

All-IP migration of telephone network and further evolution toward fixed-mobile network convergence

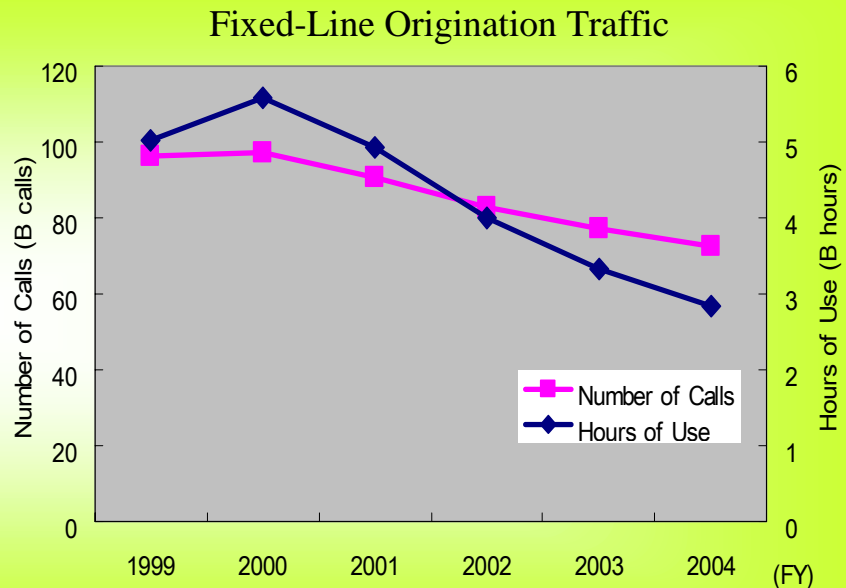
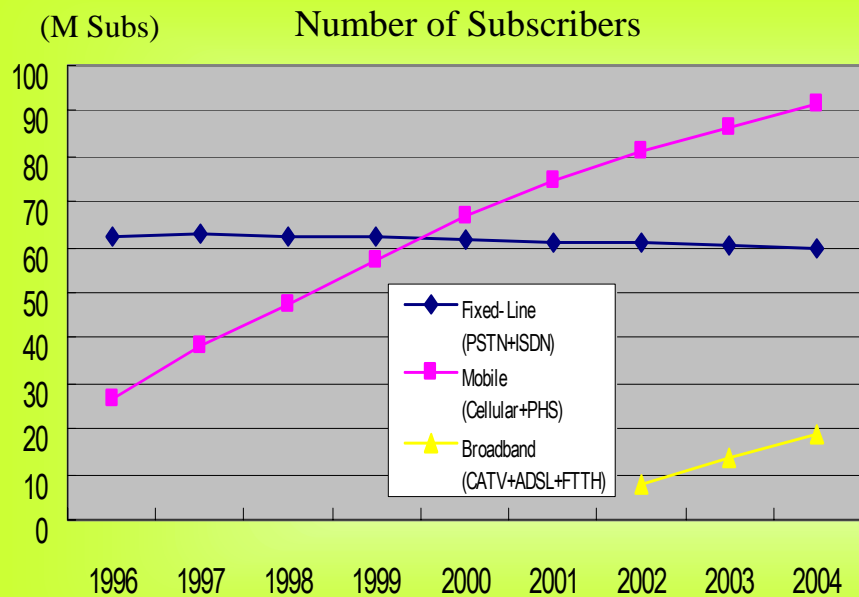
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1. Telecommunications Trend in Japan
2. All-IP Migration of Fixed-Line Network
3. Evolution toward NGN
4. Summary

1. Telecommunications Trend in Japan

Shrinking Market of Fixed-Line Telephony and Mobile Market Saturation



[source] MIC

Coping with changing traffic characteristics

Cost Reduction

Groping for new business area

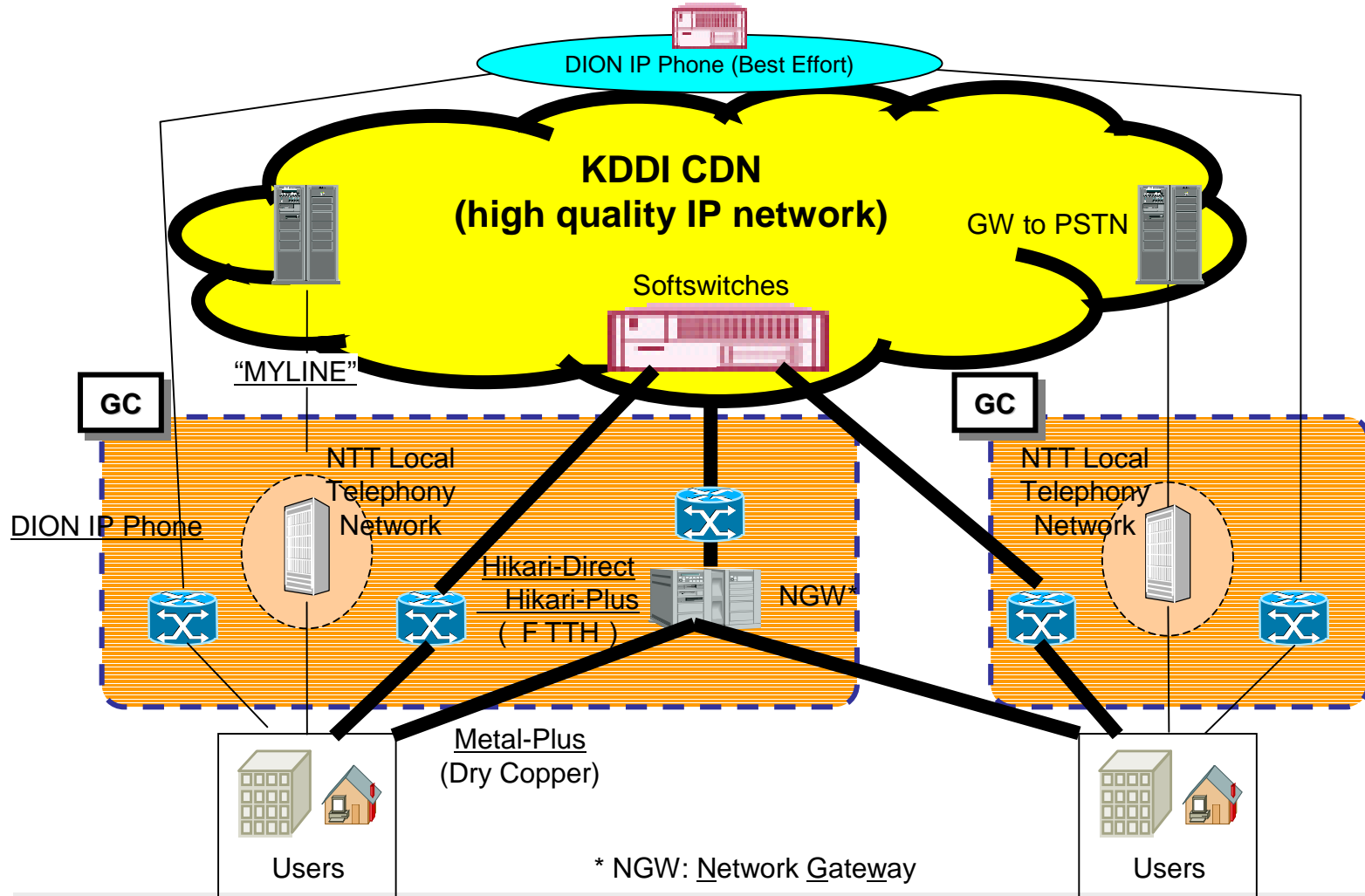
toward Network Convergence

toward Flexible Network

2. All-IP Migration of Fixed-Line Network

All-IP Migration Plan of KDDI

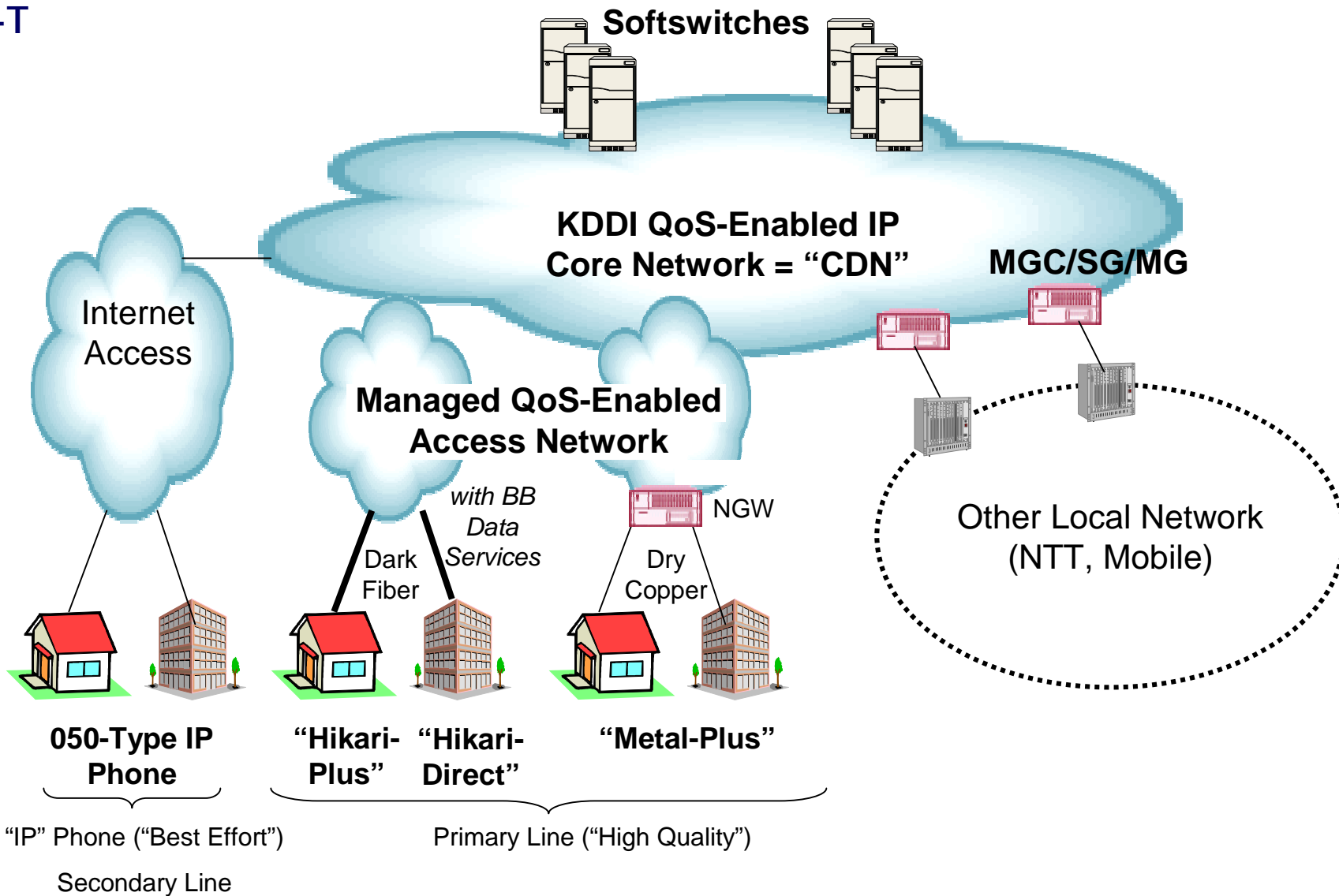
- Replace all the circuit switches with Softswitches by March, 2008.
- Migrate NTT Local subscribers into KDDI direct subscription with “Metal-Plus” and “Hikari-Plus”.





Landscape of KDDI Fixed-Line IP Telephony Network

ITU-T





ITU-T

“Metal-Plus”: IP Telephony with Legacy Terminals

- Telephone-line subscription directly from KDDI
- Telephony and ADSL available at lower charge

KDDIメタルプラス

メタルプラス 電話

- Telephony service
- Continued use of current NTT telephone number



メタルプラス ネット DION

- ADSL on “Metal Plus” line
- Up to 50Mbps available on Down link
- Flat-rate “dial-up” Internet access also available





“Hikari-Plus”: FTTH

ITU-T

- Optical fiber subscription directly from KDDI
- “Triple-Play” (Telephony, Internet access and IP-TV) available at reasonable charge

KDDI 光プラス

光プラス 電話

- Telephony service
- Continued use of current NTT telephone number



光プラス ネット

- Up to 100Mbps available on Up & Down links at home

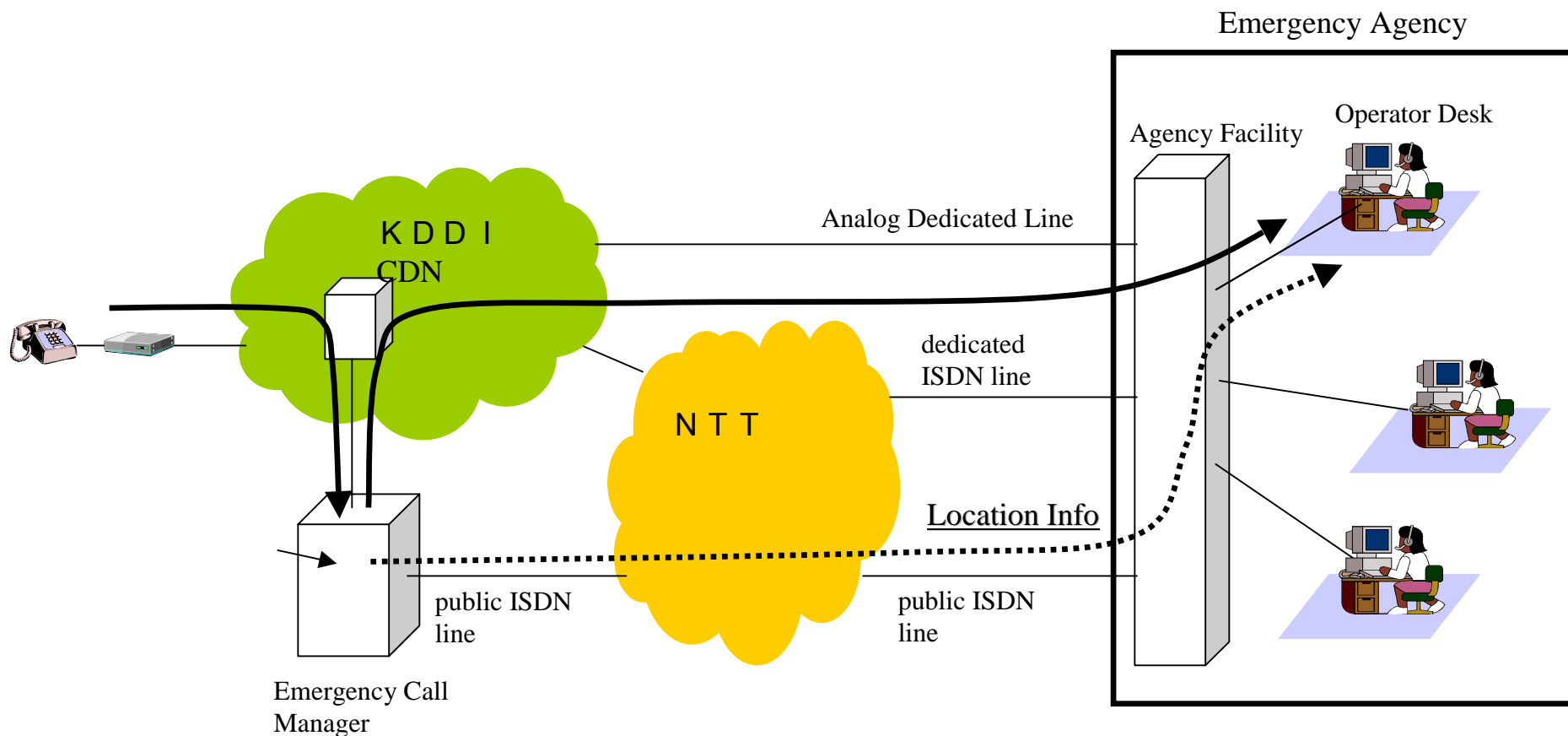


光プラス TV



- Multiple Channel TV available
- Pay-per-view Video-on-demand content available

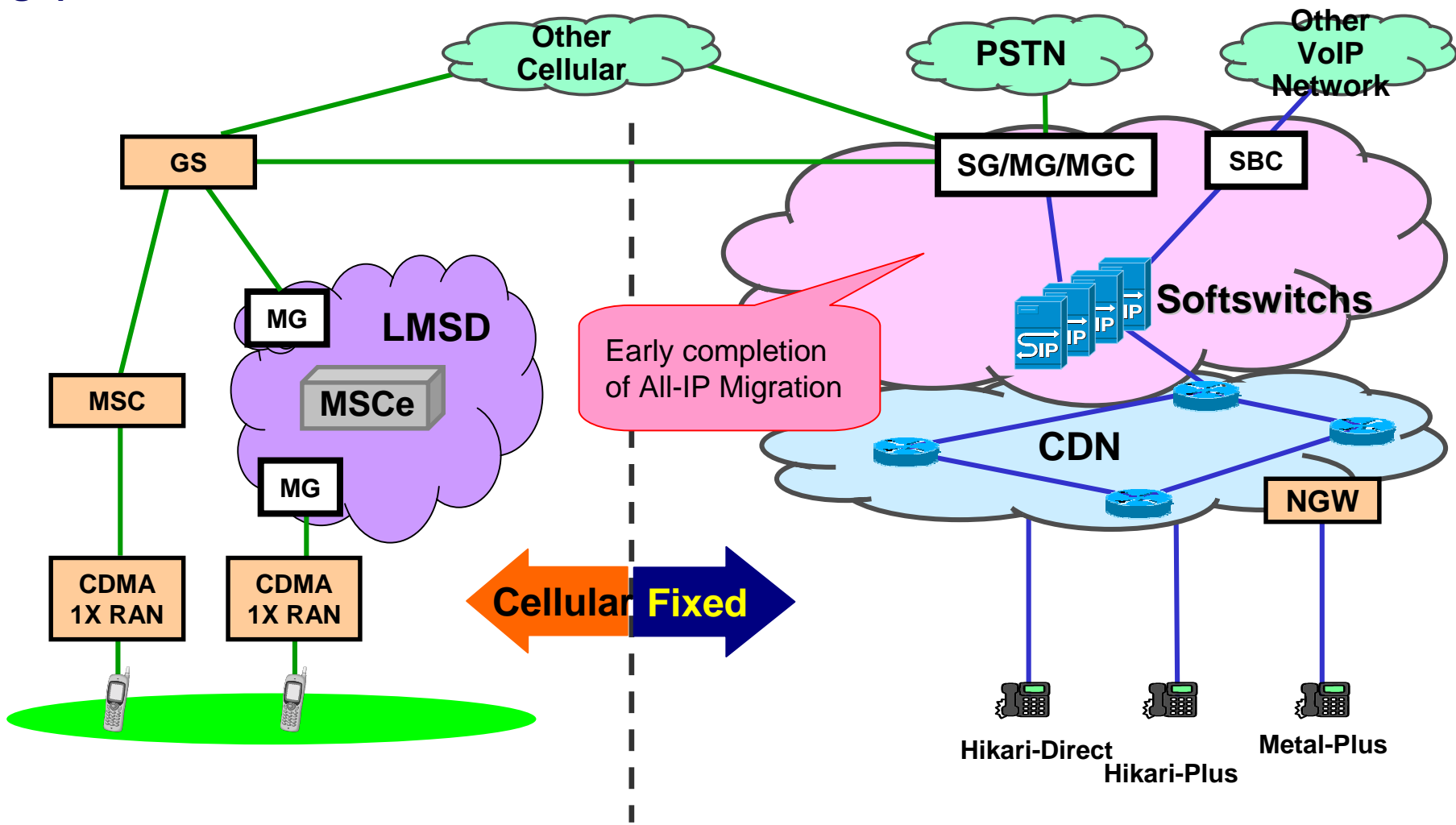
Emergency Calls over IP Telephony





Near-Future Configuration of all-KDDI Telephony Network

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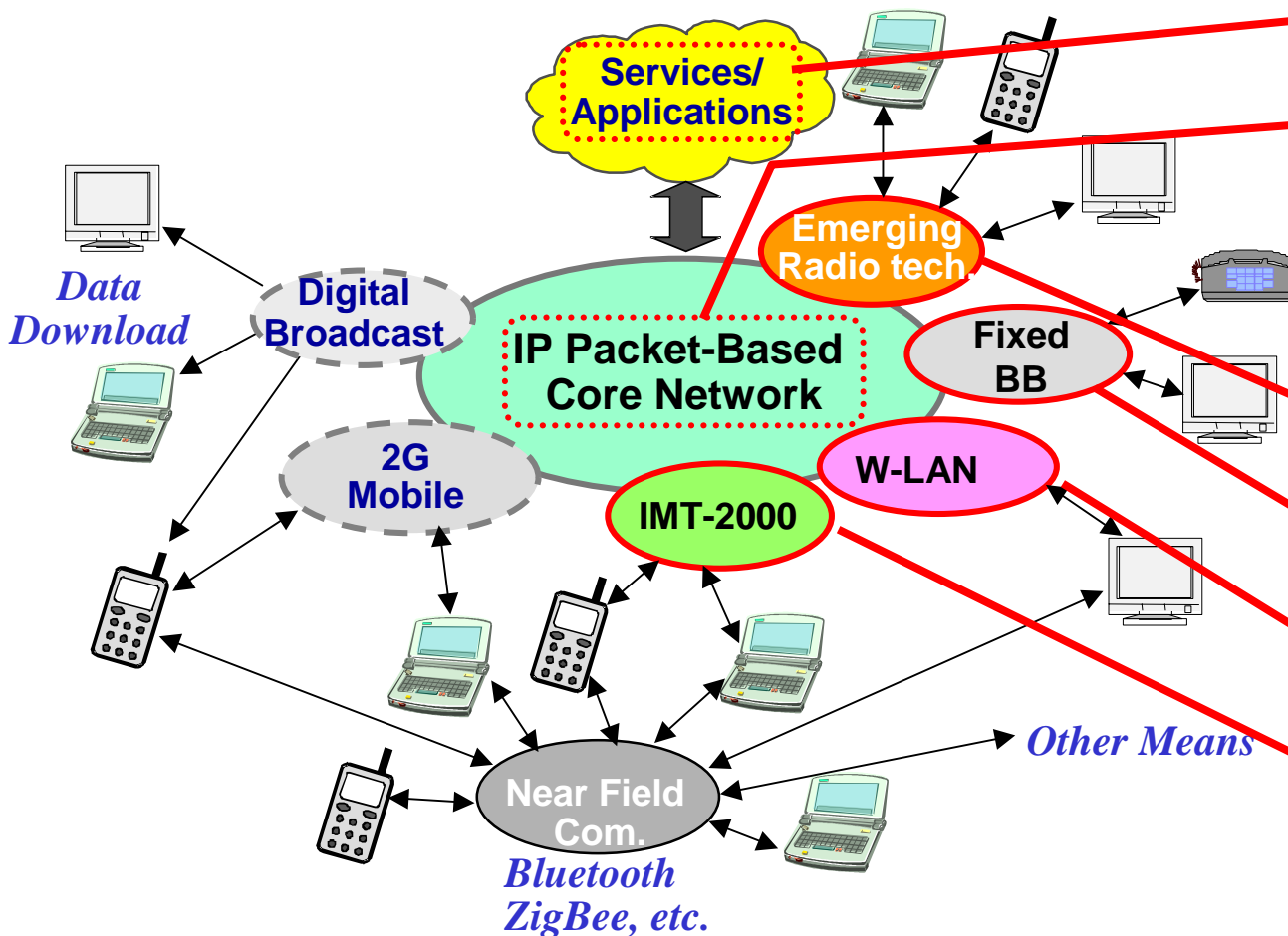
LMSD (Legacy Mobile Station Domain)
 MG/SG (Media Gateway/Signaling Gateway)
 SBC (Session Border Controller)

3. Evolution toward NGN



KDDI's "Ultra-3G" Vision

Fixed-Mobile Network Convergence



- Integrated Services**
- ◆ MMD-compliant (MMD: Multimedia Domain)
 - ◆ IPv6-based Network

- Variety of Access Means**
- ◆ Next-Gen CDMA2000, WiMax, etc.
 - ◆ ADSL, FTTH & CATV
 - ◆ IEEE802.11 a/b/g + n, e, i
 - ◆ CDMA2000 1x/EV-DO + 1xEV-DO Rev. A + NxEV-DO, etc.



Plug-In Concept of "Ultra-3G"

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Flexible Network

Plug in new services

Applications

VoIP

Chat IM

IP Video Phone, Interactive Games, etc.

Service Control

MMD / IMS

IP-based Packet Network

Integrated Network

Access Network

1xEV-DO

FTTH DSL

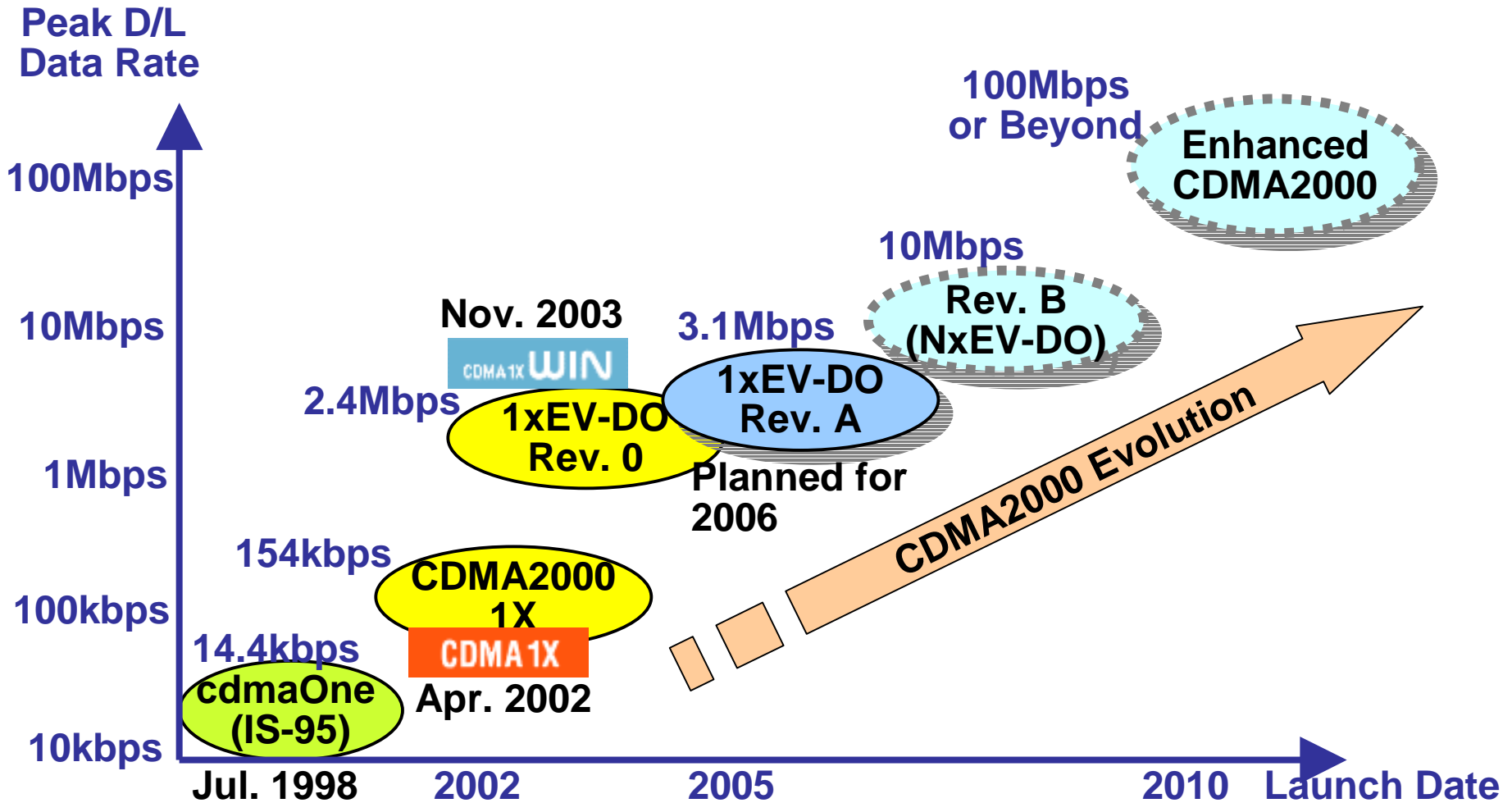
Enhanced CDMA2000 Mobile WiMAX, etc.

Plug in new access networks



Evolutional Technology Approach by au

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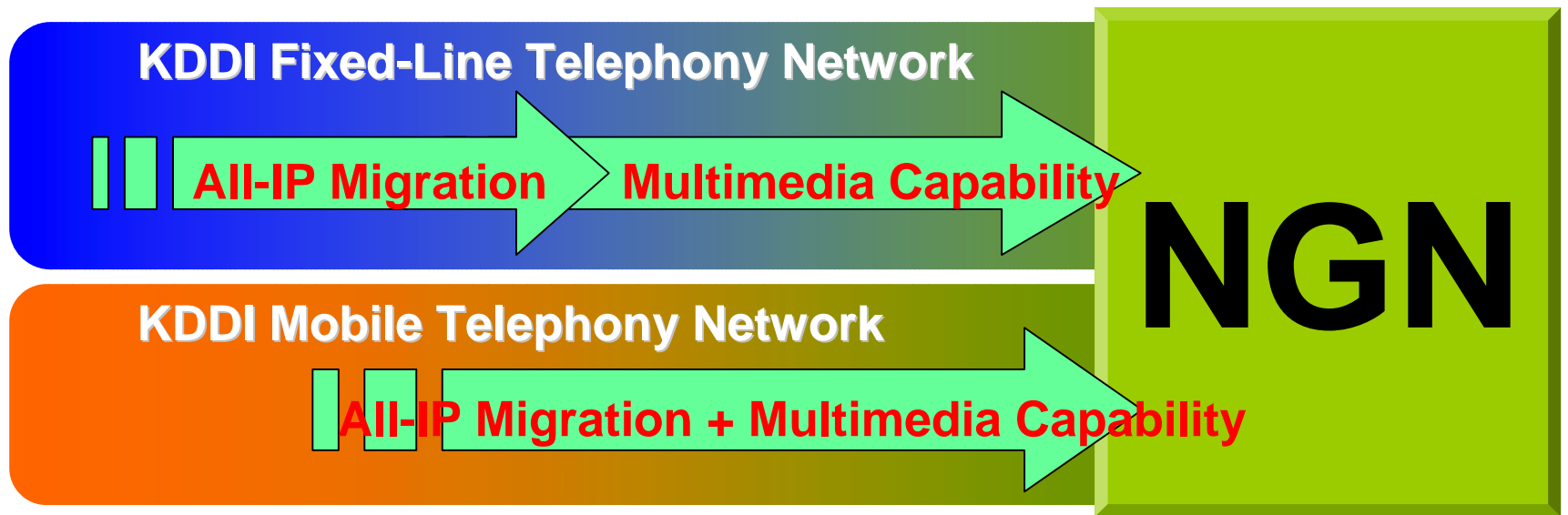


4. Summary



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- KDDI plans to complete all-IP migration of our fixed-line telephony network by March, 2008. The plan also includes the introduction of “Metal-Plus”, hybrid IP telephony system.
- KDDI disclosed “Ultra-3G” concept, according to which, a variety of our packet access networks would be connected to a consolidated packet core network. The concept aims eventual all-IP migration of our mobile network. The concept also includes fixed-mobile network convergence.



KDDI

Designing The Future