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# 12<sup>ÈME</sup> FESTIVAL INTERNATIONAL DU FILM ET DE LA TÉLÉVISION **CINEMA TOUT ECRAN** GENÈVE \ DU 30 OCTOBRE AU 5 NOVEMBRE 2006 \ MAISON DES ARTS DU GRÜTLI

INTERNATIONAL SEMINAR  
The New Forms of Audiovisual Content Delivery

## Evolution of Digital Media in a Convergent Era

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The views expressed in this presentation are those of the author and do not necessarily reflect the opinions of the ITU or its Membership.

# Building the Information Society



## *A Global Challenge in the New Millennium*

### *ITU-T*

*Telecommunication and standardization - network and service aspect*



### *ITU-D*

*Assisting implementation and operation of telecommunications in developing countries*



### *ITU-R*

*Radiocommunication and standardization - global spectrum management*

*ITU as a leading agency of WSIS*

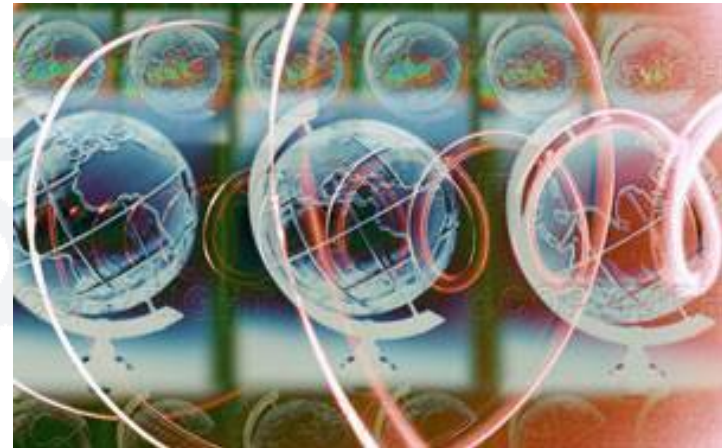
*The World Summit on Information Society talked about a society in which  
“...everyone can create, access, utilize and share information and knowledge...”*

# Evolving scenario...

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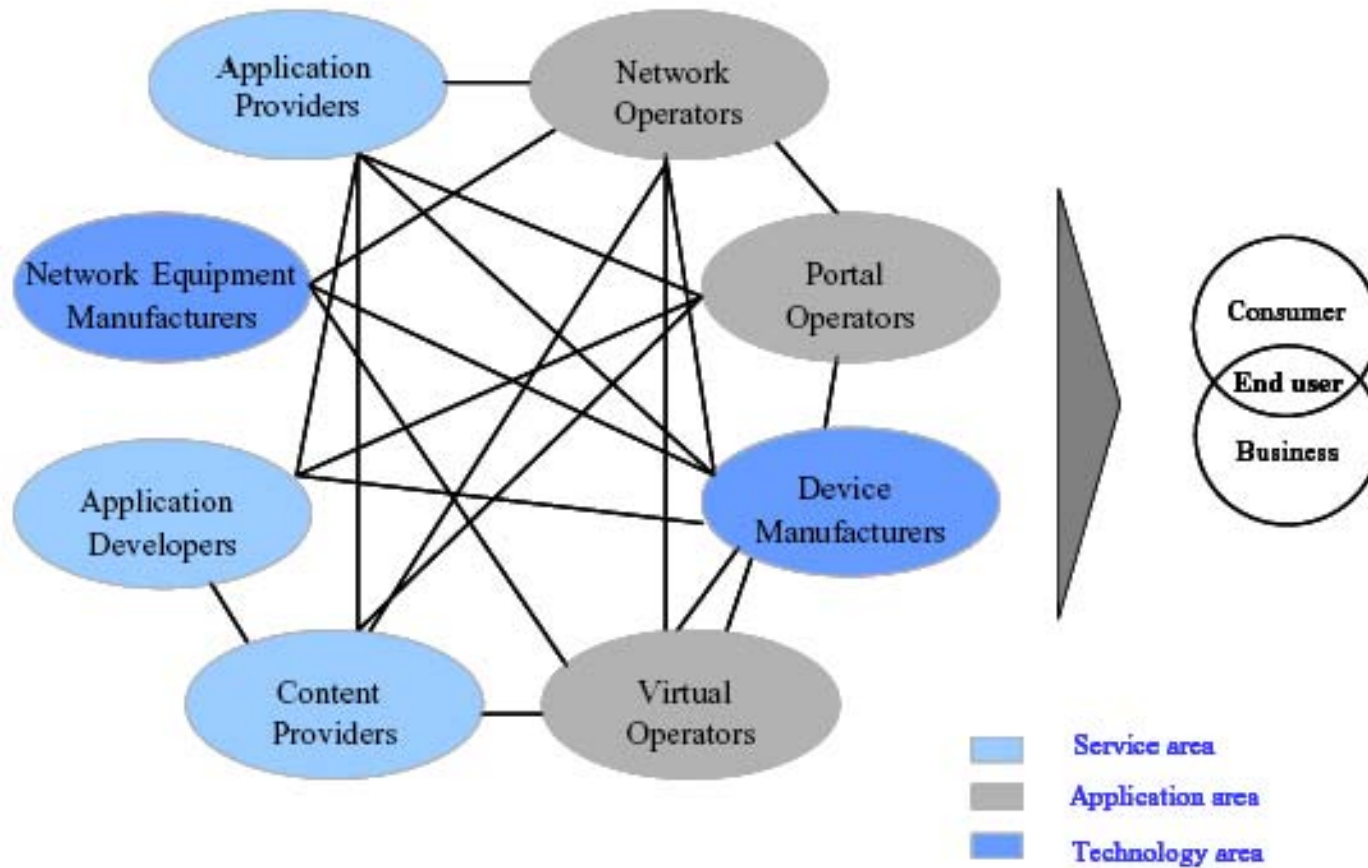
- I. from static to dynamic
- II. from fixed to mobile
- III. from big to small
- IV. from local to global
- V. from vertical to horizontal
- VI. from sometimes-on to always-on
- VII. from wired to wireless
- VIII. from divergence to convergence



# Moving ahead...



*New players- new roles, old players-new roles*



Source: EITO

# What drives multi-stakeholders?



## I. User requirements

- ✓ *on-the-go access to information*
- ✓ *communication & file sharing*
- ✓ *thirst for multimedia*

## II. Market trends

- ✓ the mobile revolution
- ✓ rapid take-up of internet and broadband
- ✓ increased use of portable and palmtop computers, and multimedia devices

## III. Technological innovation

- ✓ high speed, cost effective mobile systems
- ✓ integrated competitive platforms
- ✓ small, powerful, application-rich user devices
  - *May mean a re-visiting of content ...*

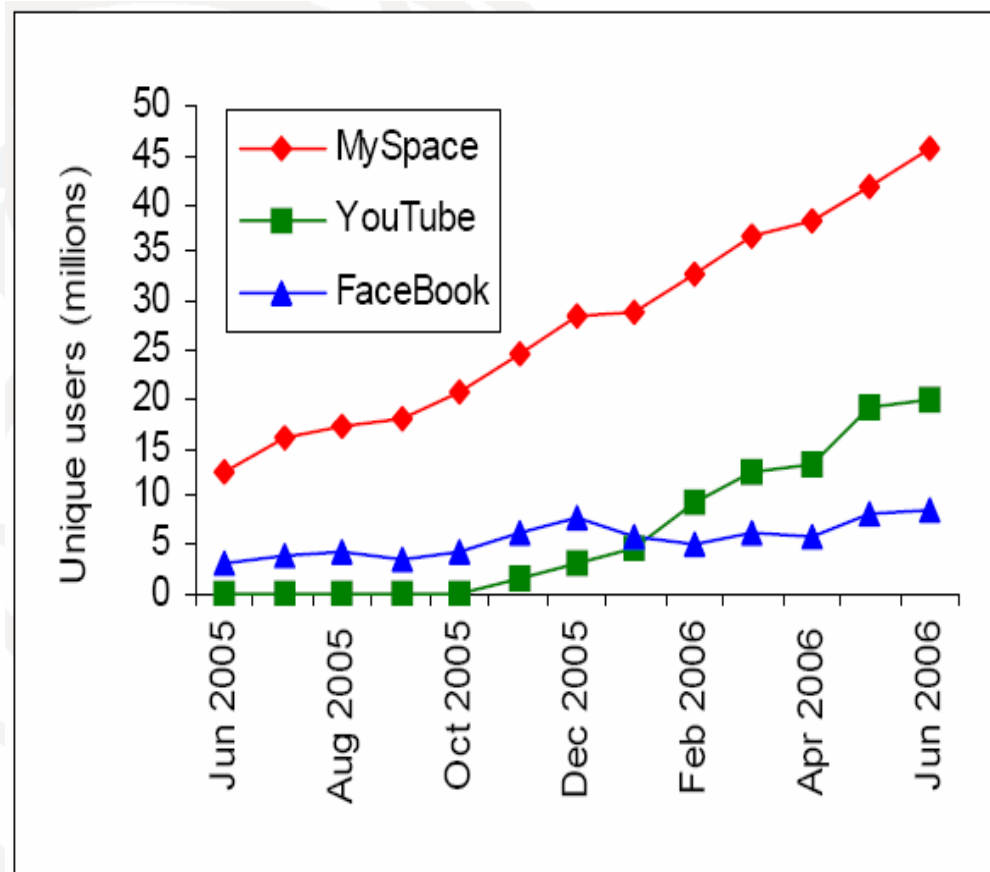


# Catering for changing user...



*Today's user is evolving!*

- I. from user to developer
- II. from observer to creator
- III. from follower to leader
- IV. from consumer to producer
- V. from audience to player
- VI. from reader to storyteller
- VII. from passive listener to active speaker
- VIII. from subject to participant



Source: ITU digital.life Report 2006

# Looking for a “portable” user environment

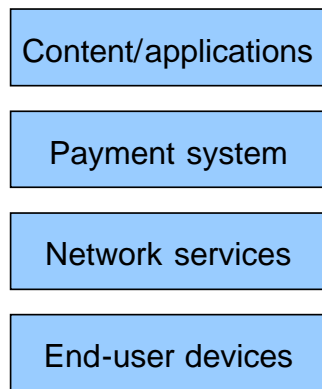


## *Content over various platforms*

Through technological and industry convergence the same content can increasingly be delivered over integrated technology platforms and services.

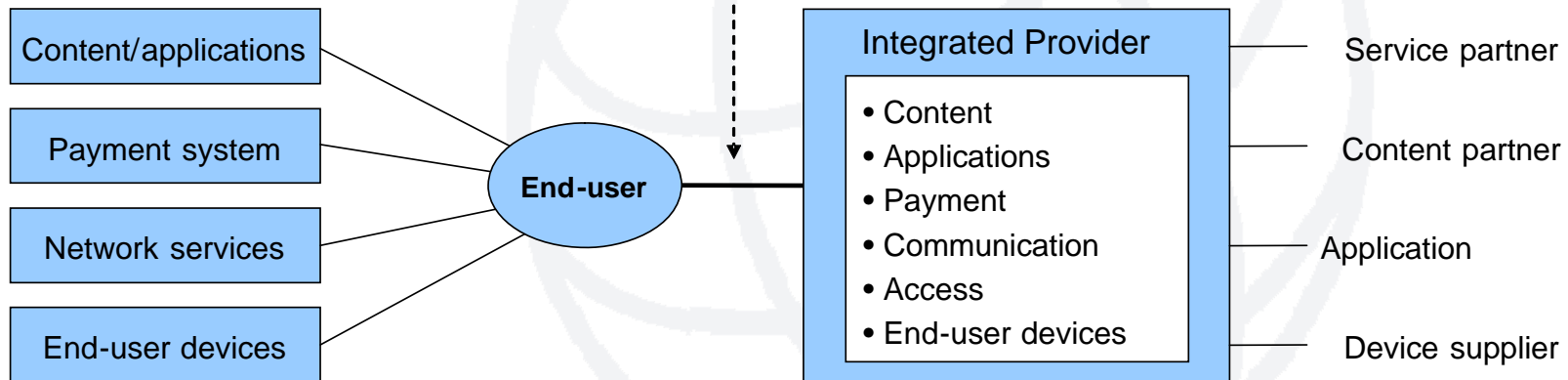
### Today:

Fragmented B2C relationships



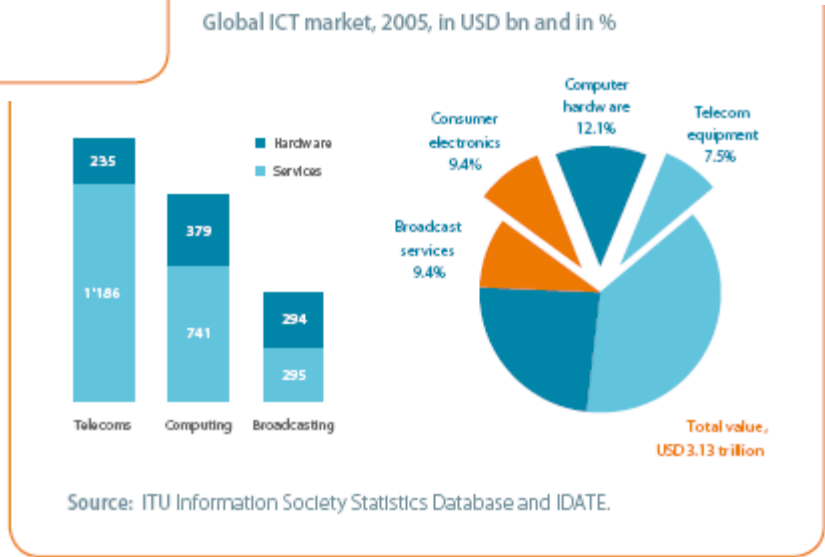
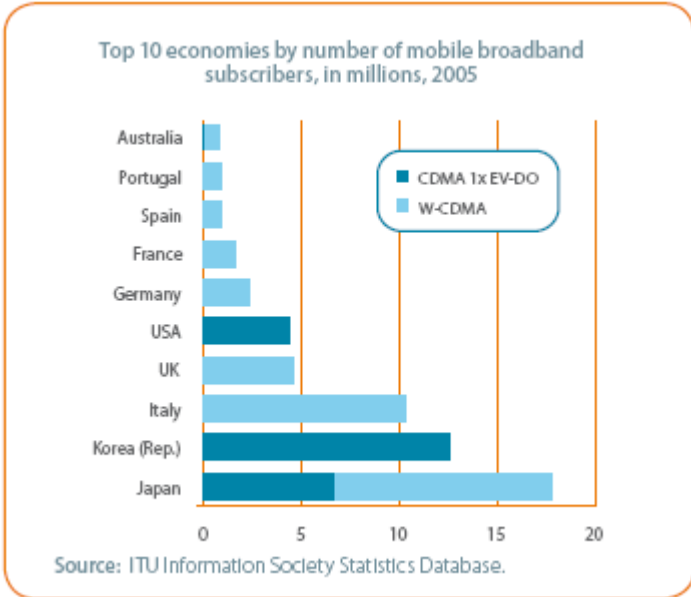
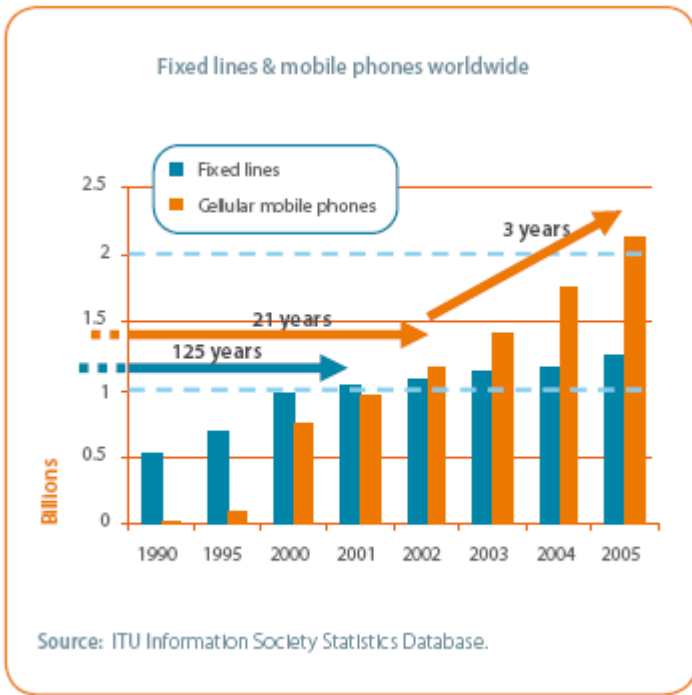
### Tomorrow:

Bundling of all relevant B2C relationships and optimal supply of services, content and applications



Source: ITU (2006): “Regulating new and emerging markets in the telecom sector”, background paper prepared by Christian Wey et al.

# Leads to a changing market landscape...



Source: ITU digital.life Report 2006



# Innovation & Content: the “Big Deal”

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*Continued need of regulation, standards to address the following challenges of multi operator environment*

- I. technological challenges & innovation
- II. interconnectivity and interoperability
- III. appropriate migration scenarios to next generations
- IV. enhancing performance and lowering costs
- V. intellectual property rights, security & privacy
- VI. legal & political aspects, fair competition

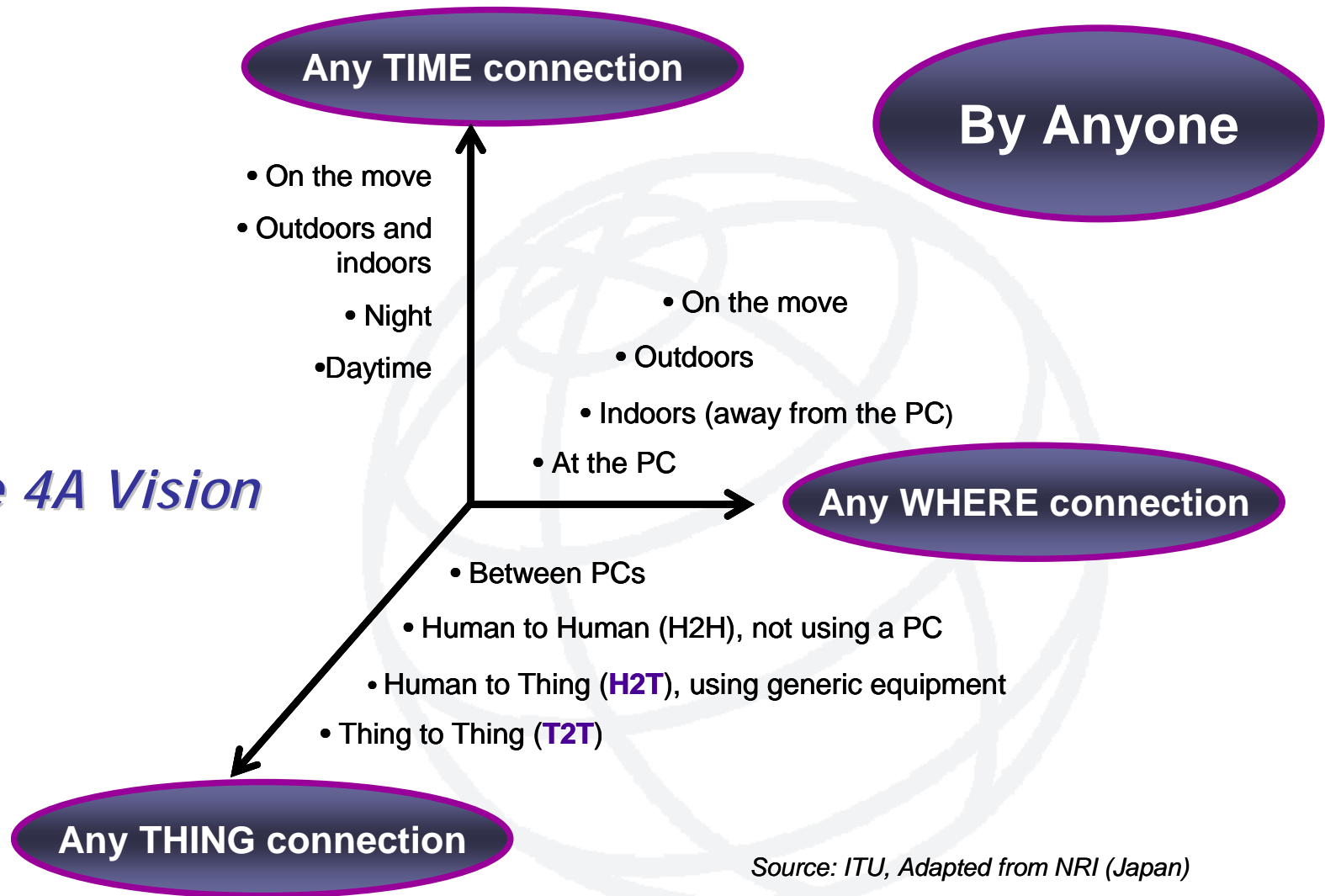


*Looking for technologically neutral policies ?*

# Convergence is the key...



## The 4A Vision



# The way forward...



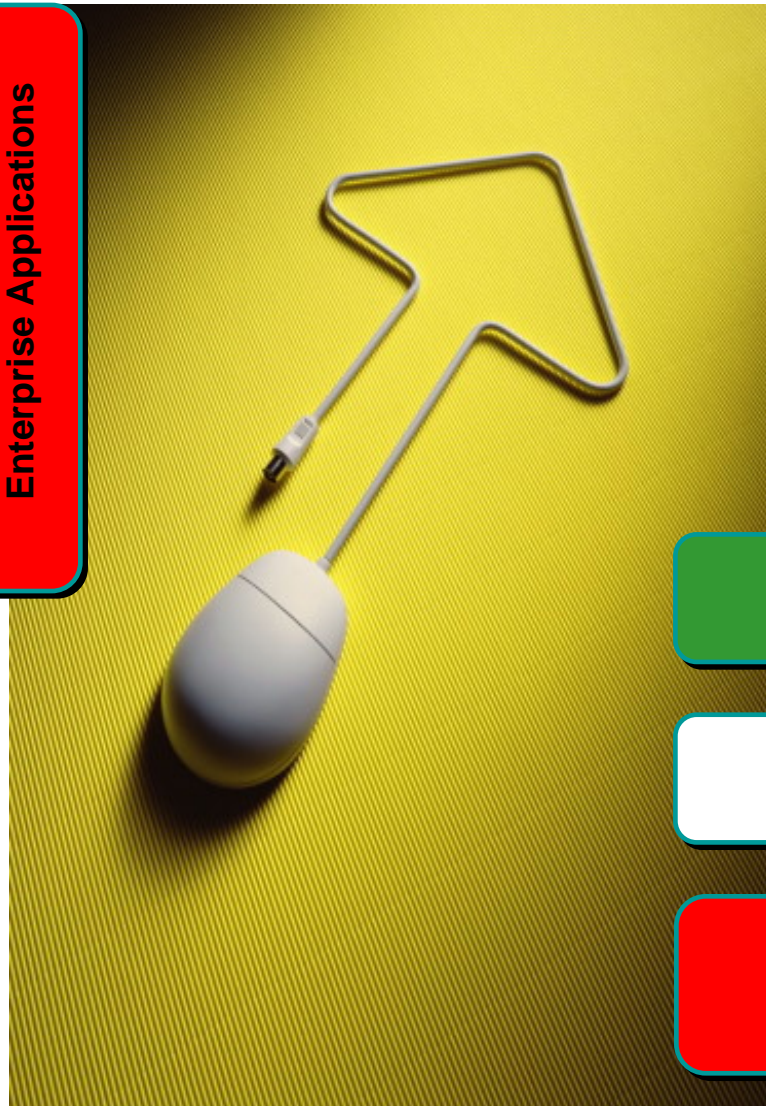
**Mobile Networks /  
Mobile Applications**

**Fixed Networks /  
Fixed Applications**

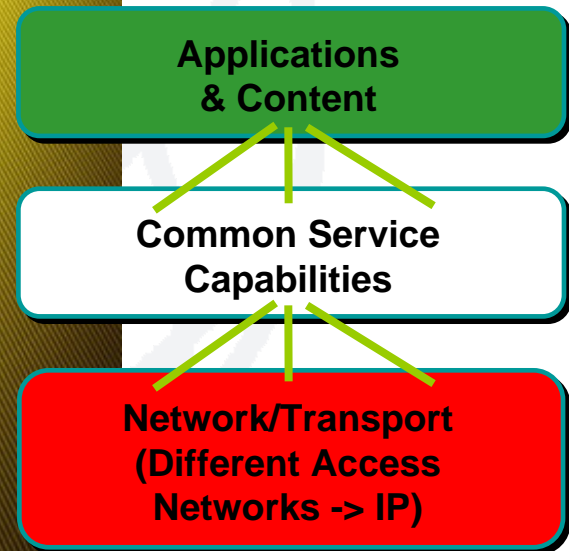
**Enterprise Network /  
Enterprise Applications**



**Spaghetti Networks  
(Vertically Integrated)**



**Lasagna Networks  
(Horizontally Layered)**

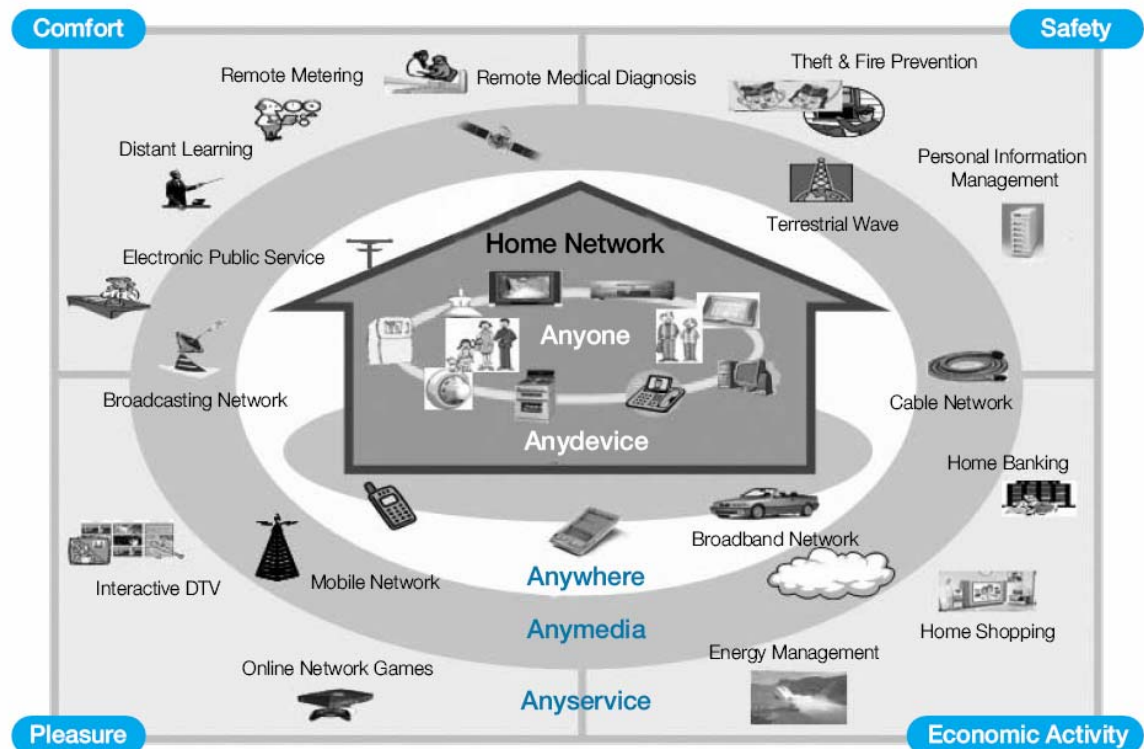


# Looking beyond...



## Building Tomorrow's Networks

- I. A fully integrated approach
- II. Ambient awareness Communication
- III. Context awareness Communication
- IV. The true 4A vision
- V. User centric approach



Source: MIC, Master Plan of IT839 Strategy 8 Services, June 2004

# STN Programme



*The programme will encompass the creation of telecommunication infrastructures by contributing to building ICT networks and developing services that are available anywhere and anytime, to anyone and on any device.*

*For this vision to become a reality, network technologies, content, and user accessibility must be developed in an integrated fashion.*



<http://www.itu.int/STN>

# Share your expertise with us ...



Telecommunications

Environment

Broadcasting

Research



ICT Infrastructure

ICT Monitoring

Digital Platforms

Radiocommunications



....by becoming a STN Partner !!!

# Conclusions & perspectives

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The unrelenting progress of technology, connectivity and digitization are expected to continue generating new convergence opportunities

- I. Futuristic networks for adaptation to changing customer expectations
- II. Efficient Spectrum Management
- III. Mobility independent of technology and geographical boundaries
- IV. Unified customer equipment & mobile handsets for all types of services
- V. Unified customer equipment & mobile handsets for all types of services



***Convergence looks set to remain both a headline and a key influencer for many years to come !***

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# Forthcoming workshop

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The Workshop on  
"Market Mechanisms for Spectrum Management"  
will be held from 22 to 23 January 2007  
in Room C at ITU Headquarters, Geneva, Switzerland.

<http://www.itu.int/spectrum>



# Useful links

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## I. ITU Strategy and Policy Unit

- ✓ [www.itu.int/spu](http://www.itu.int/spu)

## II. Shaping Tomorrow's Networks Programme

- ✓ [www.itu.int/stn](http://www.itu.int/stn)

## III. Workshop on "Market Mechanisms for Spectrum Management", 22-23 January 2007

- ✓ [www.itu.int/spectrum](http://www.itu.int/spectrum)

## IV. ITU/EBU Workshop on "Competitive Digital Platforms", 19-20 March 2007

- ✓ [www.itu.int/snt](http://www.itu.int/snt)

## V. Workshop on "Tomorrow's Networks Today"

- ✓ [www.itu.int/tnt](http://www.itu.int/tnt)

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**Thank you for your attention !**

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