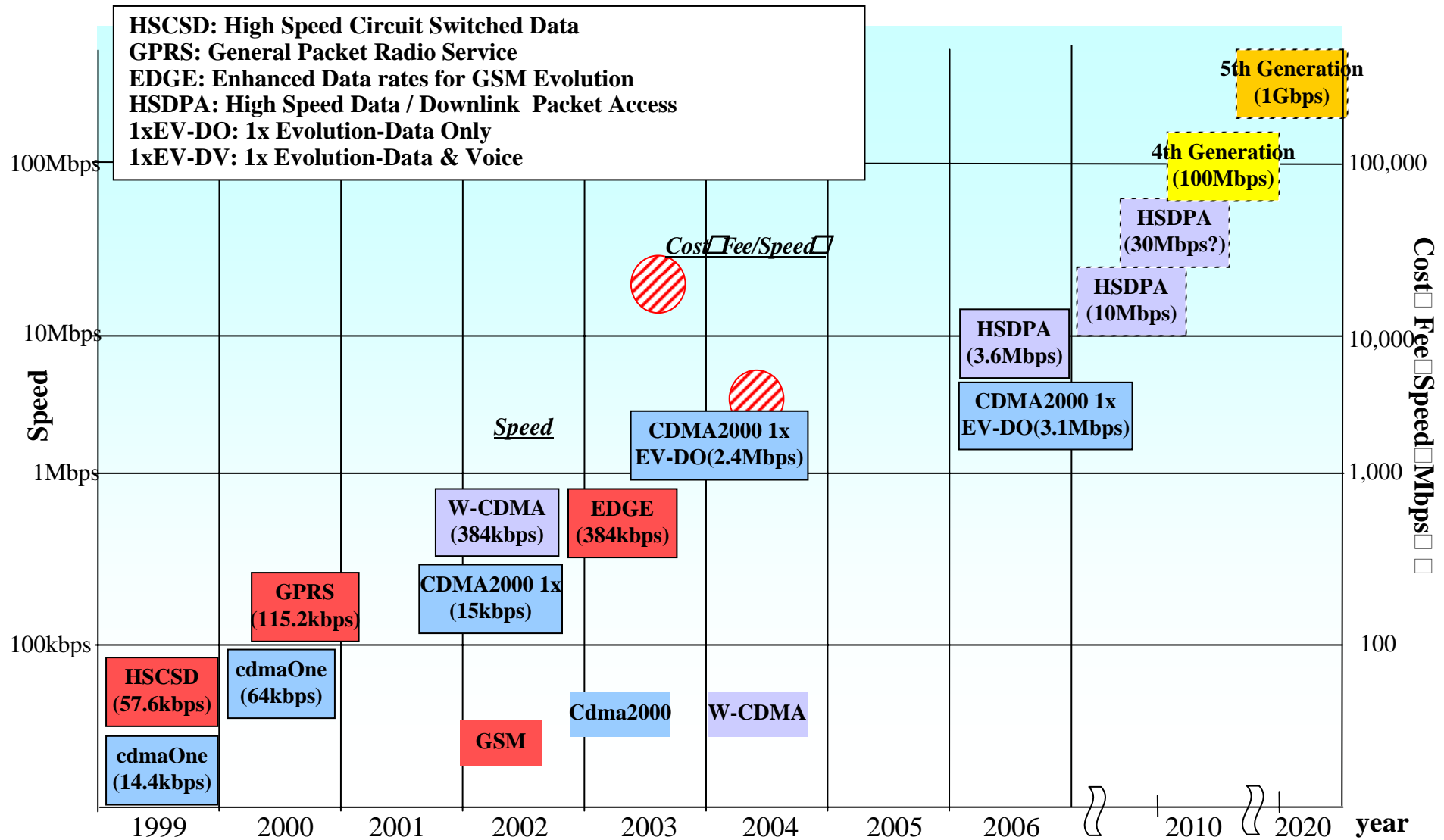
(As of July. 2007, 80% of Sub. are Internet user)





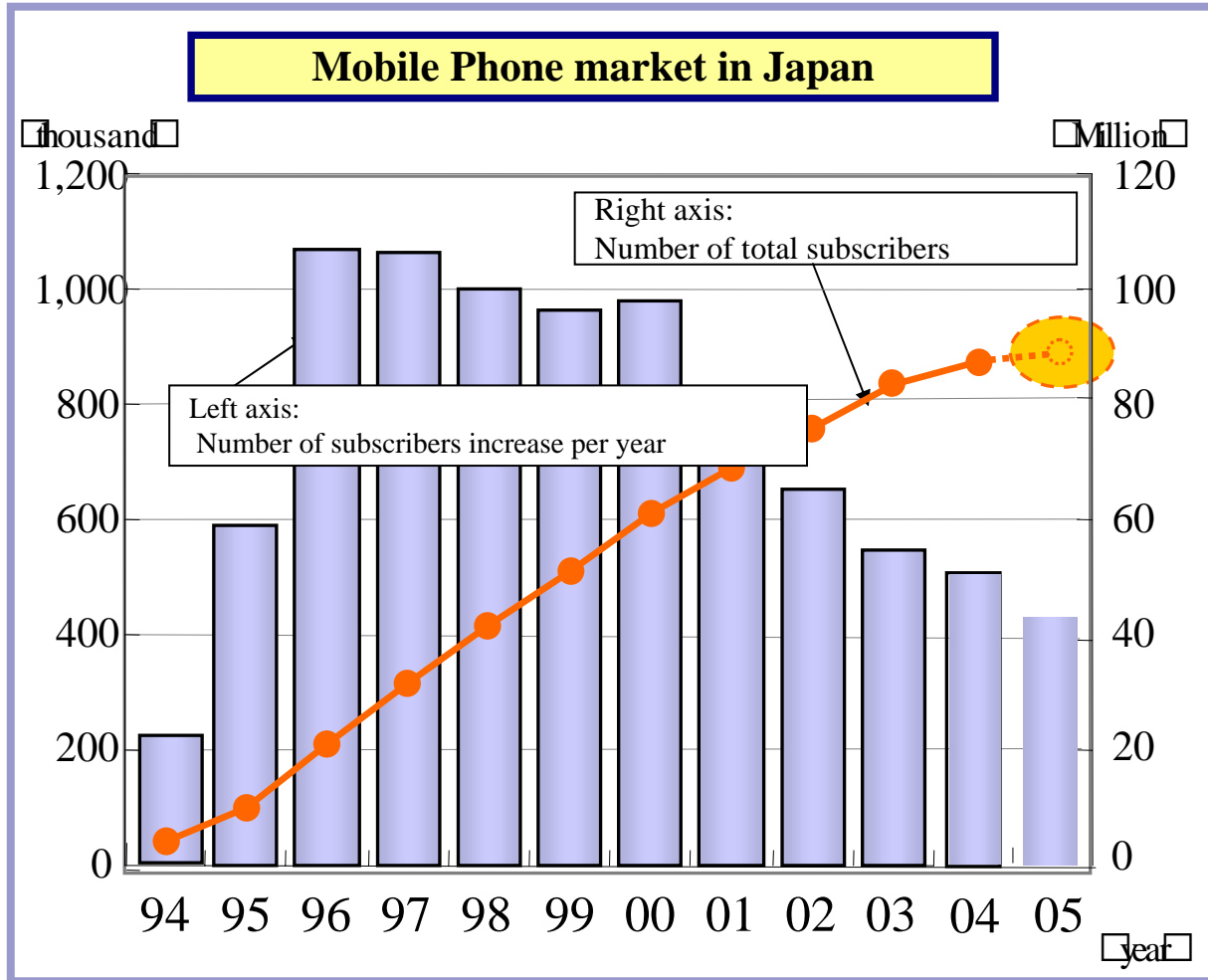
3. Transition of data speed and cost

Transition of data speed and cost



Transition of Mobile Phone Subscriber

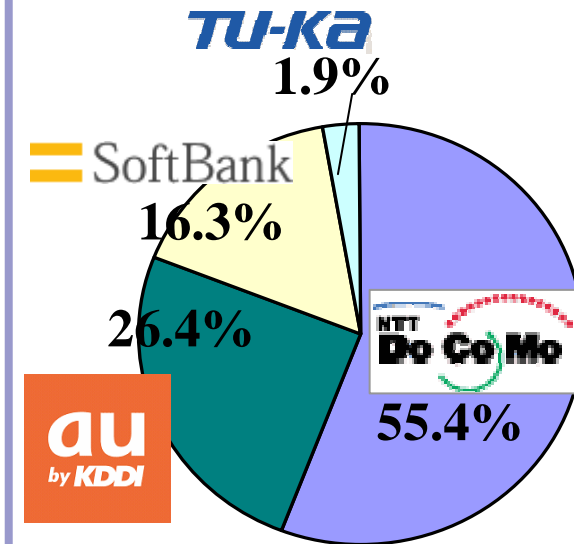
- We have more than 100million subscribers at the end of Mar. 2007.
- The number of increases per year decreases.



*In addition, we have PHS users of 4,753 thousands

Total share

(at Oct, 2006)



□ TU-KA was amalgamated by KDDI at October 1, 2005

4. Change of ARPU

Change of ARPU (1)

■ Data ARPU increase, while Total ARPU and Voice ARPU decrease.

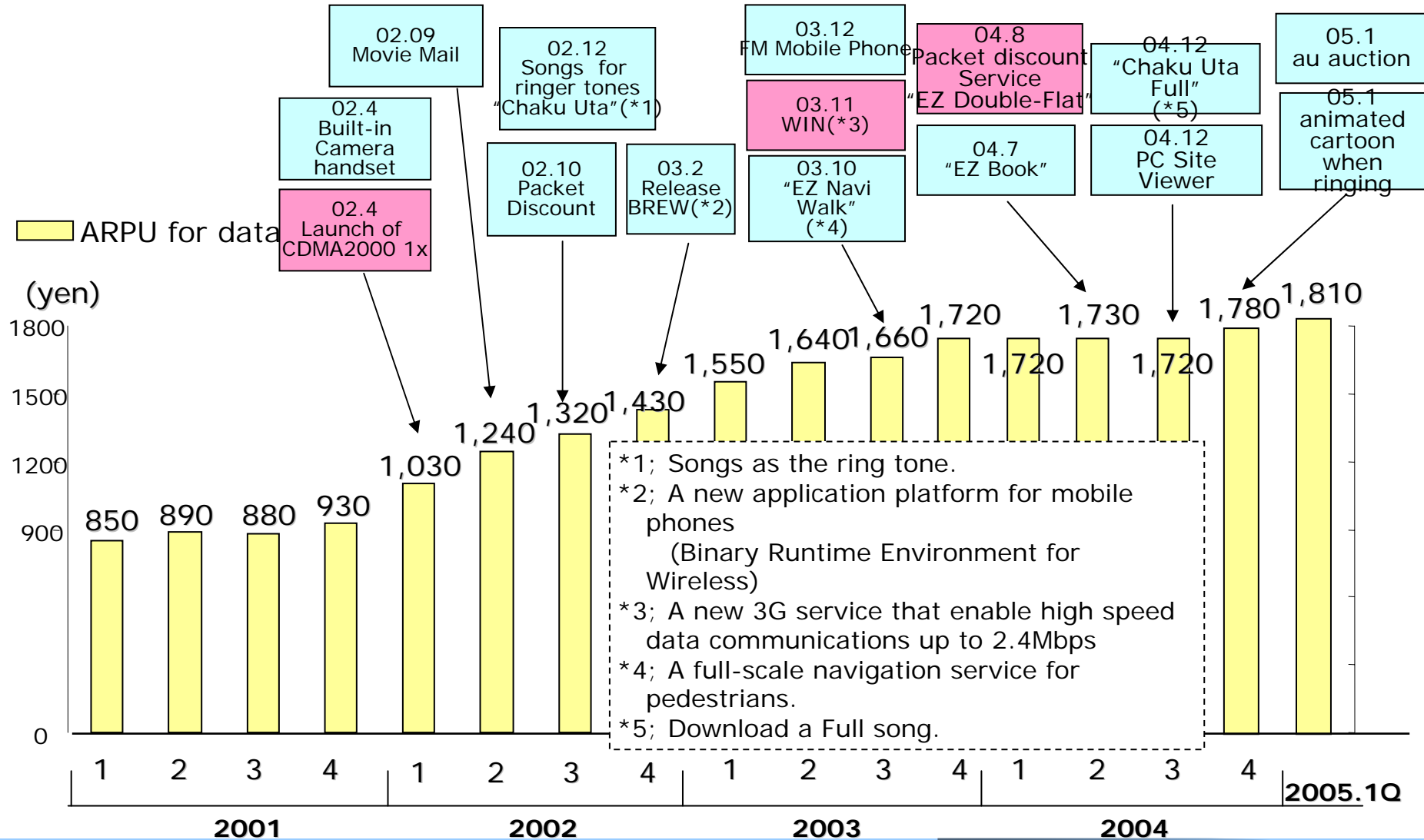
		2002.1Q (2002.4□6)	2003.1Q (2003.4□6)	2004.1Q (2004.4□6)	2005.1Q (2005.4□6)	2006.1Q (2006.4□6)	
au	Total ARPU	7,560yen	7,480yen	7,260yen	7,050yen	6,810yen	↓
	Voce ARPU (Comparison with the previous year)	6,530yen	5,930yen □600yen□	5,540yen □390□	5,240yen □300□	4,840yen □400yen□	↓
	Data ARPU (Comparison with the previous year)	1,030yen	1,550yen □520yen□	1,720yen □170yen□	1,810yen □90yen□	1,970yen (+160yen)	↑
	Data ARPU Occupation ratio	13.6□	20.7□	23.7□	25.7□	28.7□	↑

ARPU : Average Revenue Per User

Mean value of three months

Change of ARPU (2)

Introduction of new services and their impact to data ARPU.



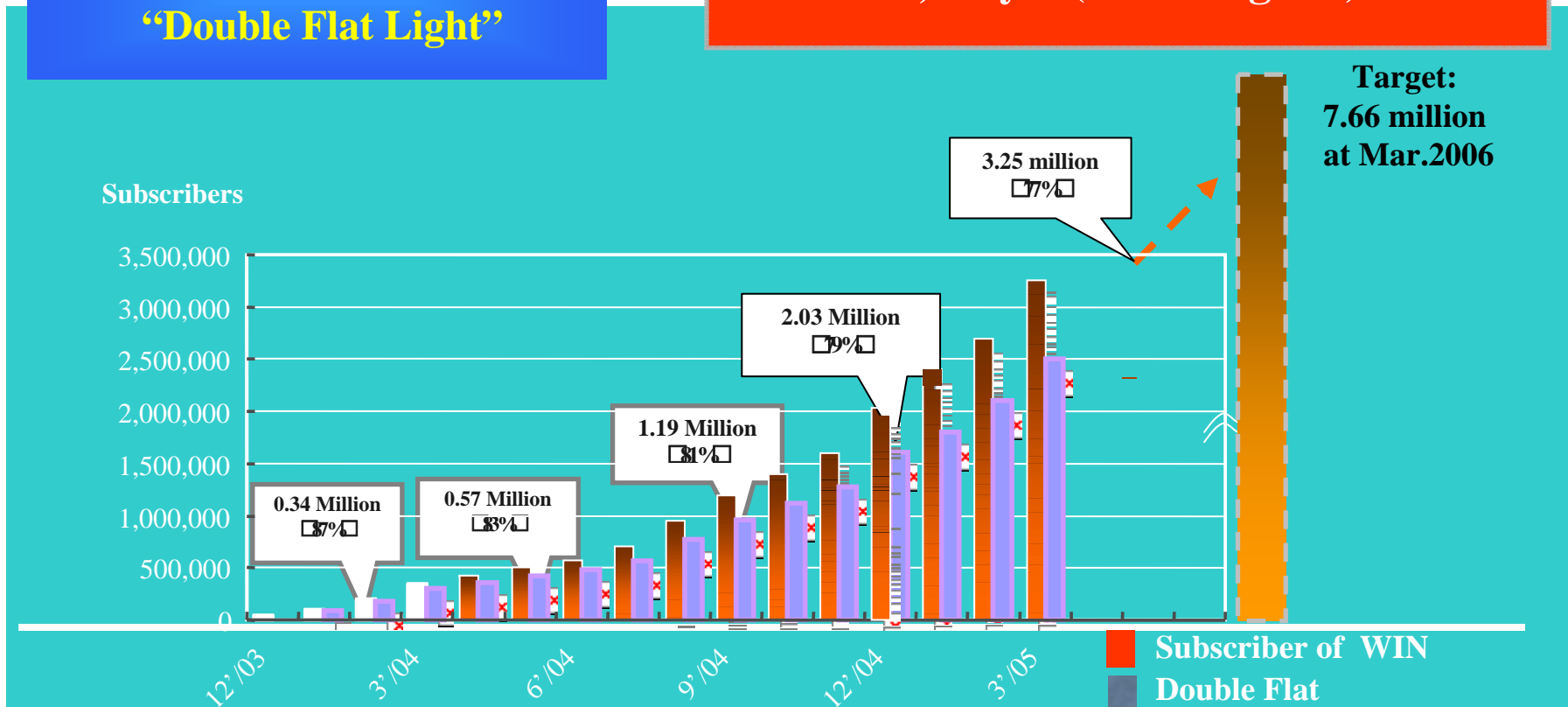
5. Flat Rate Service

Flat Rate Service (1)

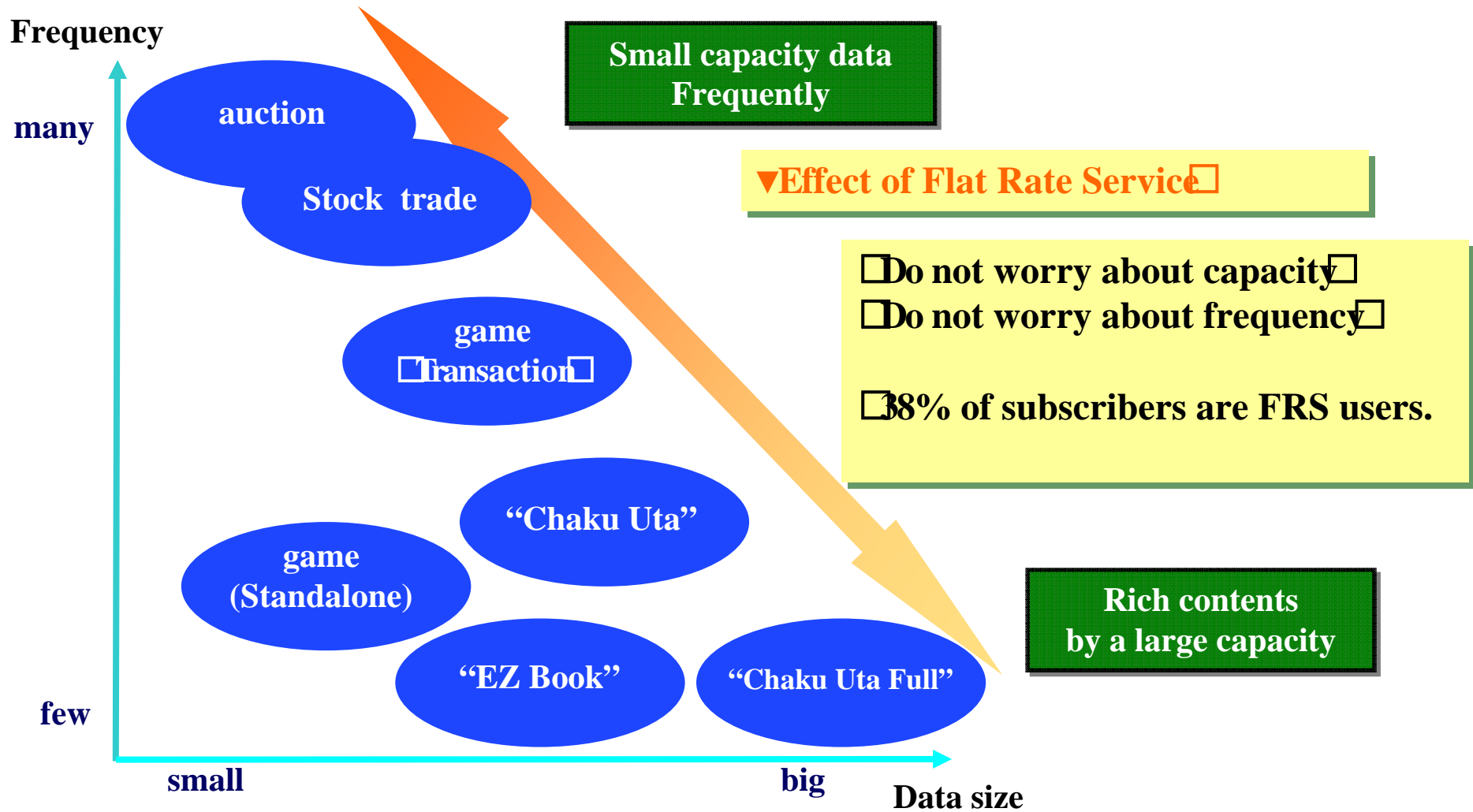
■ Number of Subscribers of a new 3G service “WIN” & “Flat Rate System”. 38% subscribers are Flat Rate Service users.

Flat Rate Packet Communication Service
 “Double Flat”
 “Double Flat Light”

Fee upper limit for EZweb and e-mail
 4,410yen(including tax)

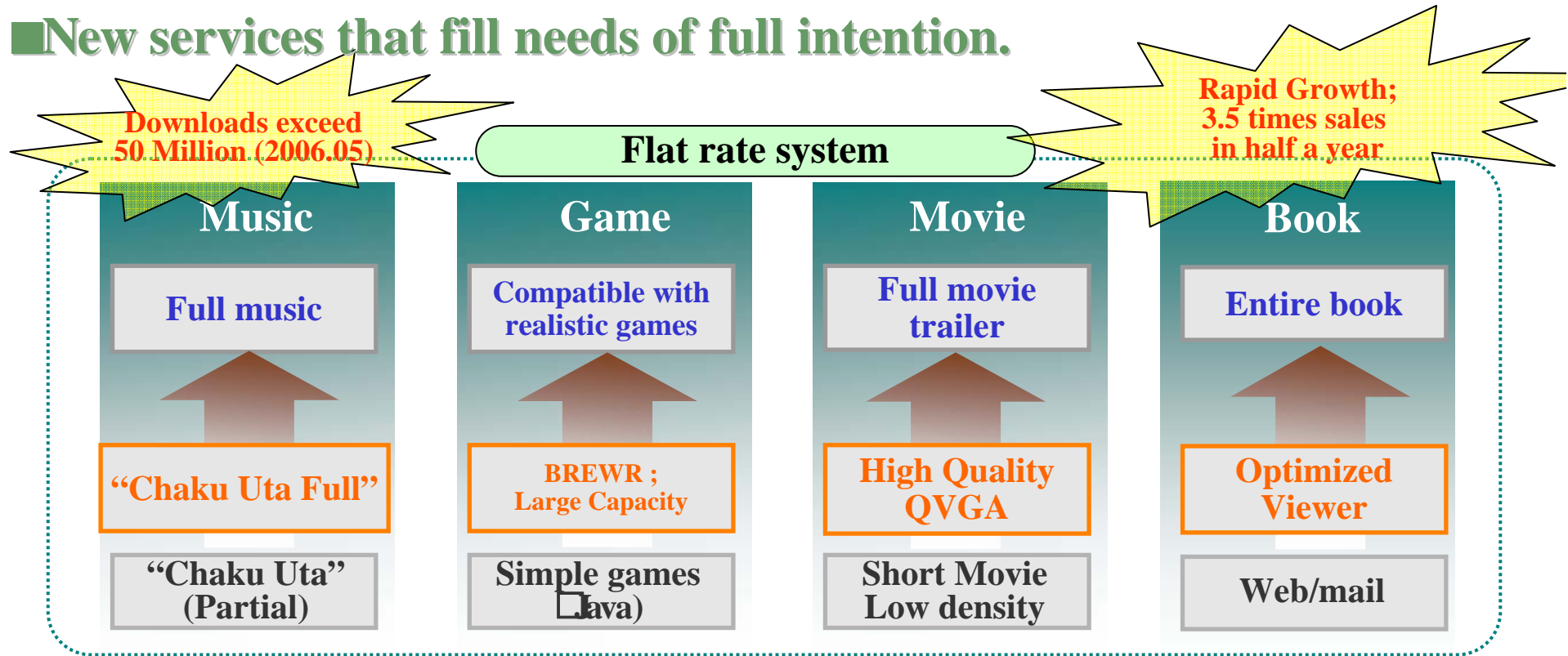


Flat Rate Service (2)



Flat Rate Service (3)

■ New services that fill needs of full intention.



■ Combine Telecommunications and Broadcasting Services

Mobile phone that receives
One Segment Digital Terrestrial
TV broadcasting



Combine Telecommunications and
Broadcasting Services

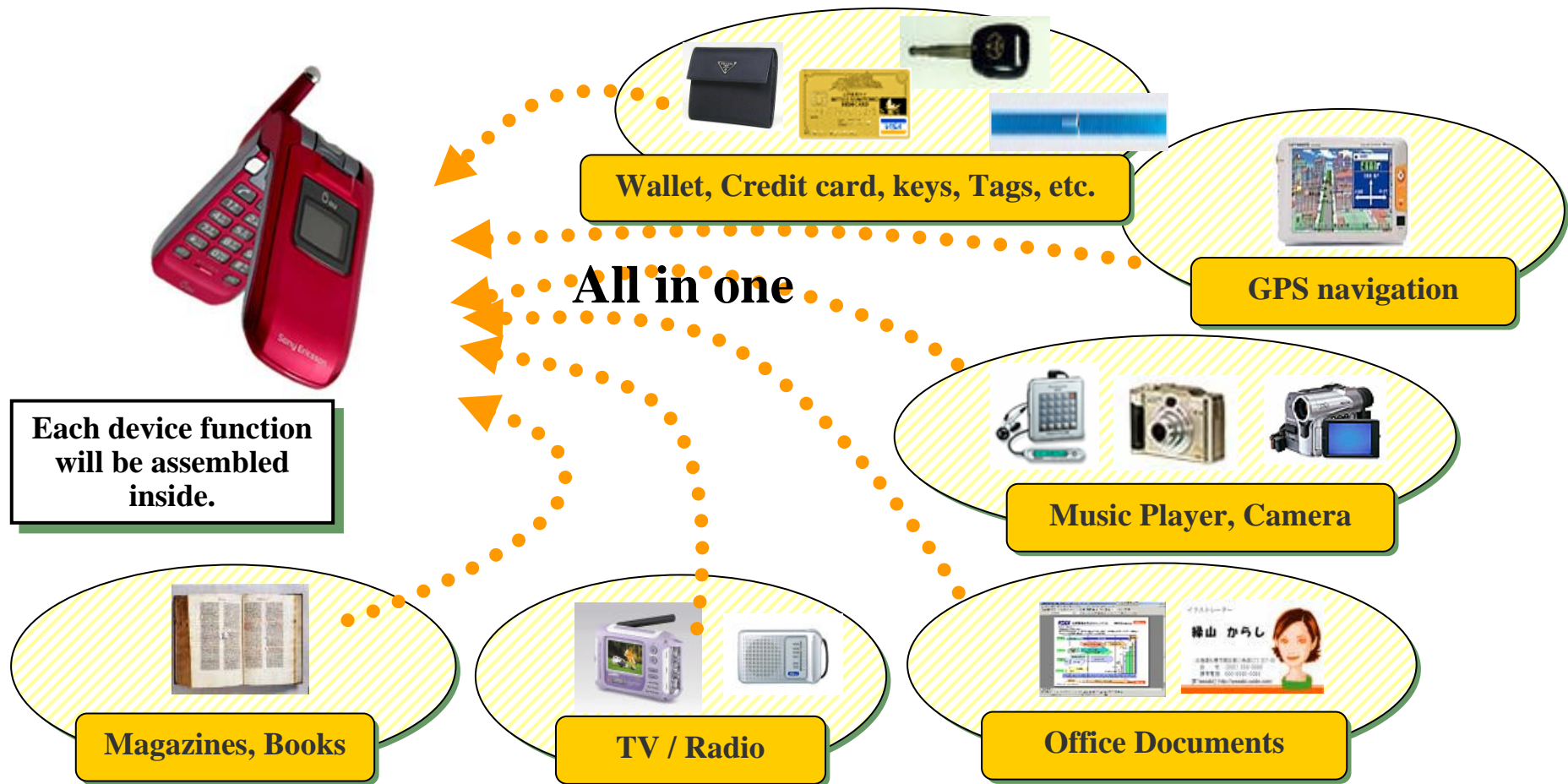
Such as downloading background music from TV
programs as "Chaku-Uta Full" content while
viewing.

Mobile phone that receives
Digital Terrestrial
Audio broadcasting



Mobile handset as personal gateway device

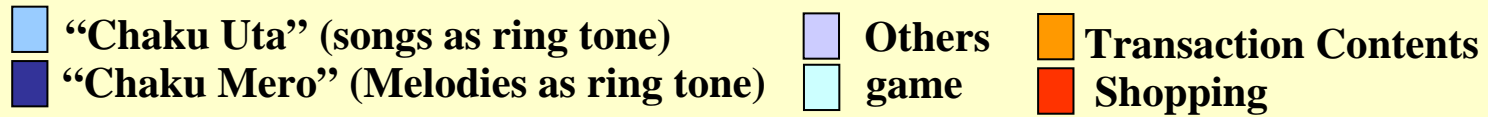
■ All in one mobile handset will provide various useful features in life.



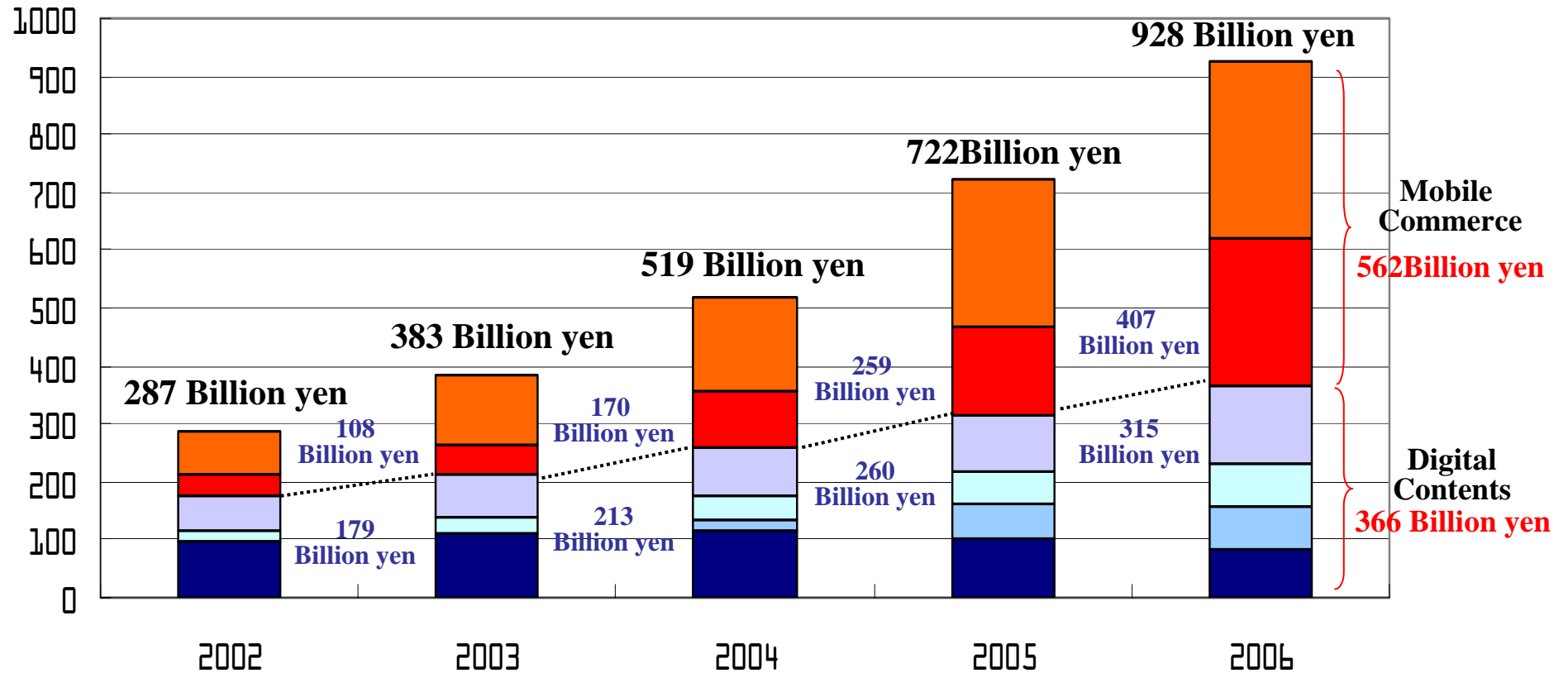


6. Expansion of Mobile Contents Market

Expansion of mobile contents market



(Billion Yen)

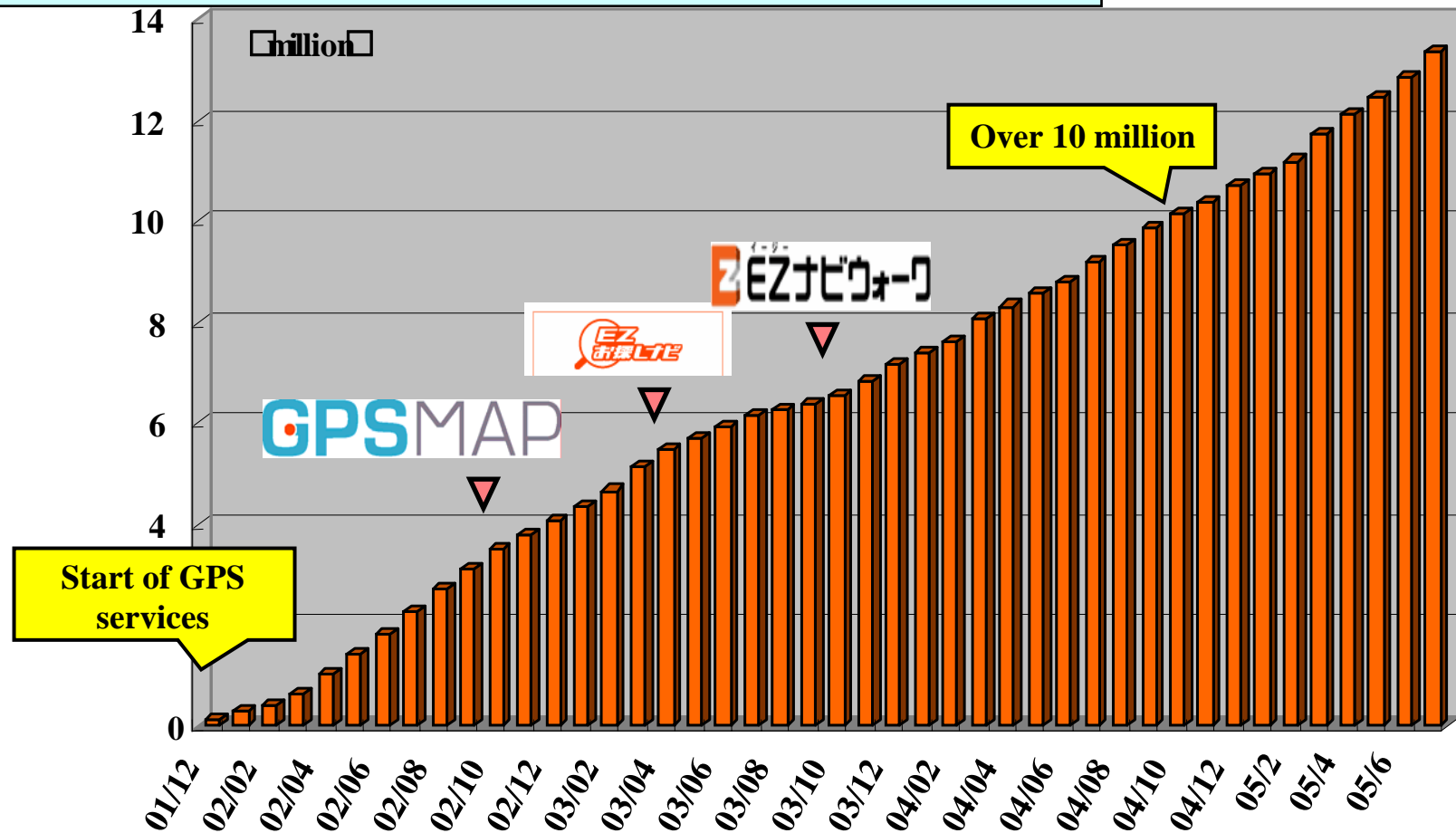




7. Applications: Location Services and Remote Medicine

Market growth of mobile phone with GPS

- KDDI has 23.4 million GPS mobile phones at Oct. 2006. These occupy 90% of all KDDI mobile phones.
- It is defined in Japan at April 2007 that all terminals should be equipped GPS function.



Deployment of GPS service

■GPS navigation service is penetrating steadily in Japan.
EZ navigation-walk service members are over 500 thousands at August 2005.

Location search for corporation

GPSMAP
Oct. 2002

GPSMAP

Evolution of navigation services

EZ Navigation
Oct. 2003

EZナビウォーク

Location search
Apr. 2003

EZ
お探しナビ

Location search service

Start of GPS service
Dec. 2001

EZ@NAVI

Start of car navigation
service
Sep. 2005

EZ助手席ナビ

Safety
Navigation
Jun. 2005

安心ナビ

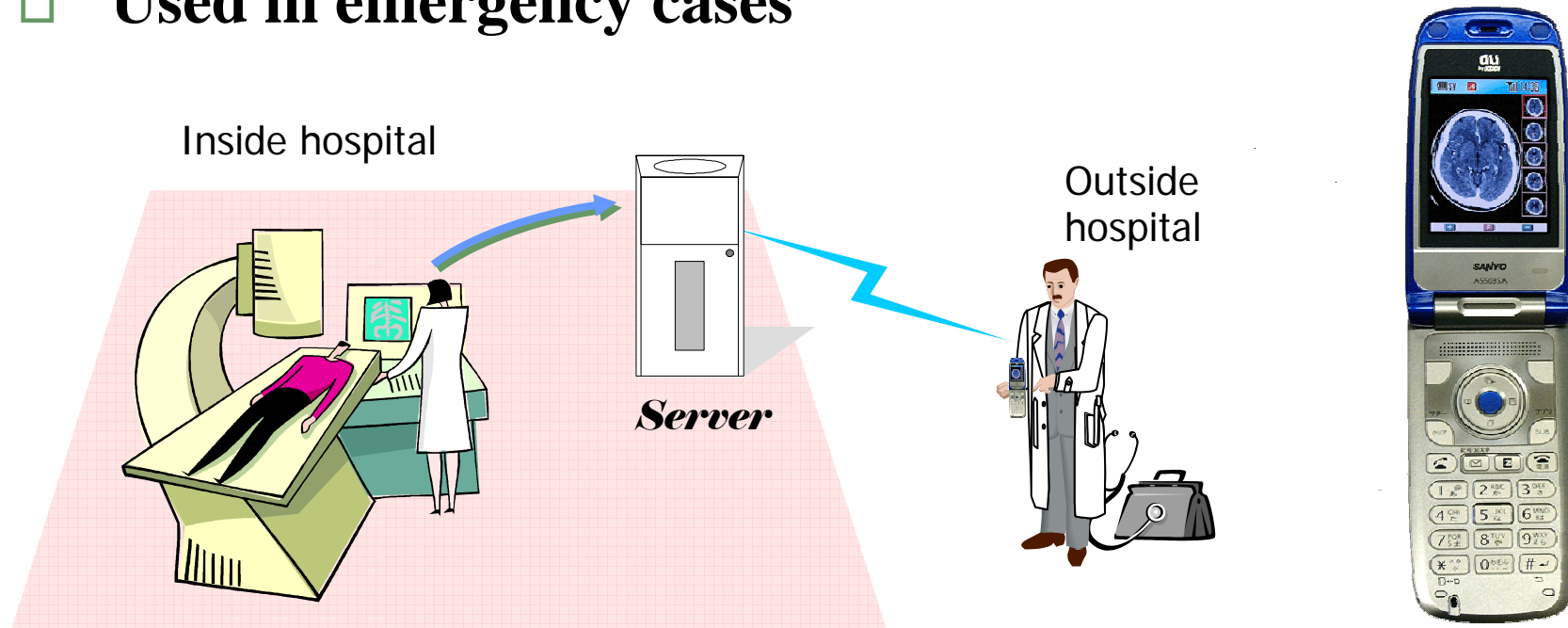
Map/change of train service

Display of mobile phone for “EZ navigation”



Remote Medicine System using Mobile Phone

- An application system which is based on the cellular network infrastructure
- Used in emergency cases



In emergency cases, specialists can check images wherever they are, even if they are out.

8. Concluding Remarks

Concluding Remarks

**1. What is the effective content for wired BB?
Terrestrial broadband TV? Triple Play?**

**2. How can we realize mobile BB for mobile Phone?
WiMax? 4G?**

**3. What is the expected content for mobile BB?
E-commerce ?, GPS ?, Remote Medicine ?**