

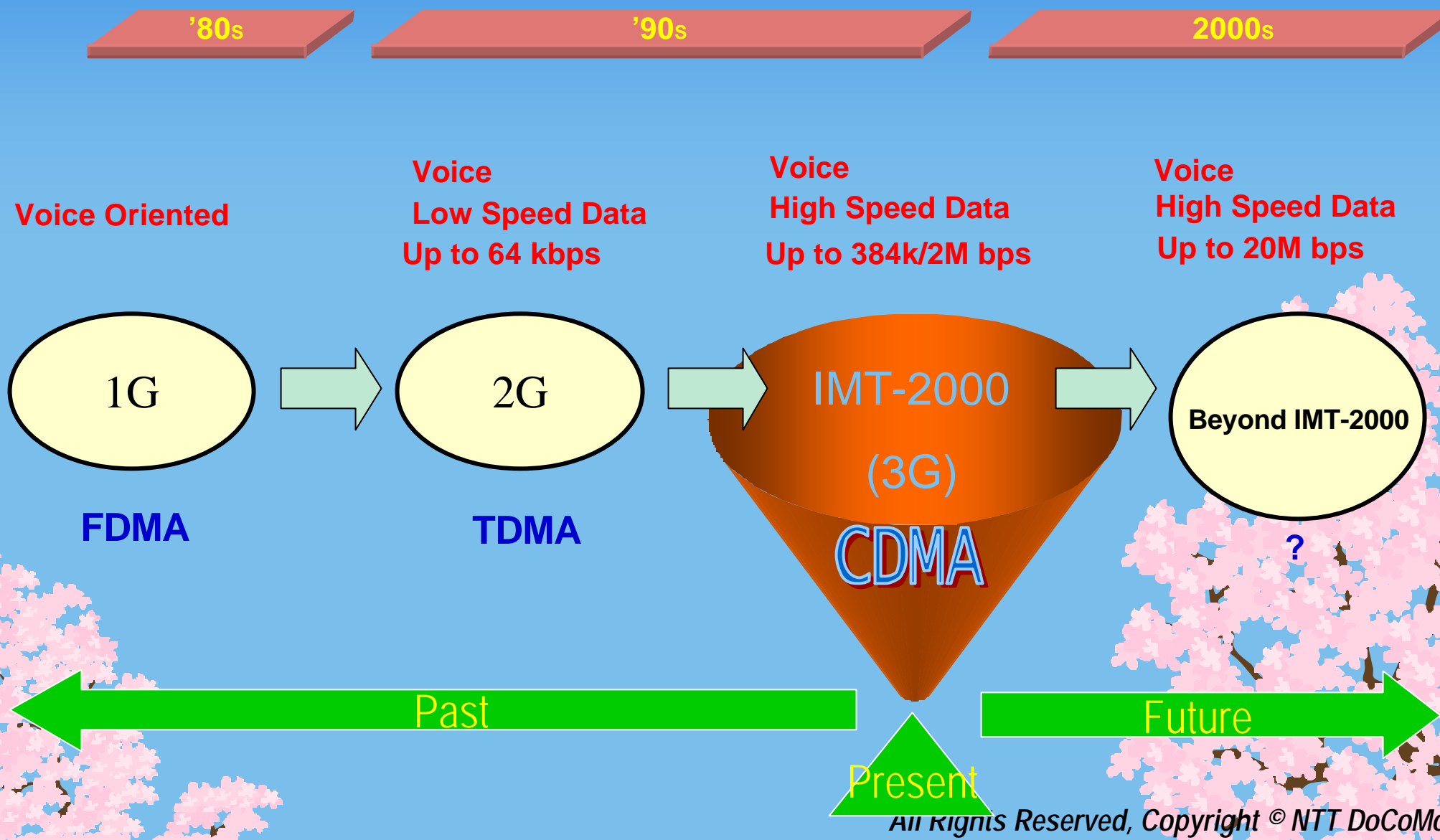
Global Multimedia Mobility, past, present, future

- Towards Mobile Multimedia -

26/04/2001

Hiroshi NAKAMURA
DoCoMo Europe S.A.

Evolution toward IMT2000 and Beyond

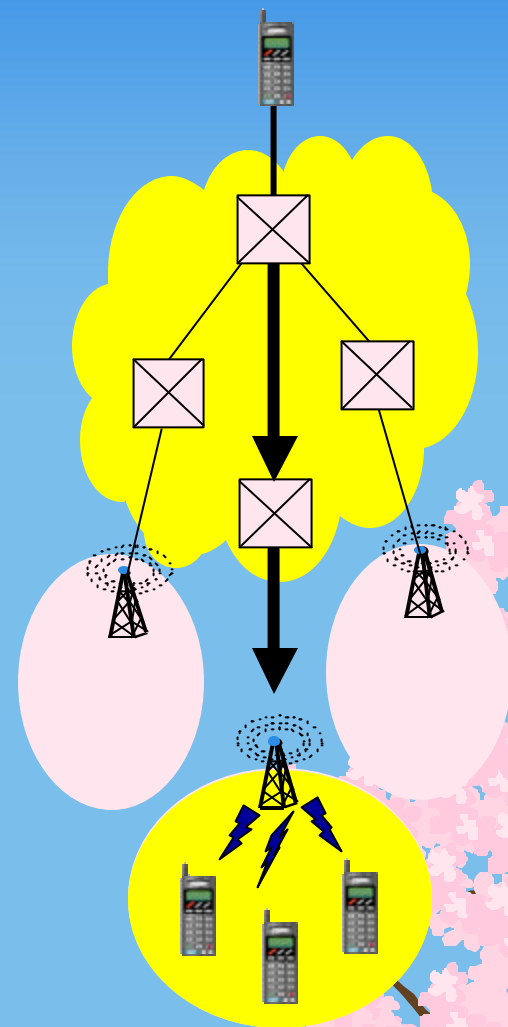


Mobility - Past

Expansion of service area by one number

Expansion of service area by one number

(1) Paging
within one radio zone

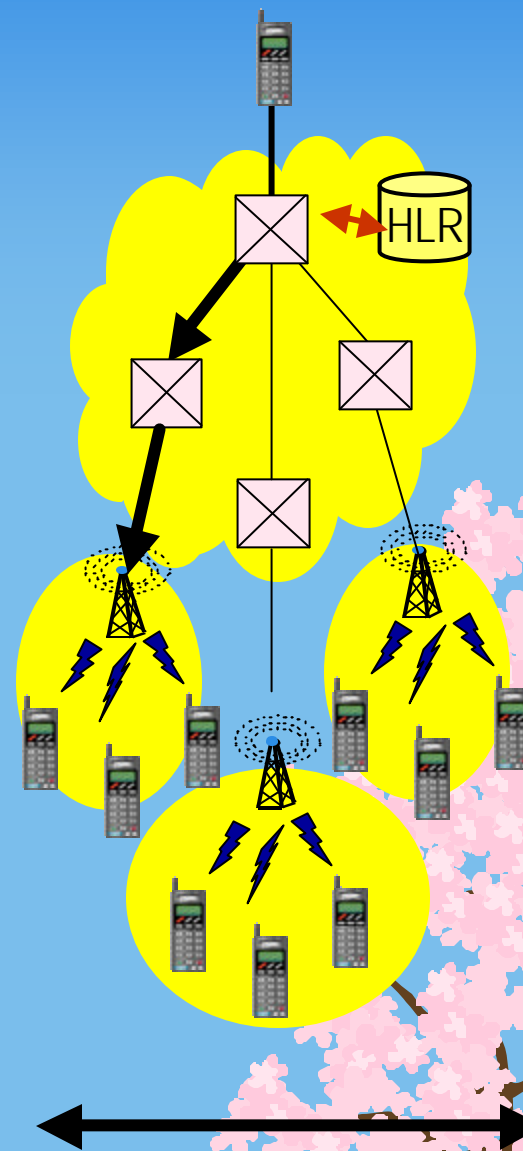


Expansion of service area by one number

(1) Paging
within one radio zone



(2) Location Registration
within one network



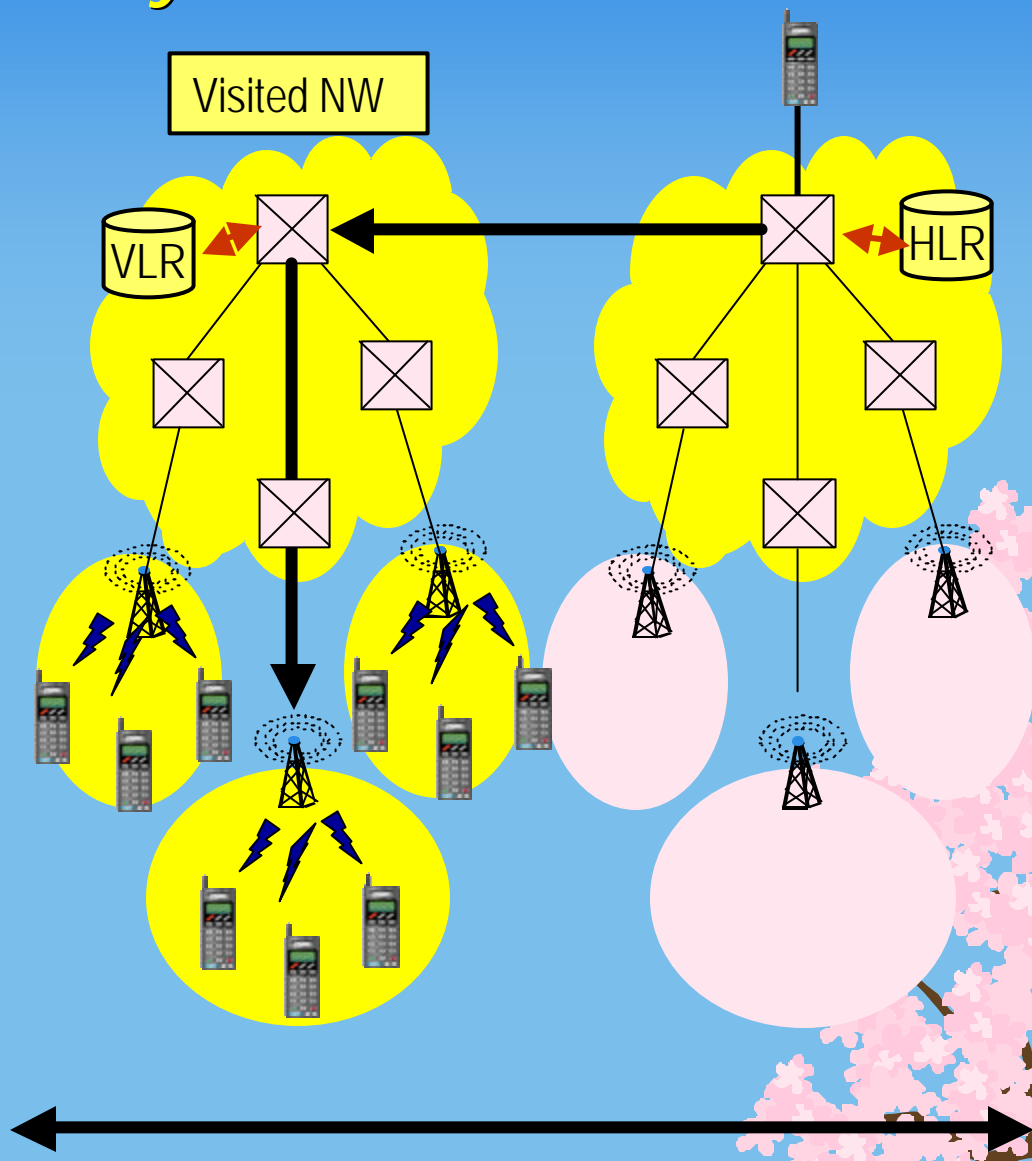
Mobility

Expansion of service area by one number

(1) Paging
within one radio zone

(2) Location Registration
within one network

↓
(3) Roaming
among networks

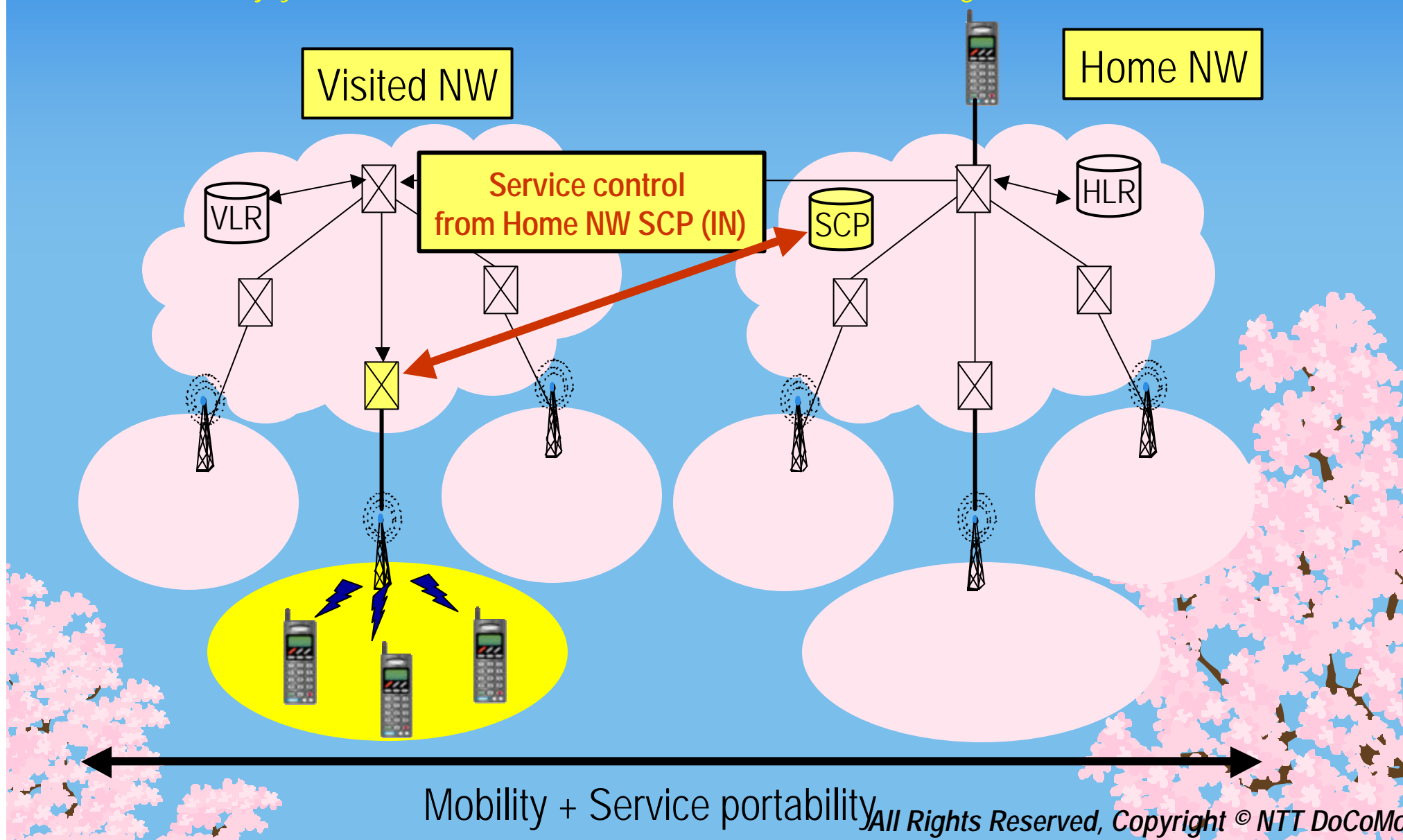


Mobility - Present

Expansion to Service Portability (VHE)

VHE (Virtual Home Environment) : Service portability between networks

User can enjoy the same services of home network while roaming



Mobility to the Future

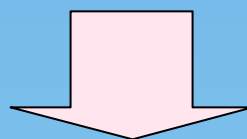
Flexible and High Efficient Mobility Management

Much more freedom for Mobility

Requirements for Beyond IMT-2000

(2) Advanced Mobility Management

Unique Mobility Management for All Mobile Terminals



**Diversified, Flexible and High Efficient
Mobility Management**

Mobile Telecommunication

Location Registration (HLR-VLR)

**Paging,
Handover**

Internet

Mobile IP (HA-FA)

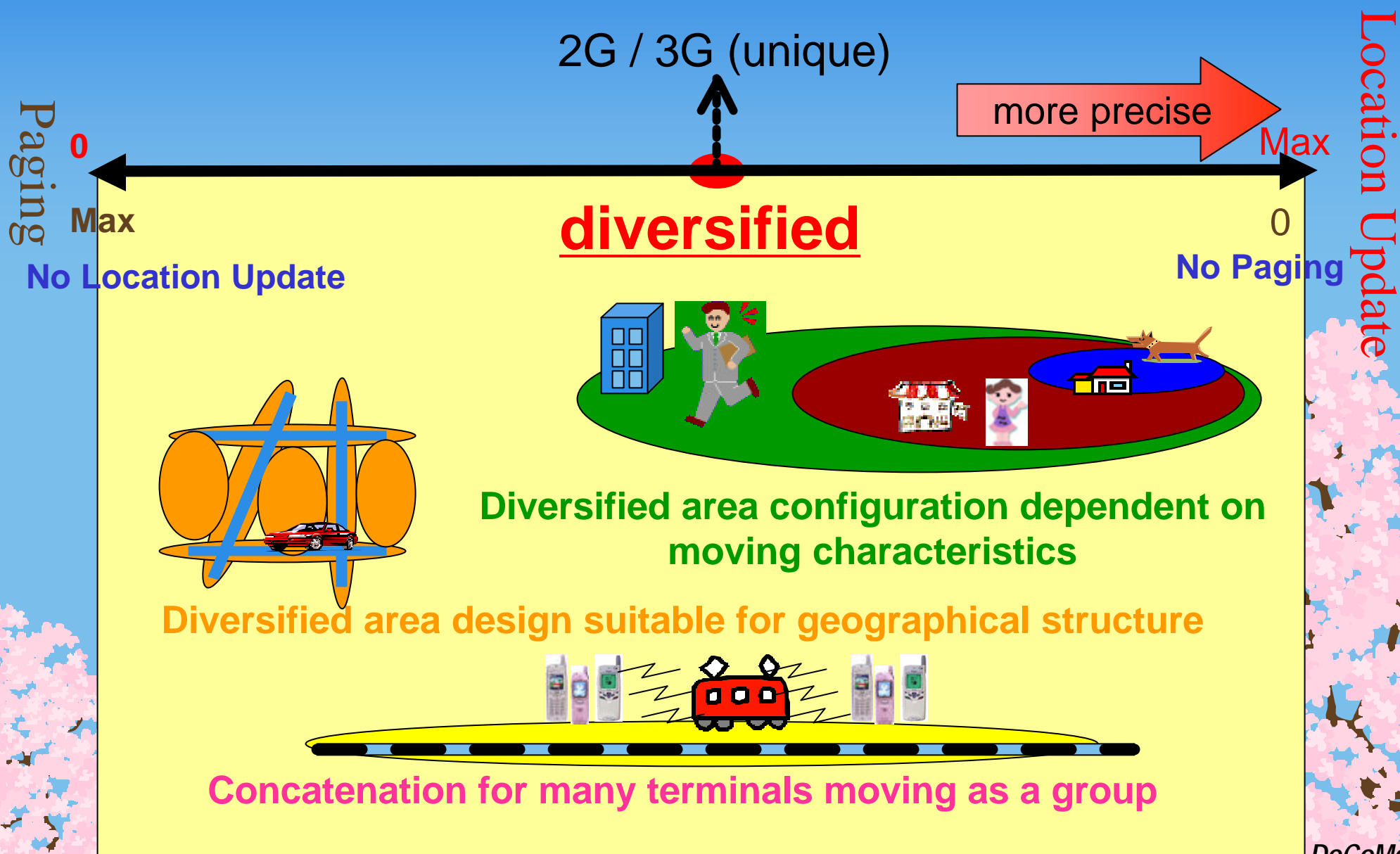
Cellular IP, Hawaii



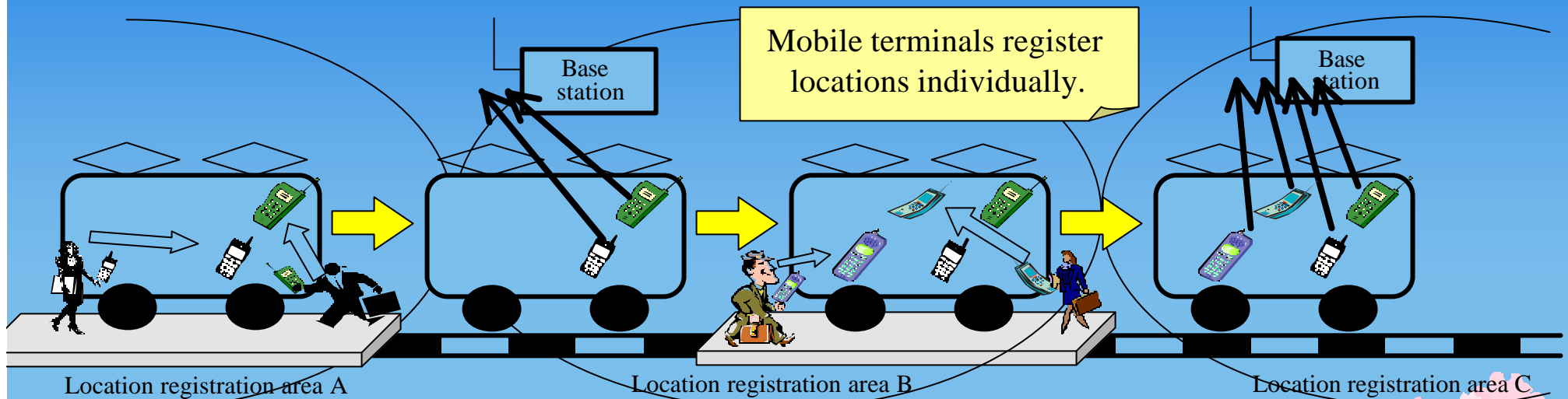
Mobility Control Layer & Transport (Routing) Layer
Separated

Unified

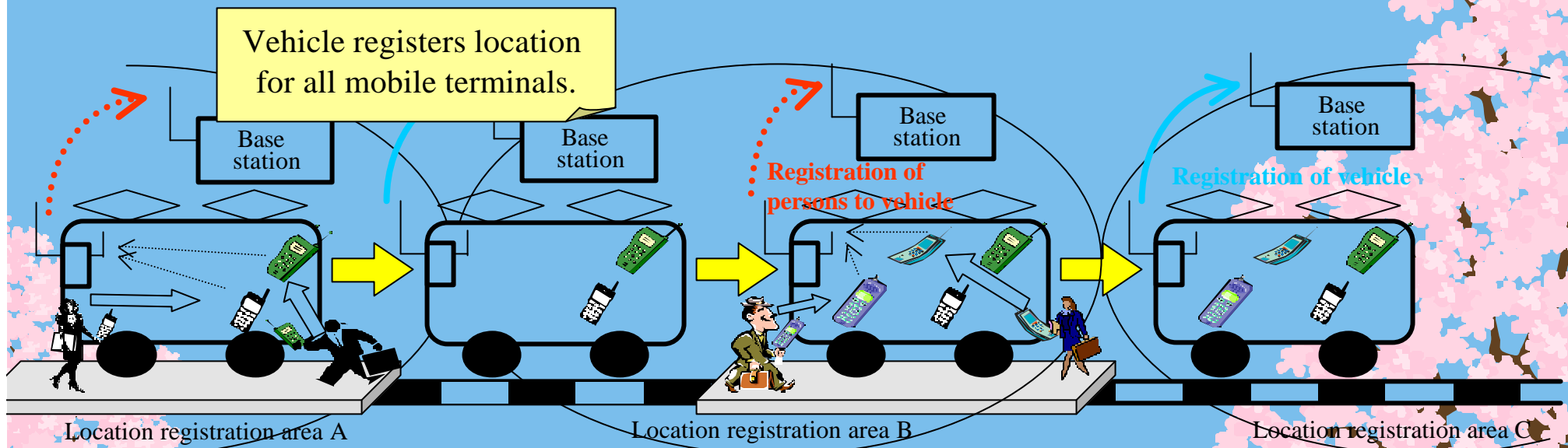
Study on Location Management



Concatenated Location Management



(a) Conventional location registration



(b) Concatenated location registration

Requirements for Beyond IMT-2000 - Much more freedom for Mobility -



Video Conf. Server

Contents

Large screen ‡ high
sound quality

Small screen ‡ low sound
quality

Small screen ‡ text

Large screen ‡ high
sound quality

Device Seamless

Video Conf. Client

Visual Phone+Headset

+ pen

Visual Phone+TV

NW Seamless

ad-hoc NW

WLAN

Cellular

WLAN



Remote Controller

room

indoor

outdoor

branch office

Seamless service support

