

Toward BcN

(Broadband convergence Network)

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K.P. Jun Ph.D.
Vice President, ETRI

kpjun@etri.re.kr

I. Why BCN ?

II. BcN Project in Korea

III. Remark

Why BcN ?

Current Domestic Status

Established Korea Information Infrastructure Plan (1995)

Initiated Mobile Internet service (1999)

Built nationwide optical network (2000)

Built broadband subscribers' Network in 1,400 cities(2002)



Category	Current Status	Remark
Broadband Internet subscribers	11,170K (76%)	No. of total households 14,690K
Broadband Internet users	29,220K(64%)	Total population 44,000K
Mobile Internet subscribers	31,942K(73%)	Total population 44,000k
e-Commerce	KRW238trn(17%)	Total commercial trading KRW1,426trn
Online banking transactions	223,546K(24%)	No. of total transactions 931,441K

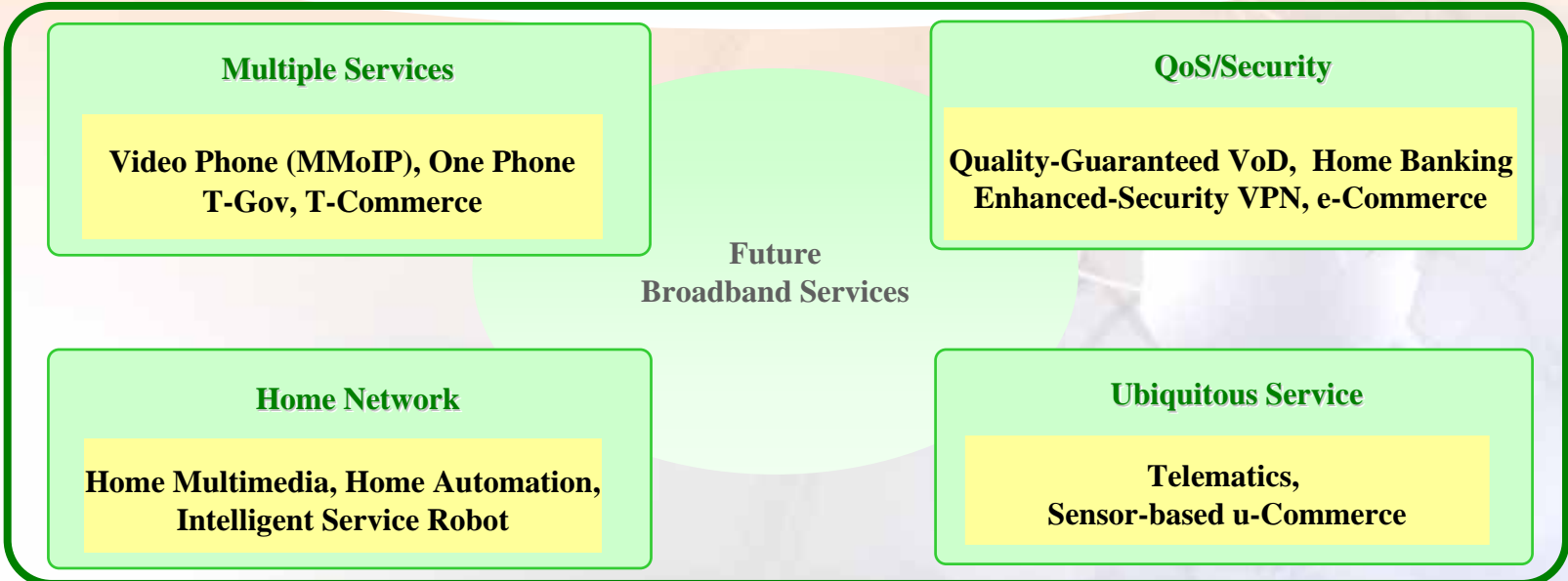
(Source: IT Export Information Database)

KOREA is the first nation to recognize the need of New Communication Environment

Future Broadband Services

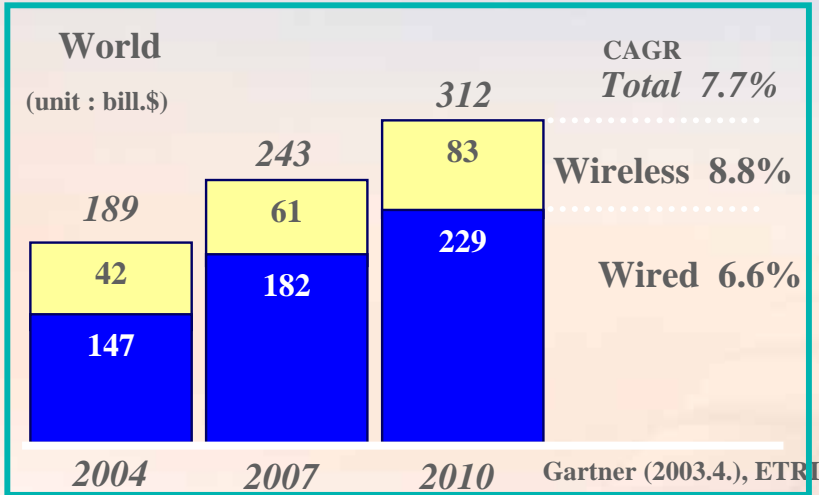


Integration of Voice • Video • Data
Human-Oriented Ubiquitous Information Environment

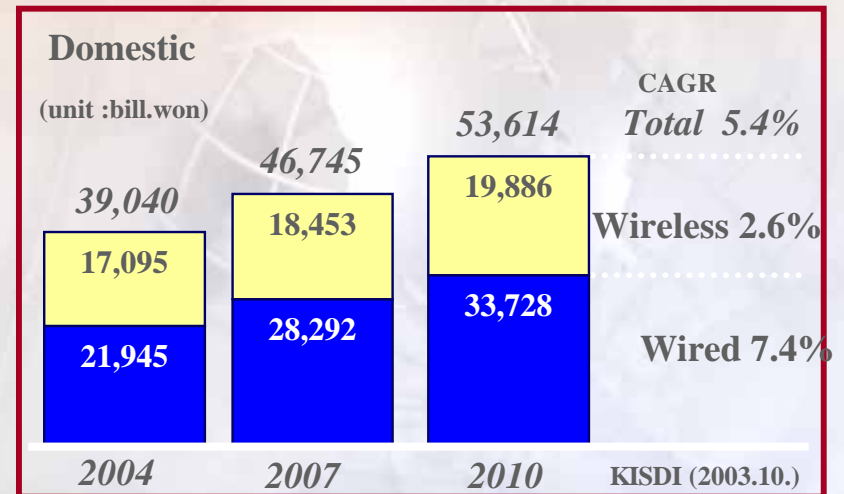
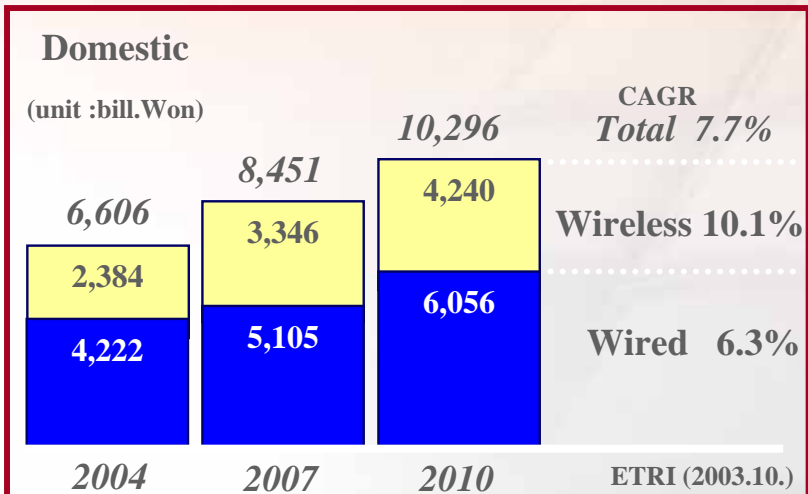
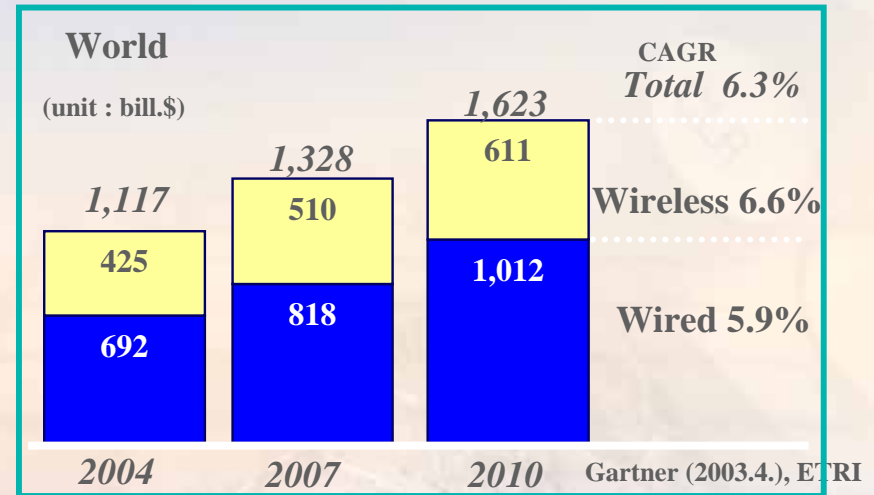


Forecast for Broadband Service

Telecom Equipment



Communication Service



But, Current Network

- **Different networks for different services**
 - ✓ Increased complexity for Internetworking
 - ✓ Increased OpEx and CapEx for New Service

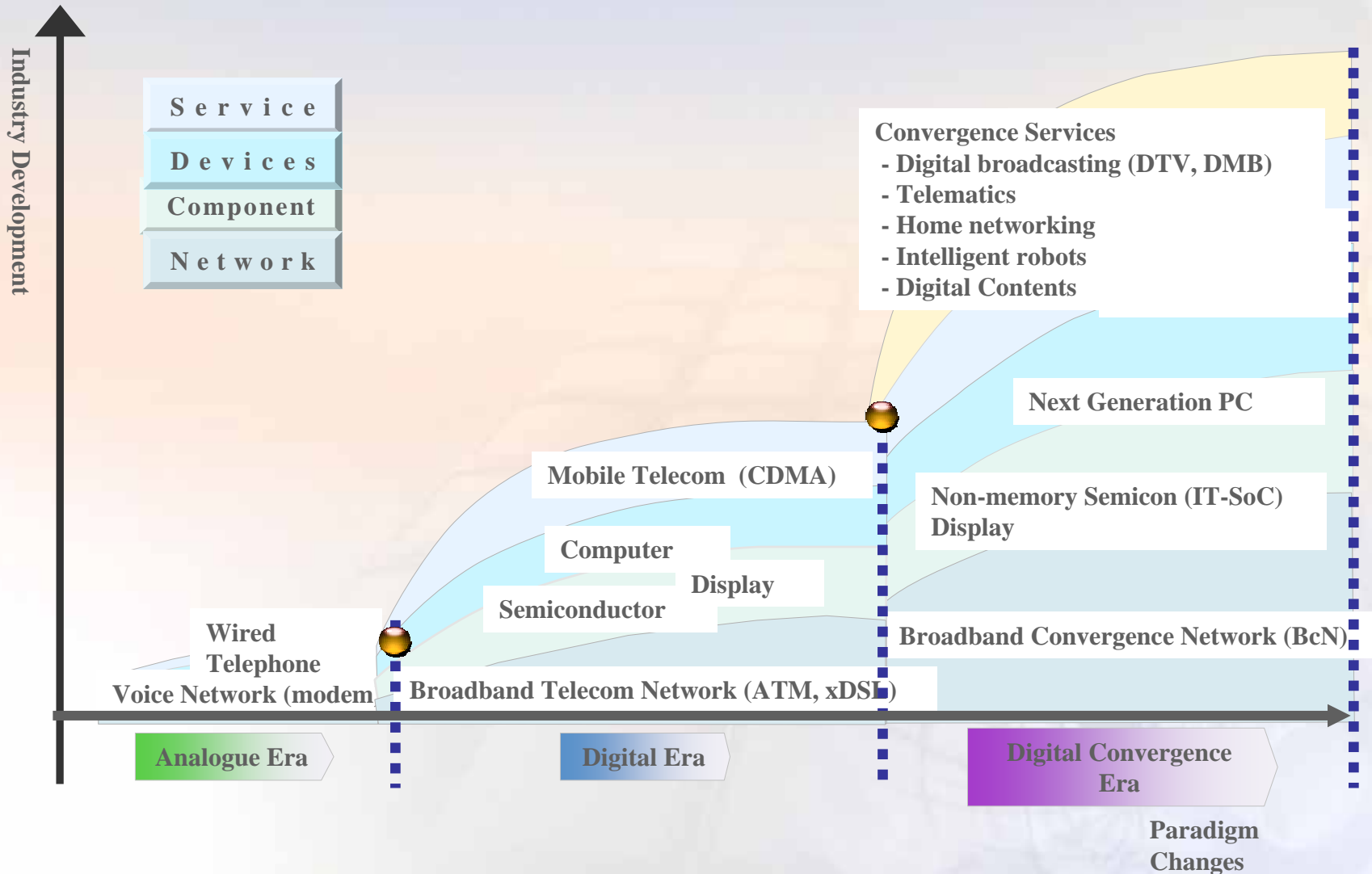
- **Not Manageable**
 - ✓ Impossible to guarantee QoS

- **Closed Service Architecture**
 - ✓ Difficult to increase revenue

- **Narrow bandwidth for users**
 - ✓ Difficult to use multimedia service

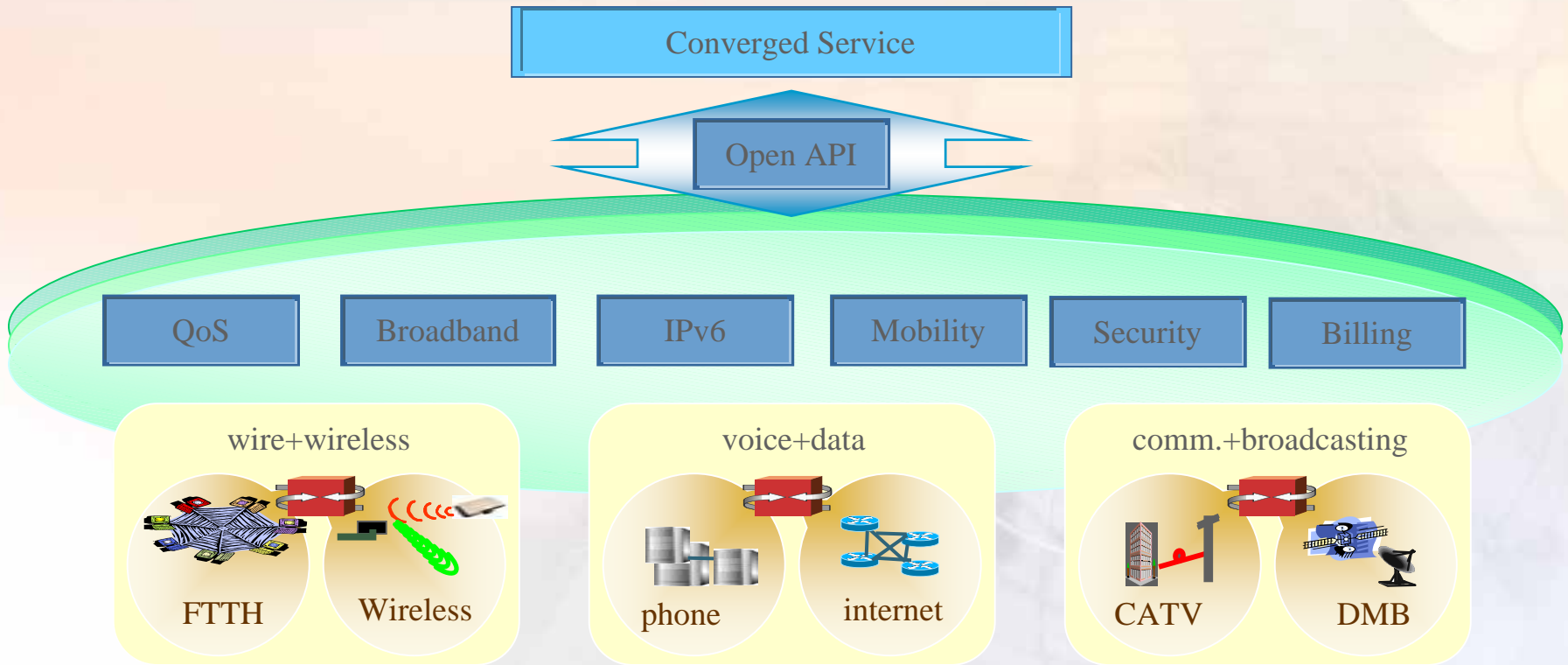
BcN Project in Korea

Timeliness of BcN

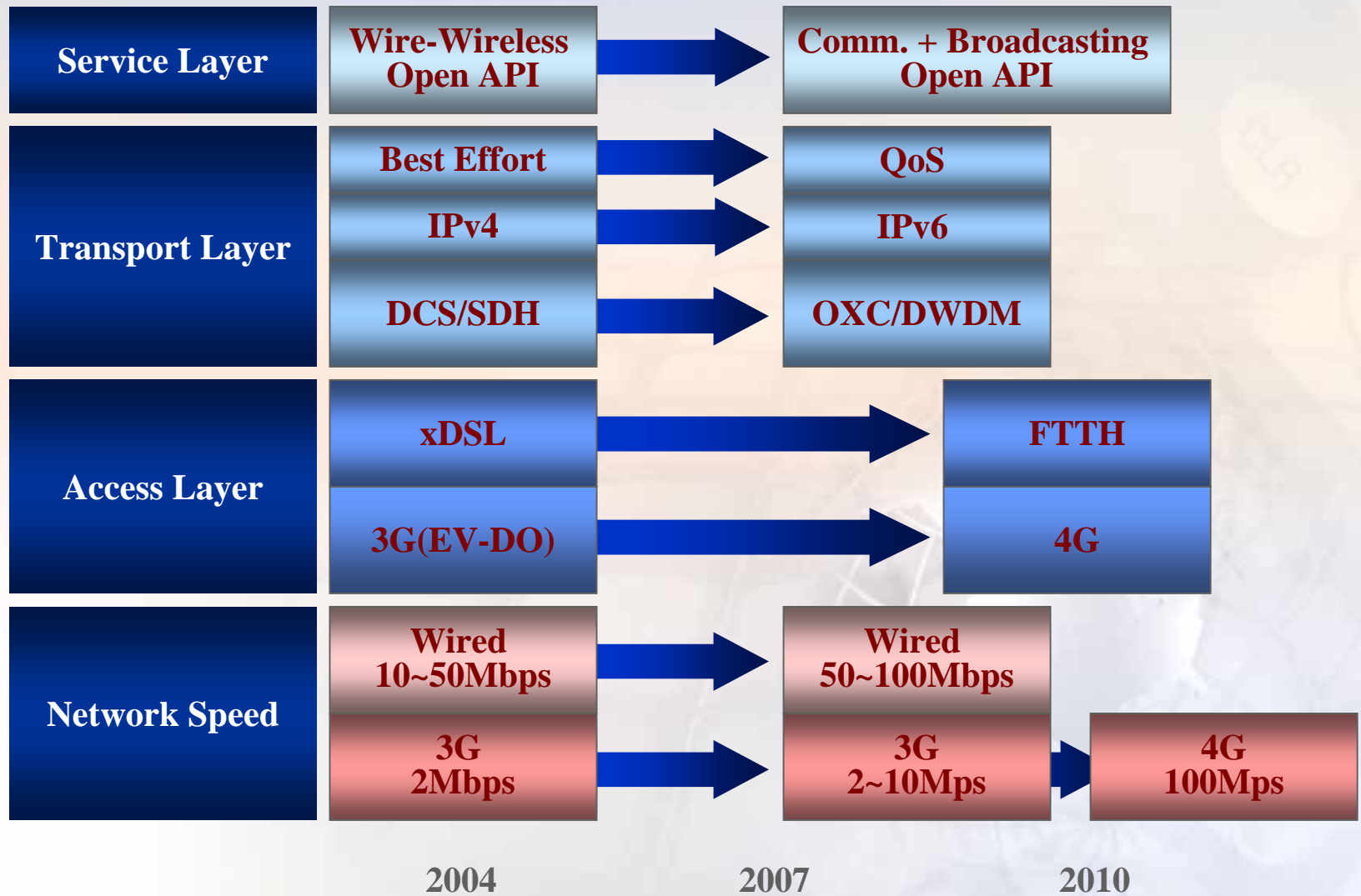


The Concept of BcN

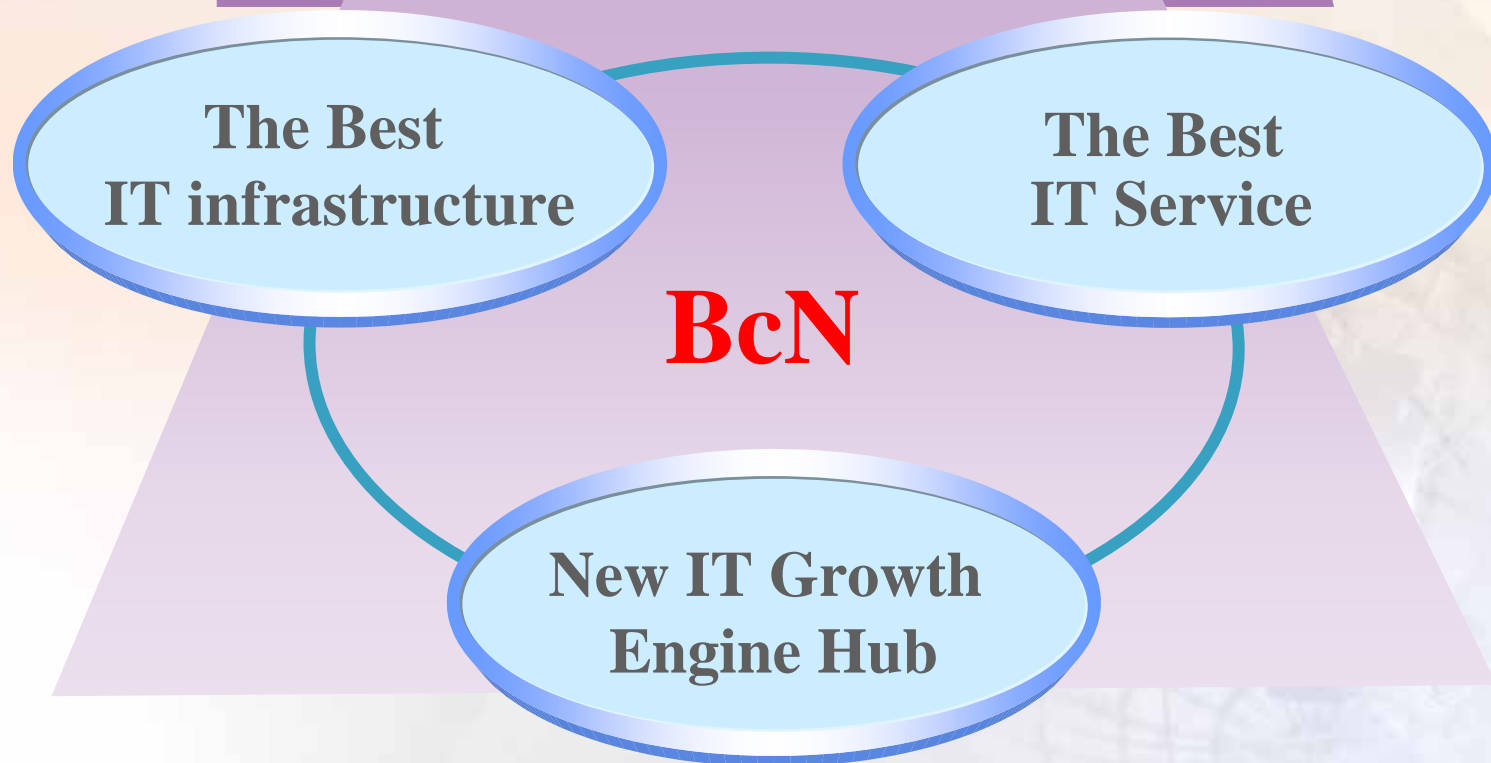
QoS-guaranteed multimedia network capable of providing communication, broadcasting, and Internet Integrated services ubiquitously, continuously, and safely.



Technologies for BcN



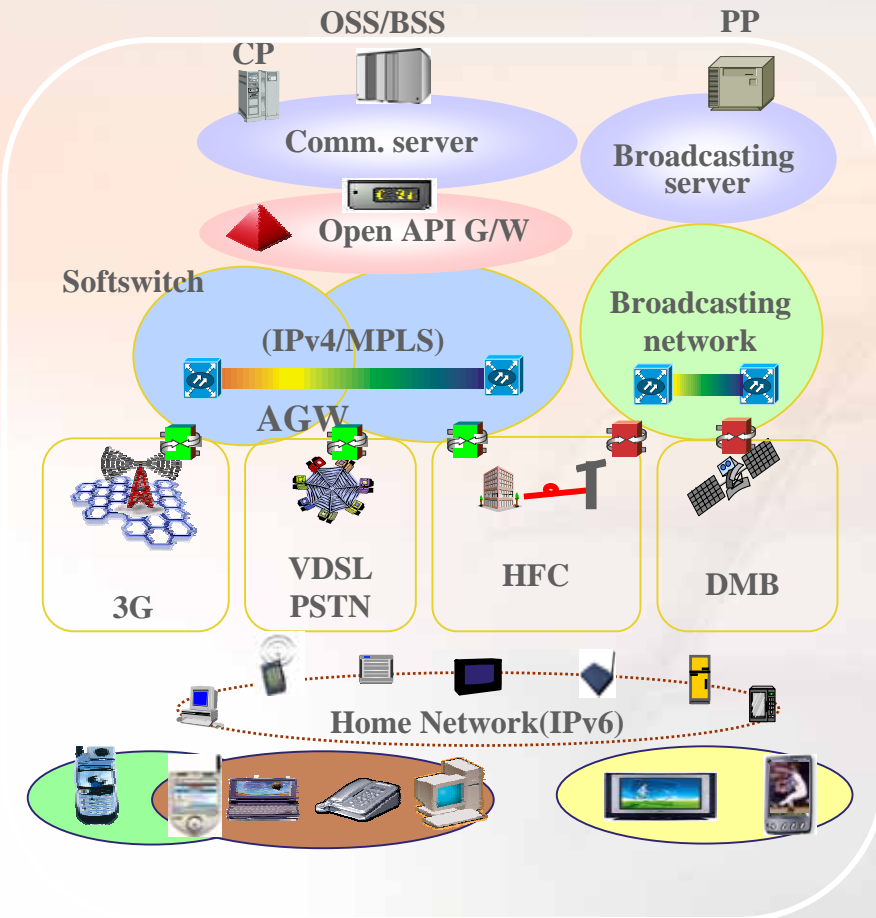
The First and the Best BcN Broadband IT Korea



Build an integrated network with the bandwidth of 50 ~ 100Mbps that can offer seamless multimedia services to 20M. subscribers in wired or wireless communications between the heterogeneous networks

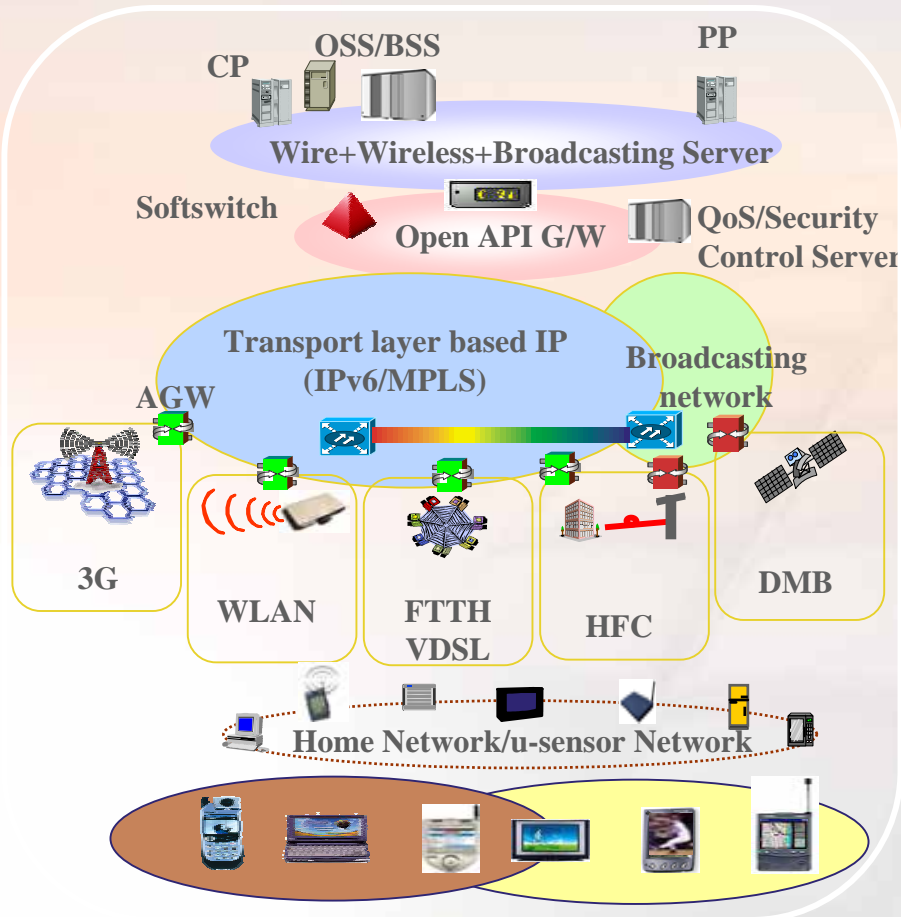


Integration of Voice and Data



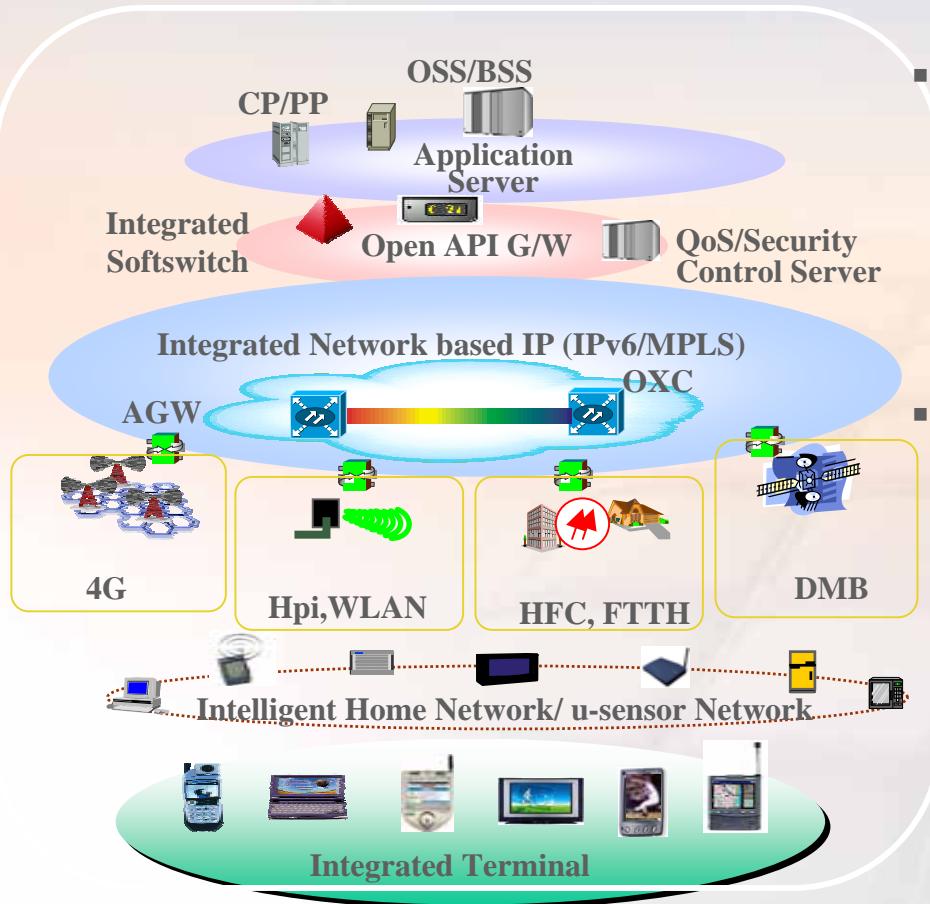
- Integration of Voice and Data network based on Open Architecture
- Service Convergence between Wired and Wireless communications
- Expansion of FTTC(VDSL/HFC)
- Introduction of New Services
 - ▶ FTTH
 - ▶ Terrestrial DMB, Satellite DMB
 - ▶ IPv6 based Home Network

Convergence of Transport Layer



- Convergence of Wired & Wireless network
- Transport layer based on IPv6/MPLS
- Service Convergence of Communication & Broadcasting
- Expansion of FTTH
- Introduction of New Services
 - ▶ HPI and interactive DMB
 - ▶ Ubiquitous Sensor network

Converged Service Network



- Converged Service Over Single Transport Layer
 - ▶ Voice Network
 - ▶ Internet
 - ▶ Mobile Network
 - ▶ Broadcasting
 - ▶ High-speed Data Network
- Supporting New Service Requirements
 - ▶ Broadband
 - ▶ QoS
 - ▶ Security
 - ▶ Mobility
 - ▶ Multicasting



Remark



- Need international cooperation
- Ready to share IT R&D experience
- Close cooperation for IT standardization