



Recent Developments in 3G in Japan

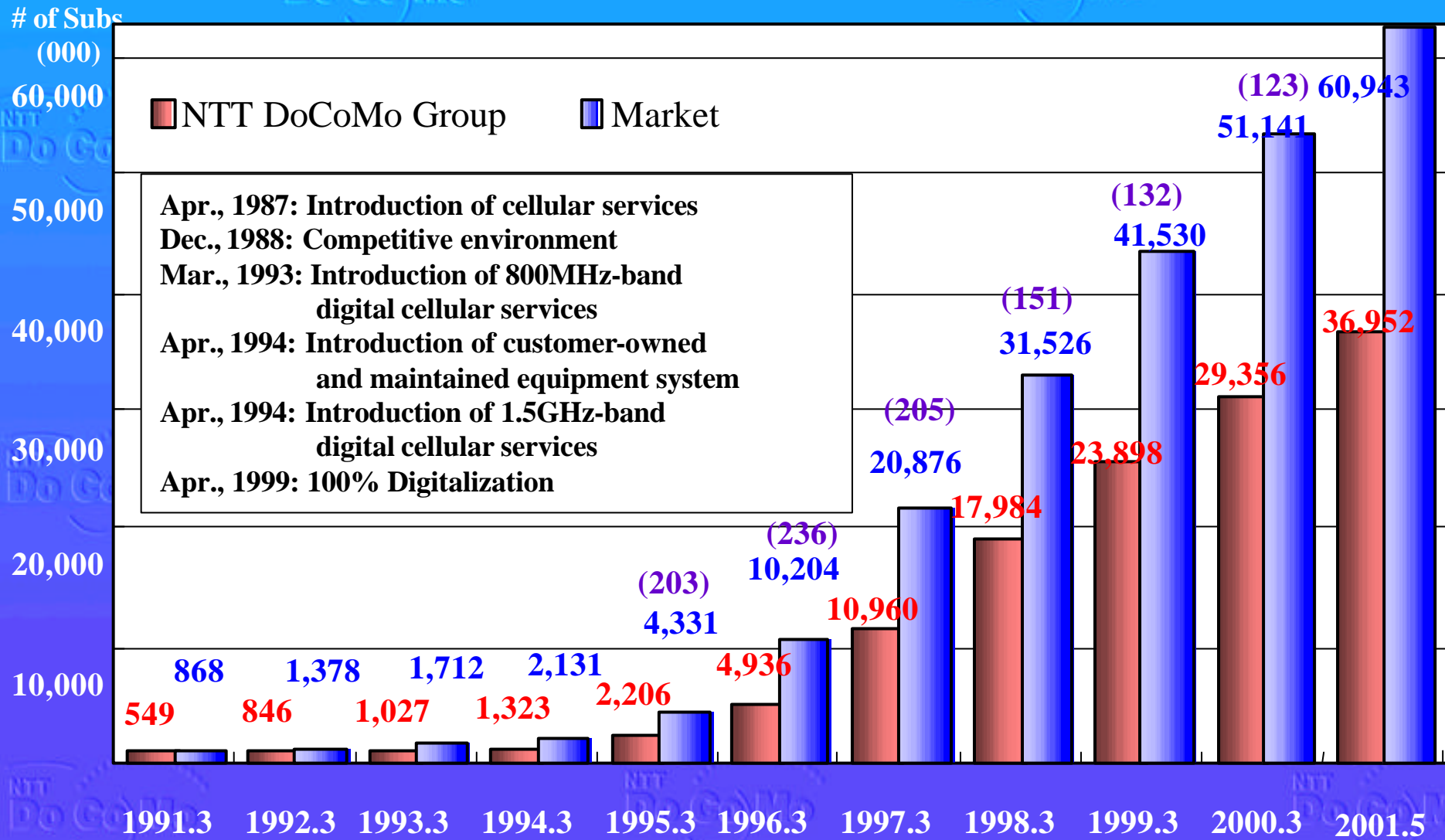
September 06, 2001

DoCoMo Europe S.A.

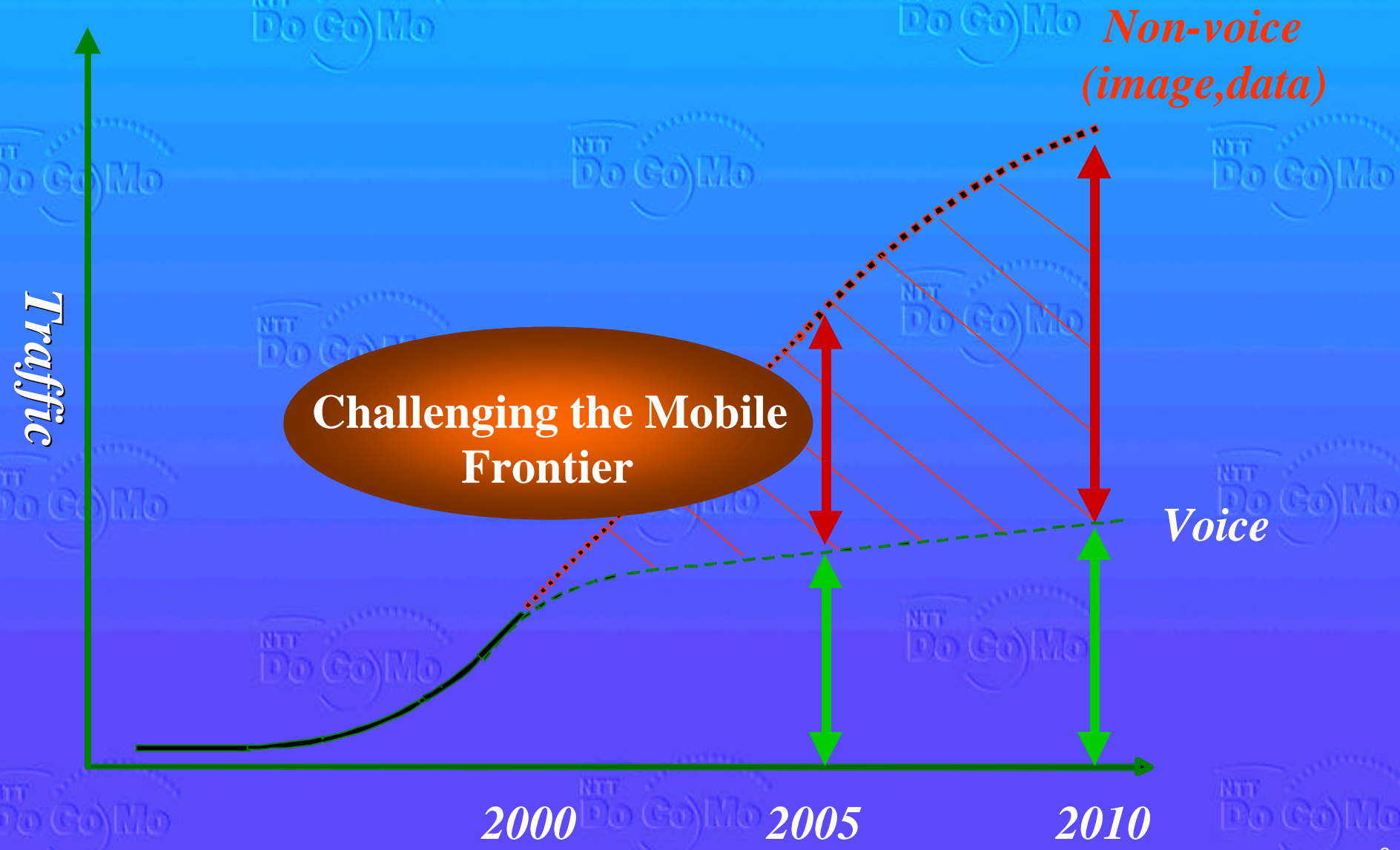
Hiroshi NAKAMURA

Market Growth of Cellular Services in Japan

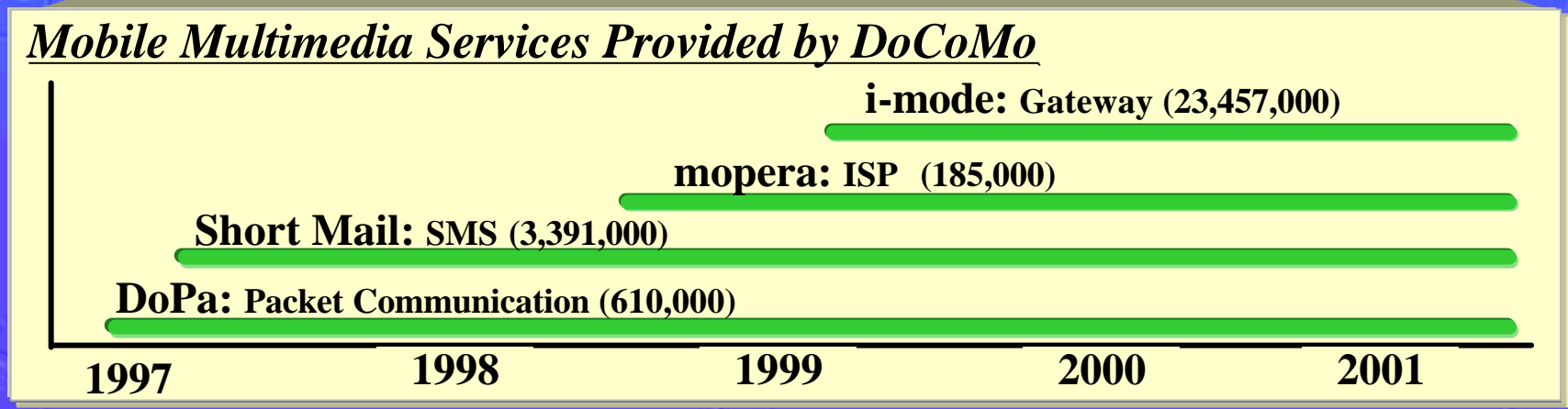
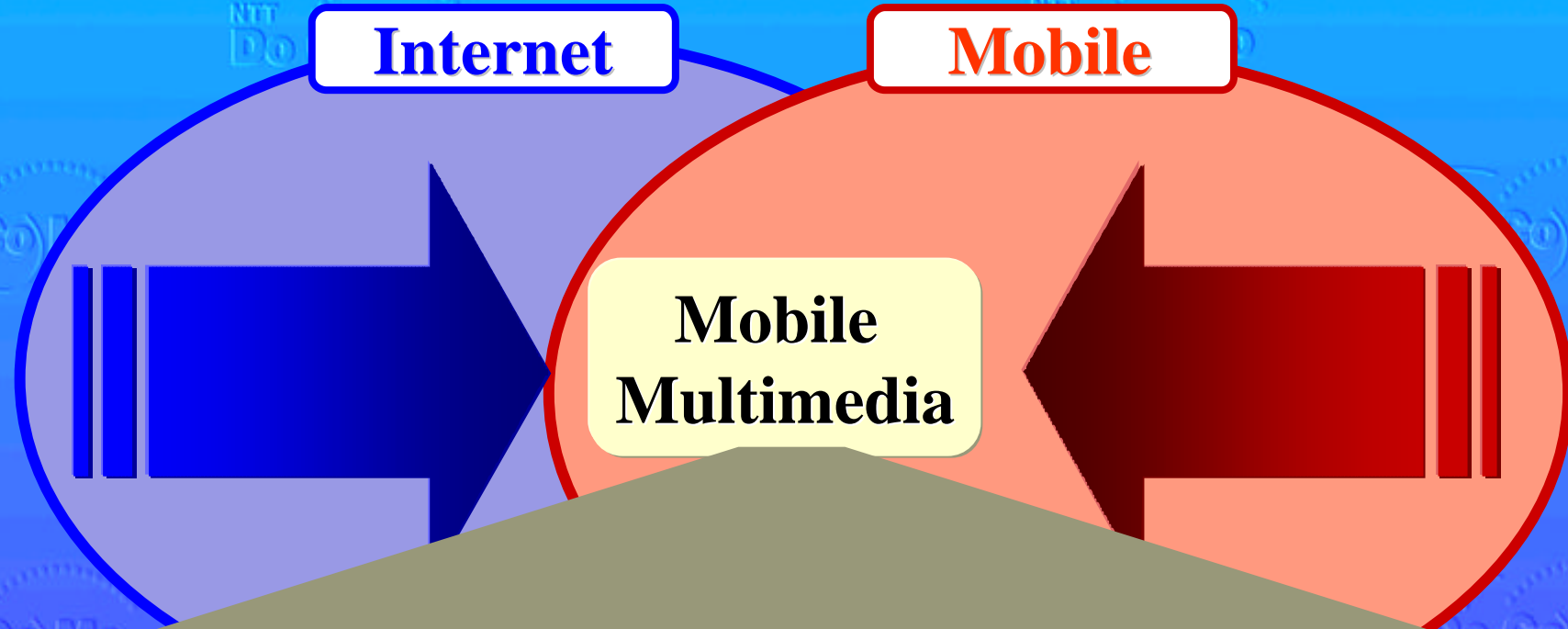
Subscribers of Cellular Services in Japan



Challenging the Mobile Frontier



Mobile Multimedia



1. Figure in parenthesis is the number of subscribers to each service as of end of May 2001

“ i-mode ” Subscribers and Sites Growth



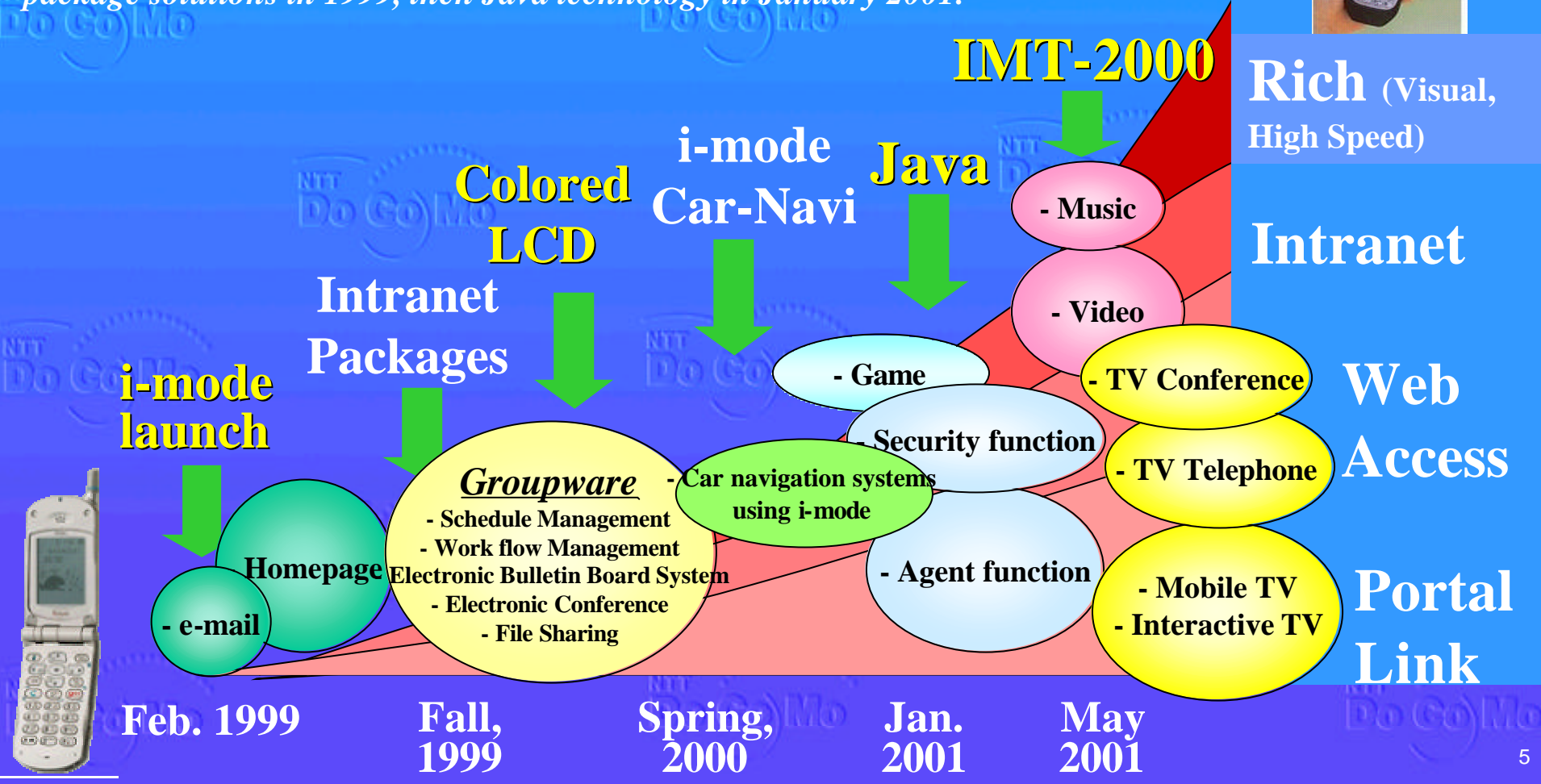
× million subscribers

No. of sites



"i-mode" Developing Strategy

The success of i-mode will lead to a smooth introduction of IMT-2000 which enables 64 k - 384 kbps high speed accesses from mobile devices. Even before IMT-2000, we would make heavy effort for enhancing i-mode platform by introducing Intranet package solutions in 1999, then Java technology in January 2001.



Service Brand Name



Freedom Of Mobile multimedia Access



Service Positioning Image

MOBILITY/AREA

Function-Oriented

For Low-end Voice Comm. User
- High Mobility (Domestic)
- 9.6kbps Data Transmission
Up to 28.8kbps Packet Switching System
Ex. Short mail, mail



PDC



W-CDMA

For High-end Voice/Data Comm. User
- High Mobility (Global)
- Max 2Mbps Data Transmission Ex. movies
- Multi-call



PHS

For Low-end Data Comm. User
- Comparatively Low Mobility (Domestic)
- 64kbps Data Transmission
Ex. pictures, music

Price-Oriented

TRANSMISSION SPEED

W-CDMA Data Communications

	Packet Data Transmissions	Circuit Switched Data Transmissions	(Reference) PDC Services	
Mobile Environment (Ex. Vehicular)	Up to 384kbps	64kbps	PDC Packet Up to 28.8kbps	PDC Circuit 9.6kbps
Mobile Environment (Ex. Pedestrian)				
Indoor Office	Up to 2Mbps in the future			

Key Features of W-CDMA Service

The W-CDMA introductory service scheduled in the end of May 2001

Further realizes mobile multimedia

Enables fast-speed data/image transmission

Packet transmission at up to 384kbps (downlink) / 64kbps (uplink)

Greater global Mobility

Aims to realize worldwide a mobile multimedia environment similar to Japan's

Higher voice quality

Offers higher voice quality and is more resistant to interference and noise

W-CDMA Service Offerings

Enhanced i-mode



- uplink: max. 64kbps
- downlink: max. 384kbps
- packet switched

Video distribution service



- 64kbps
- circuit switched

Videophone Service



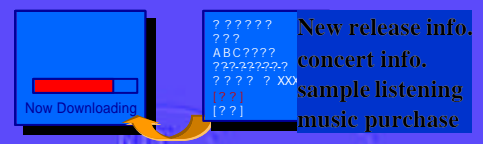
- 64kbps
- circuit switched

High-speed Internet / Intranet access service



- uplink: max. 64kbps
- downlink: max. 384kbps
- packet switched

Music distribution service



- uplink: max. 64kbps
- downlink: max. 384kbps
- packet switched

FOMA Communication Charges



< Introductory Service >

1 . Voice Mode Tariff

? Equivalent to existing cellular voice charges

2 . 64K Digital Communication Mode Tariff

? Approximately 1.8 times as much as the voice mode tariff
(as 64K mode occupies more radio bandwidth than voice mode)

3 . Packet Communications Mode Tariff

? ¥0.05 / packet

(After the start of the expansion-phase service, according to current assumptions, this tariff will be offered to users who pay a fixed monthly rate in addition)

Initial Handsets for W-CDMA

< Upon Introductory Service Launch >



Providing handsets with 3G features (e.g., CCD camera)

Standard Type

Visual Type

Data-Card Type

Handsets



FOMA N2001



FOMA P2101V



FOMA P2401

Features

- High-quality voice
- High-speed data
384k downstream packet
64k non-restricted digital
- Still picture
- Video clipping

- High-quality voice
- Videophone
- High-speed data
(same as small basic handset)
- Still picture
- Video clipping
- Video delivery

- High-speed data
384k downstream packet
64k non-restricted digital

Objectives of FOMA Introductory Services

To ensure a stable, nationwide deployment, DoCoMo launches FOMA services with an “introductory phase” so as to:

- ? further improve the service quality based on the track record of system operation and the responses obtained from customers; and**
- ? further enhance the services through obtaining users’ evaluations on, e.g., ease of use.**



NTT
Do Co Mo

Do Communications
Over The Mobile Network