

Next Generation Networks: The Enabling Regulatory Environment

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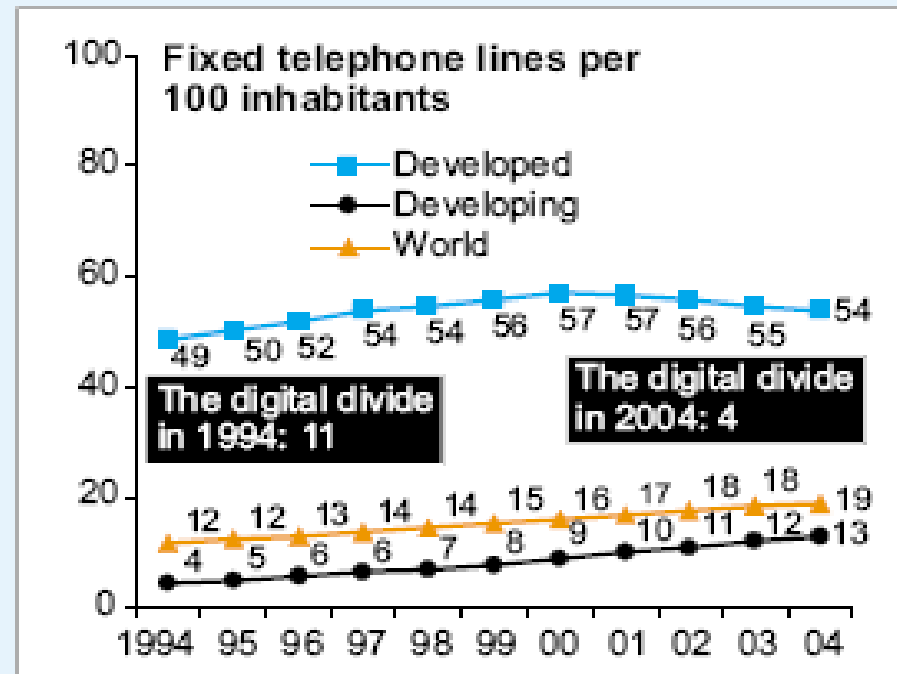
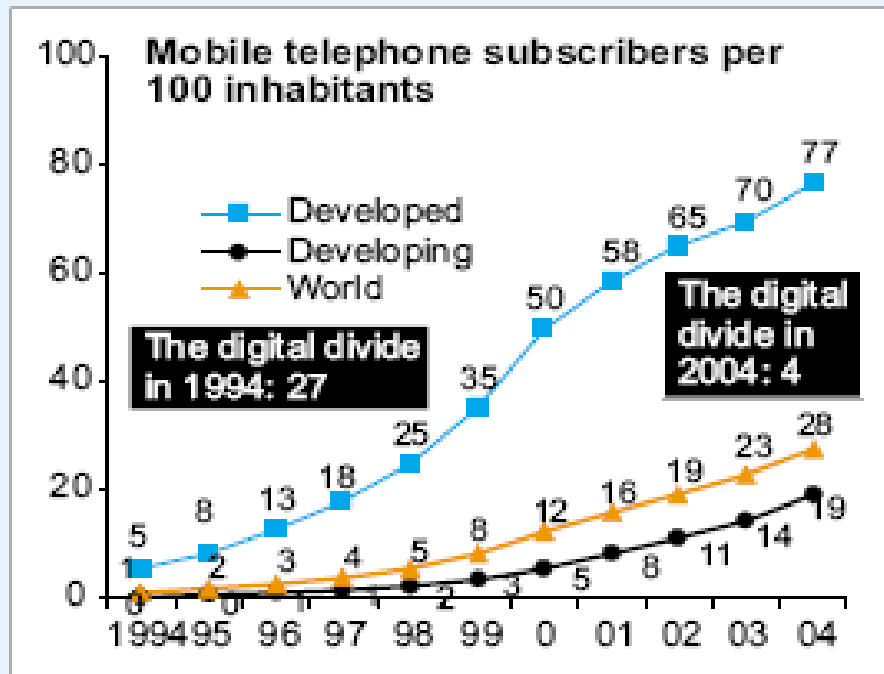
7 December 2006



HONG KONG 香港



The shrinking digital divide



Source: World Telecommunication/ICT Development Report 2006, published by the ITU (Figure 1.1, Executive Summary)

An overview of the NGN issues

- Convergence
- Technology neutrality
- Open network
- Radio spectrum
- Universal service
- Regulatory certainty

Convergence

- NGN are converged networks
- Licensing should be convergent
 - Removing restrictions on types of information transmitted
 - Permitting operation of multiple services

Convergence (2)

- Merging the telecommunications and broadcasting regulators
- Reforming and merging the telecommunications and broadcasting legislation
- Removing provisions that may hinder technological and market developments

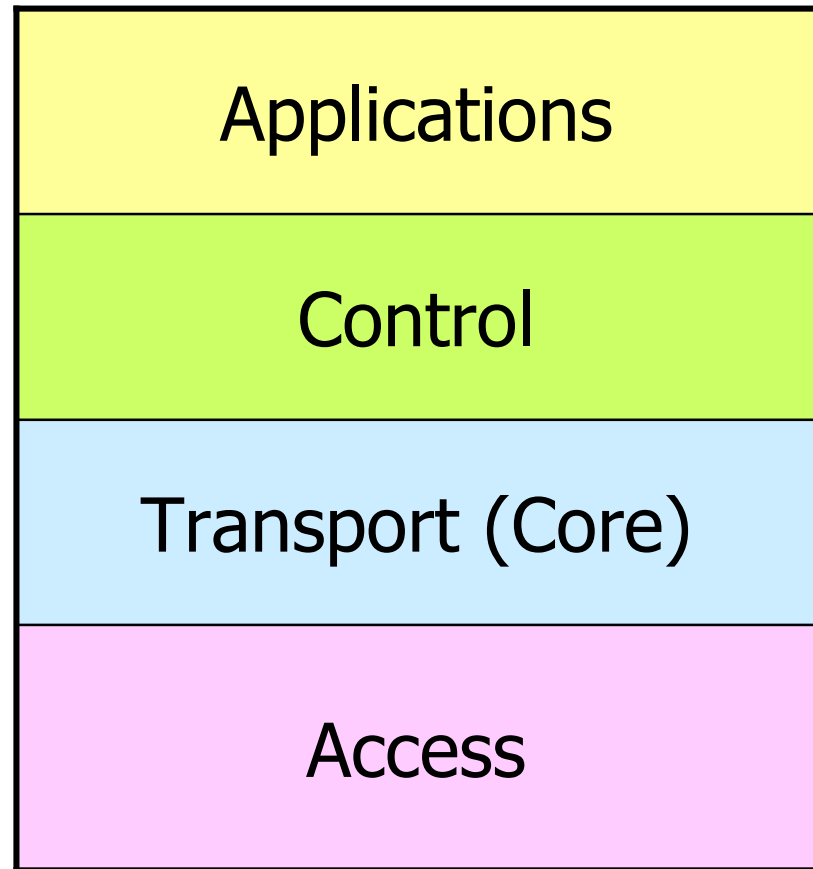
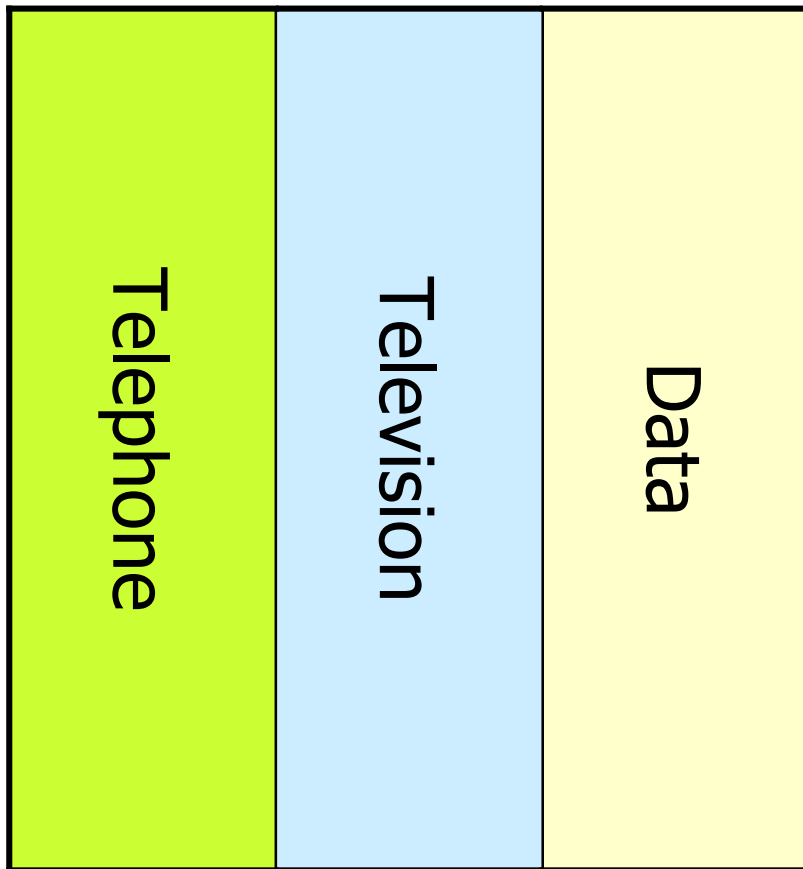
Convergence (3)

- Addressing fixed-mobile convergence
 - NGN may serve fixed and mobile customers
 - Considering unified licensing from the start

Technology neutrality

- Technology-neutrality
 - Licensing to regulate end-results
 - Choice of technology to be left to operators and market
 - Maintaining level playing field

NGN architecture



Open network

- NGN enables separation of service provision from infrastructure operation
- NGN becoming a market for applications and contents
- Encouraging infrastructure operator to open their networks to third-party application and content providers

Network neutrality

- Achieving “open network” by
 - treating packets of all contents and applications on non-discriminatory basis
 - not levying fees on content and application providers for priority delivery (fee may be levied on users for different quality grades)
- Potential conflict with economic regulation principles?

Regulation based on economic principles

• EC regulation

- Imposed only when “Significant Market Power” exists
- Endurable economic bottlenecks, non-replicable assets
- Essential facilities in competition law

Regulation based on economic principles (2)

- Some economists caution against premature regulation of new and emerging markets
 - First-mover advantages necessary for innovation
 - Catching-up competition would address temporary monopolistic situation

Regulation based on economic principles (3)

- Different situations may lead to different approaches
 - UK – enduring economic bottlenecks, leading to “equality of access” and “operational separation” requirements
 - Hong Kong – infrastructure-based competition leading to phasing out mandatory unbundling of local loops by mid-2008

Radio spectrum

- Wireless as the final connection to users
- Wireless as economic and quicker means to roll out network
- Trend towards use of market mechanisms in developed countries
- Spectrum to be made available
- Simplifying licensing of shared spectrum

Universal service

- Scope of universal access or service to be reviewed
- Caution against extension of scope of universal access or service
- Any universal service scheme to be transparent and competition neutral

Regulatory certainty

- Open and transparent consultation
- Regulation based on law
- Independent regulator
- Checks and balances through appeal and judicial review mechanisms
- Effective dispute resolution mechanisms

Conclusions - the enabling regulatory environment

- Convergence in licensing
- Technology neutrality
- Encouraging open network yet preserving investment incentive
- Making spectrum available
- Predictable and clear regulation to minimize regulatory risks

Thank you

