

Converging Economy: The Key Role of Networks

TELEFÓNICA

Business Stakeholders Meeting to the OECD Ministerial on
the Future of the Internet Economy
Seoul, June, 16th 2008



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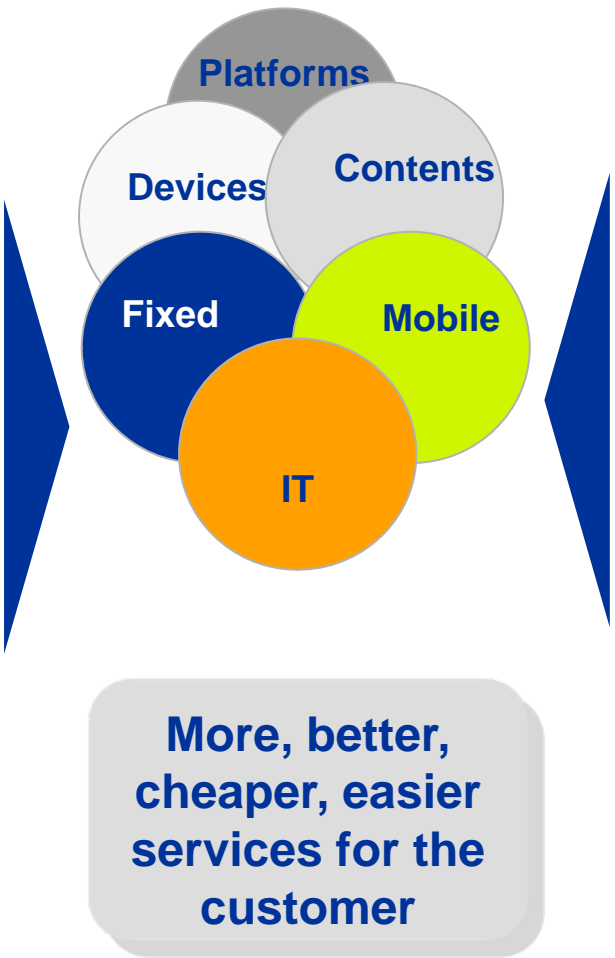
- 1 Convergence is impacting the industry both in terms of **value proposition** and **internal operation** ...
- 2 ... but convergence is a process that demands **large network capacity** and **network intelligence**
- 3 Who is going to pay for the NGN/NGA deployment ?
- 4 How NGN/NGA will be managed ?
- 5 Lessons we should learn

Convergence is impacting the industry both in terms of value proposition and internal operation ...






More services
Integration of offerings

- Operators introducing 2P, 3P, 4Play offerings
 -   
- Internet companies bursting in with disruptive models
 - New Internet services and contents
 -   
 - Telecom services offerings (e.g. VoIP, messaging)
 -   

Convergence

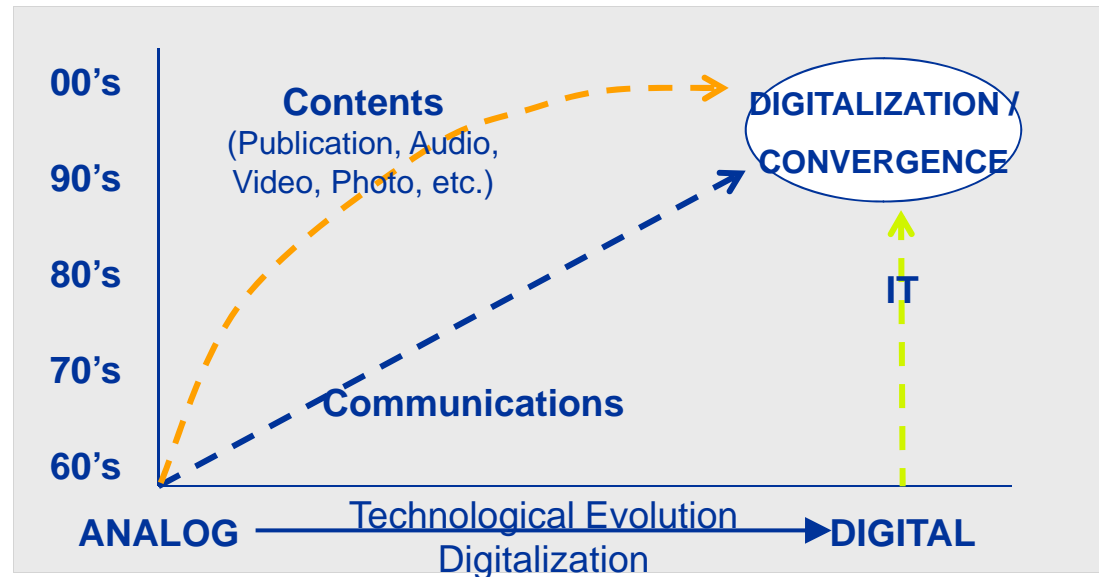


Less costs, less complexity
Increase of the efficiency

- Consolidation among Telecom vendors
 -  (NOKIA + SIEMENS)
 -  (ALCATEL + Lucent)
- Deployment of all-IP networks and platforms
- IT infrastructure and software vendors entering in the Telecom space
 -   

... but this concept, that has been around for more than 15 years, did not meet expectations in the 90's and early 00's

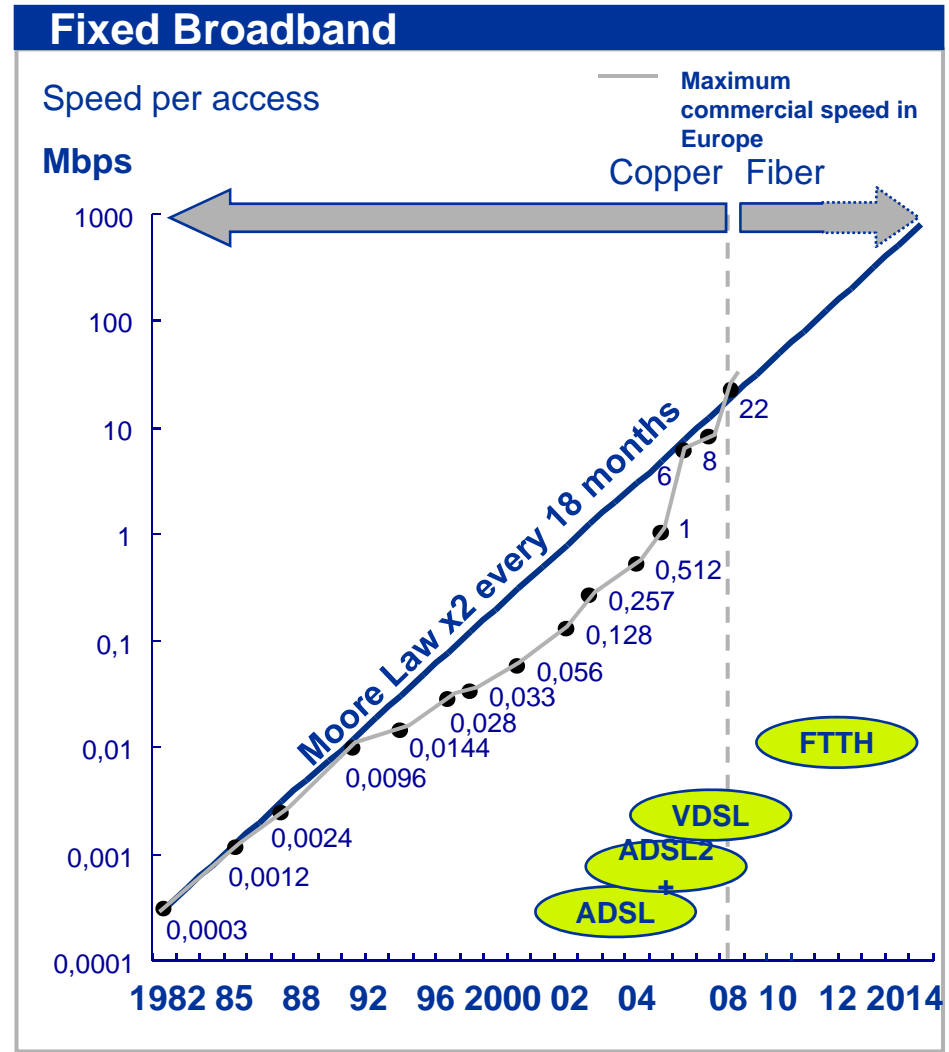
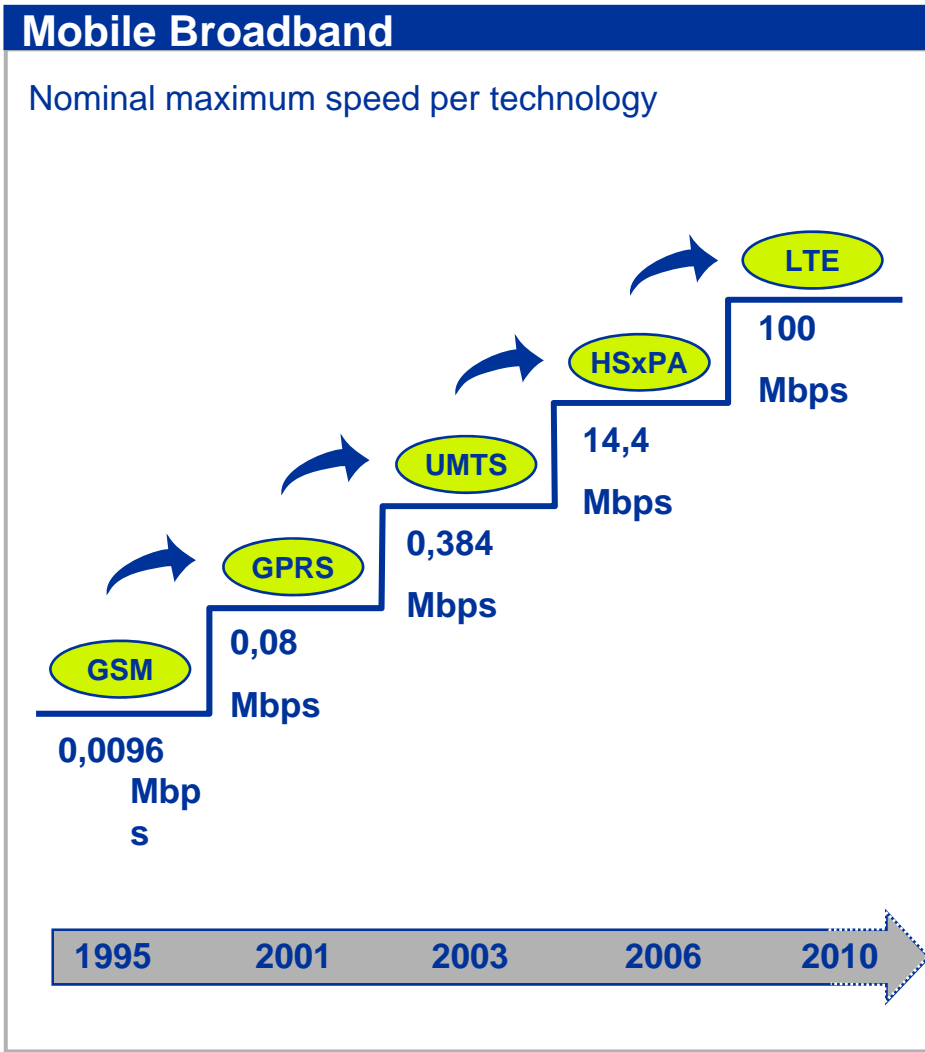
Broadband capacity plays a key role as enabler of the vision of convergent markets and services



Convergence is a process that favours the development of new services that demand larger *network capacity* and *network intelligence*

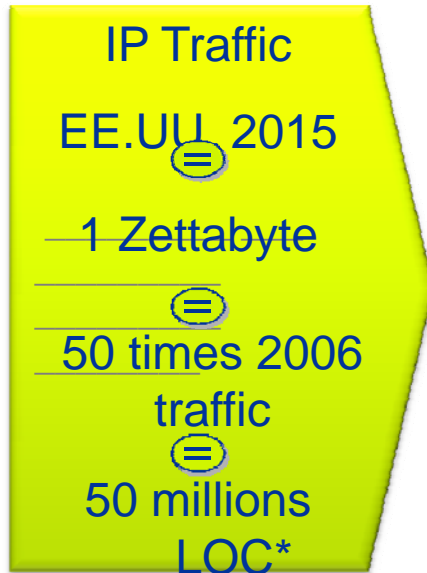
NGN/NGA is the only way ahead

Technological evolution could support and foster broadband growth ...

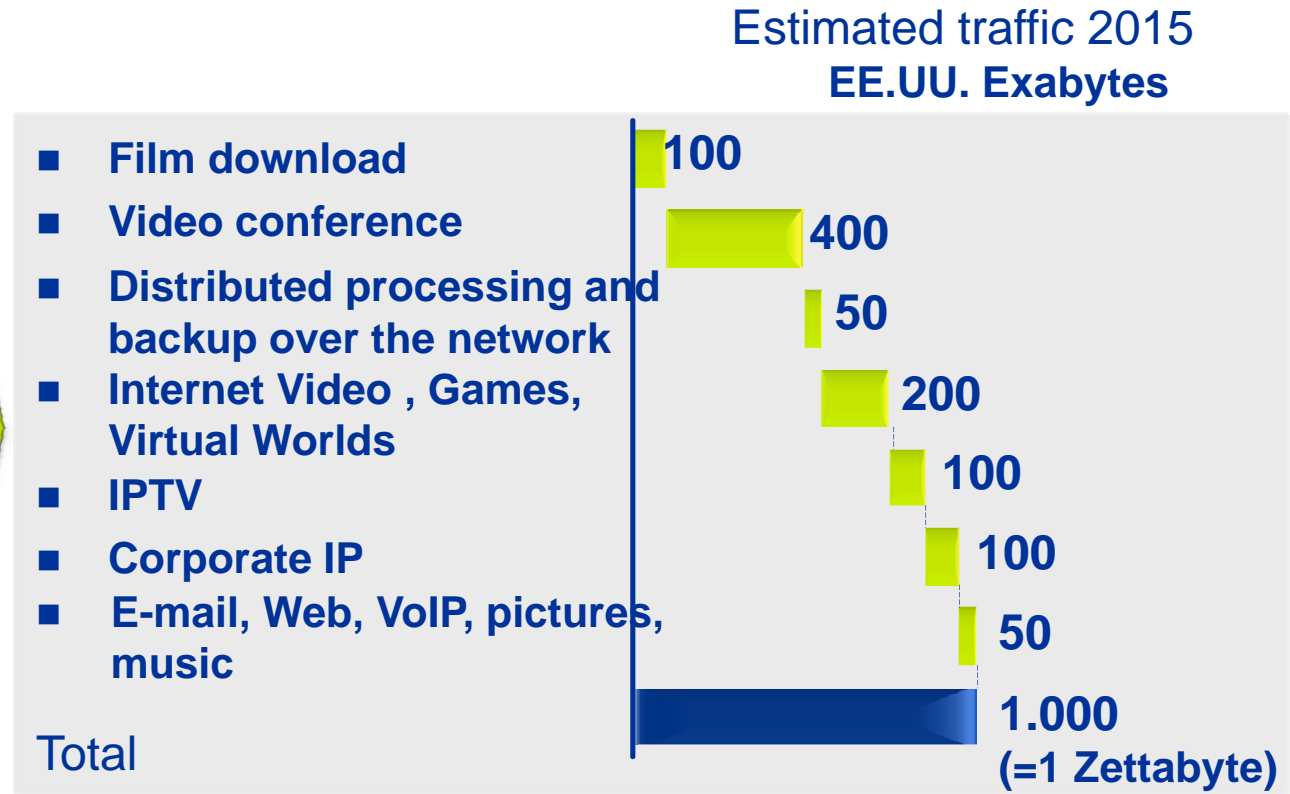


Source: IEE Spectrum, Julio 2004; Phil Edholm; Hussein Eslambolchi

... that new services and user habits require ...



* LOC = American Congress Library
Source: Discovery Institute 2008
Source: IDC, Ovum, Pyramid, Cisco IBSG



- Those are services that citizens demand and deserve.
- Access to those services will become the true digital divide

... but NGN/NGA deployment is a high risk investment that requires an adequate environment

Regulation and public policy framework plays a key role creating an investment friendly environment

Investment Approach

Goal

- Push infrastructure
- Guarantee adequate returns

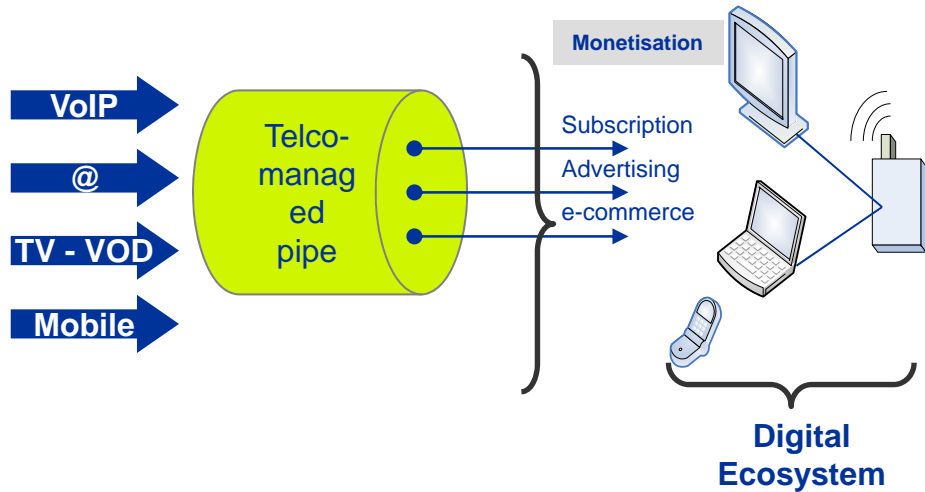
Conditions

- Favours infrastructure competition
- Regulation aligned with investment goal

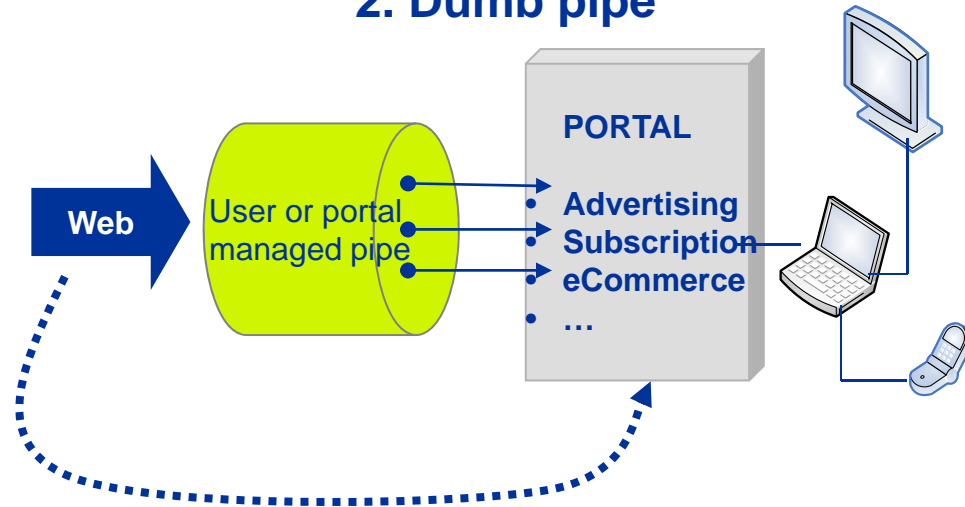
Differences in support from regulator and government is one of the key reasons for the diversity in rollout strategies

Discussion about NGN/NGA management principles goes back to the debate smart vs. dumb pipes, but ...

1. Smart pipe



2. Dumb pipe



... this is not a technological discussion, but a strategic one:

- A debate about positioning in the sector value chain
- A debate about risk and benefit relationships
- A debate about business models

A first answer to NGN/NGA management approach: The Net Neutrality principle

Net neutrality principle is the bet on the dumb pipe approach impeding agents that must invest in the deployments of new networks to provide a full range of services

What it does focus on

- Citizens rights
- Freedom to access to all kind of contents
- Freedom to access from all kind of devices
- Risk of abuse by network owners

There is not, and there has never been, a real or potential risk for none of these issues

What it hides

- Network investment needs
- Relationships between business risks and business profitability
- Network upgrades roadmap
- Consumers rights
- Quality of service

Net Neutrality is a concept that undermines industry capacity to invest, innovate and to properly manage networks and offer adequate services to customers

An alternative answer to NGN/NGA management approach:

Fair and Smart network management

From clear game rules ...

... to a comprehensive target



Fair and Smart Network management would allow a balanced market development with clear incentives for both network managers and services providers

Regulation must support NGN/NGA deployment through a sustainable model based on platform competition



Regulation must foster innovation and investment

Key principles

**Geographical
segmentation**

... reflecting the
level of competition
in each market

**Wholesale
commercial
market**

... relying on
commercial
agreements

**Commercial
flexibility**

... fostering
innovation in
products and
services

**Regulatory
Symmetry**

... avoiding
distortions in
competition
through extreme
ex-ante regulatory
measures

The deployment of NGN/NGAN is:

1. A key element for competitiveness of any economic area in a global world
2. Together with Internet contents and services, it is one of the cornerstones of the new model of economic development