



International Telecommunication Union

IPTV: New Challenge for Global ICT Sector Policies

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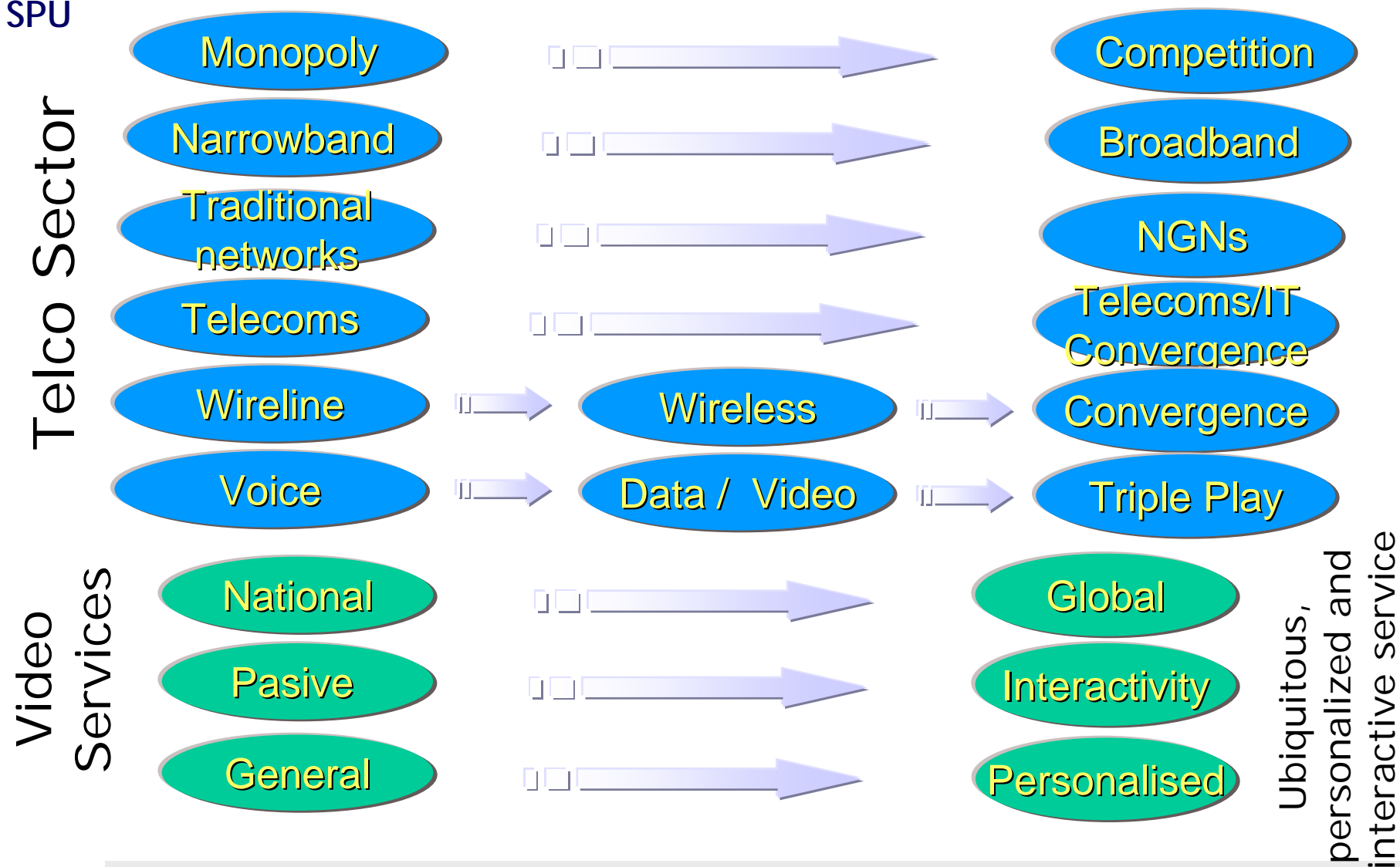
Agenda

- o Telecom and Broadcasting Sector
- o Convergence Process
- o IPTV Drivers and Obstacles
- o Regulatory considerations
- o Global policies
- o Conclusions



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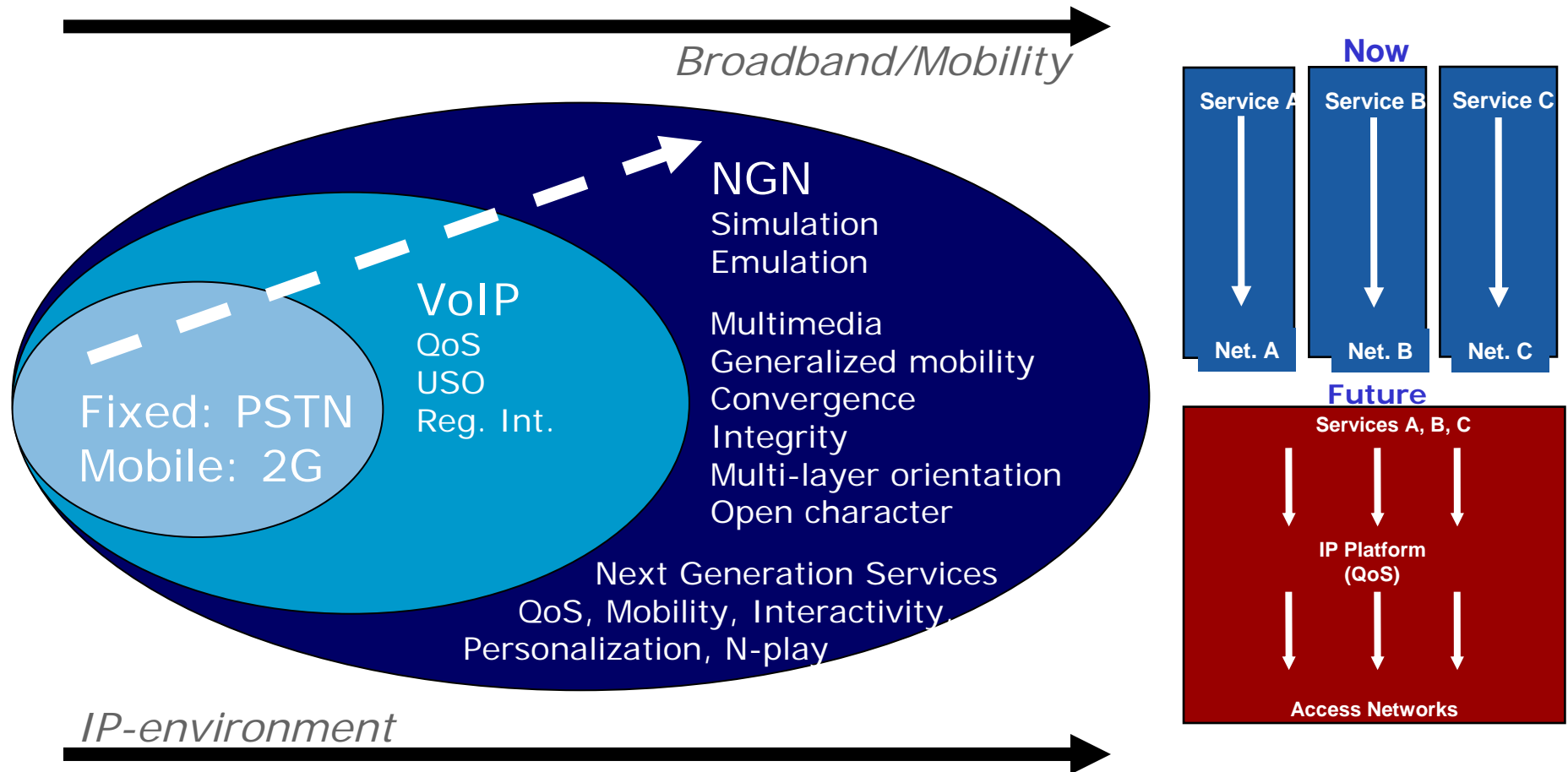
Trends in Telecom and Broadcasting





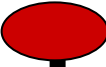
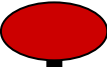
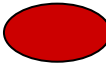

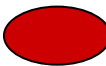



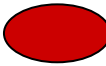
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Telecom Sector in Transition



Interconnection / Emerging markets / Universal services / Competition
Numbering / Quality of Services / Emergency Access / Consumer Protection

Converging Markets

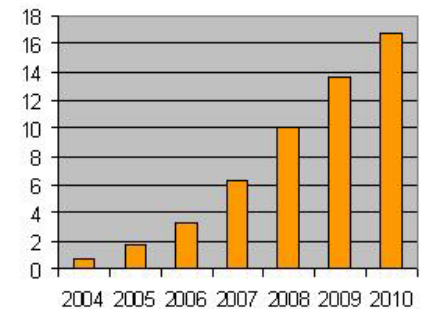
	Broadcast ing/ Satelite	Fixed Telec.	Cable-TV	Mobile Telec.	Wire less	Infr. less s. prov.
Voice		 ↓	↑	 ↓	↑	
Internet		↓	↑	↓		
Television/ Radio		↓	 ↓	↓	↓	
Services on Demand (VoD...)		↓	↓	↓	↓	

Note:  historically, the main service provided over the access platform

IPTV: Market Trends

- Beijing RIC Information Consulting (2005): Global
 - 2006: the global revenue of IPTV service → \$8 billion with over 8 million subscribers.
 - Users: 2004: 2.19 million → 2008: 20.44 million
- 21st Century Communications World Forum :
 - 2006: 2-3 Million U.
- Gartner (2006): Europe
 - 2006: 3.3 million users
 - 2010: more than 16 Million Users
 - Additional revenues generated will grow from 336 Million to 3 Billion

IPTV Users in Europe



Source: Gartner (2006)



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IPTV: Market Trends

o France

- 2006: 1,7 mln / Revenues 141 mln Euro
- 2010: 5 mln / Revenues 682 mln Euro

o UK

- 2006: 75 tys. → 2010: 1,9 mln.

o Germany

- 2006: 47 tys. → 2010: 2,8 mln w
- 2010: Revenues: 465 mln Euro
- Deutsche Telecom / Microsoft / Premiere

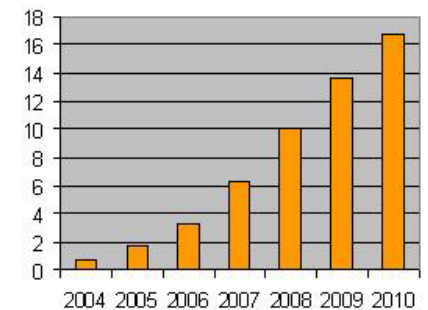
o Hong Kong's PCCW

- 30% of the world's IPTV customers – and 61% of Asian subscribers – 2005: 500,000 subscribers
- the churn rate has dropped by half

o China

- Subject of special licenses
- Shanghai Media Group (SMG)

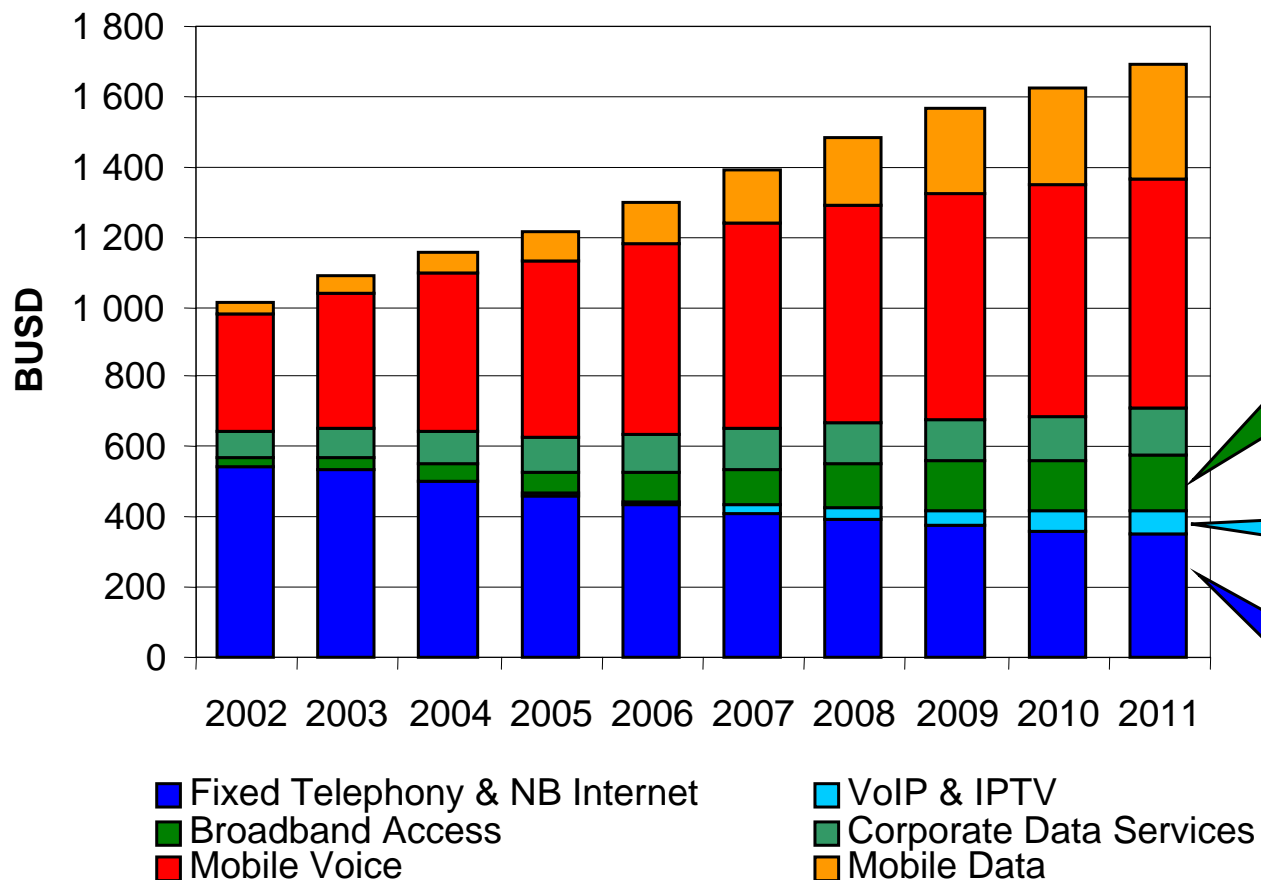
IPTV Users in Europe



Source: Gartner (2006)

Fixed and Mobile Operators Revenues

Revenues Worldwide



More than 200 M. S.
Broadband take-up
faster than mobile
Historic Growth R.
Broadband: 94% CAGR
Mobile: 32% CAGR

VoIP and IPTV
strong growth
dynamics

Traditional
telephony
revenues are
rapidly declining

Source: Ericsson Estimates



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IPTV: Drivers and Obstacles

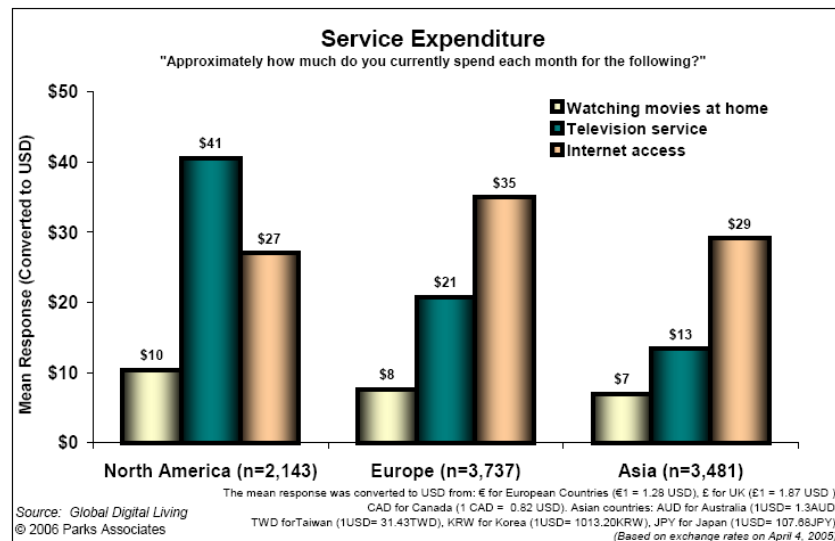
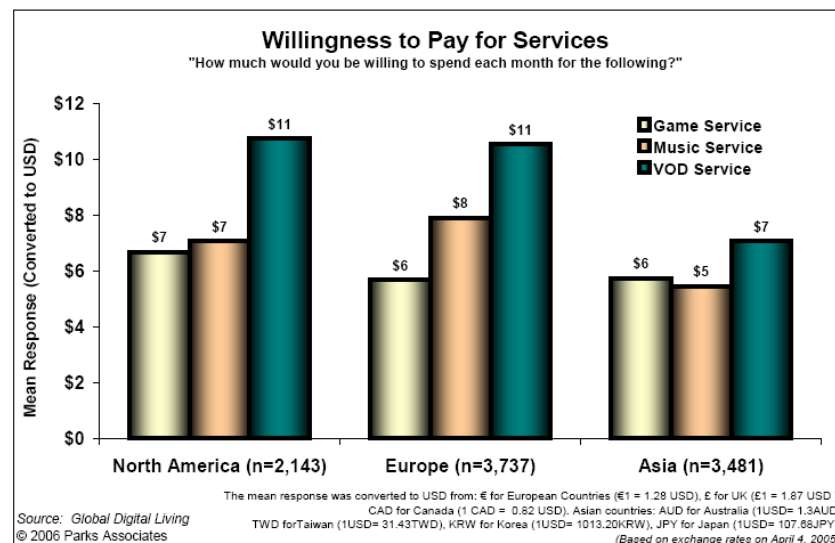
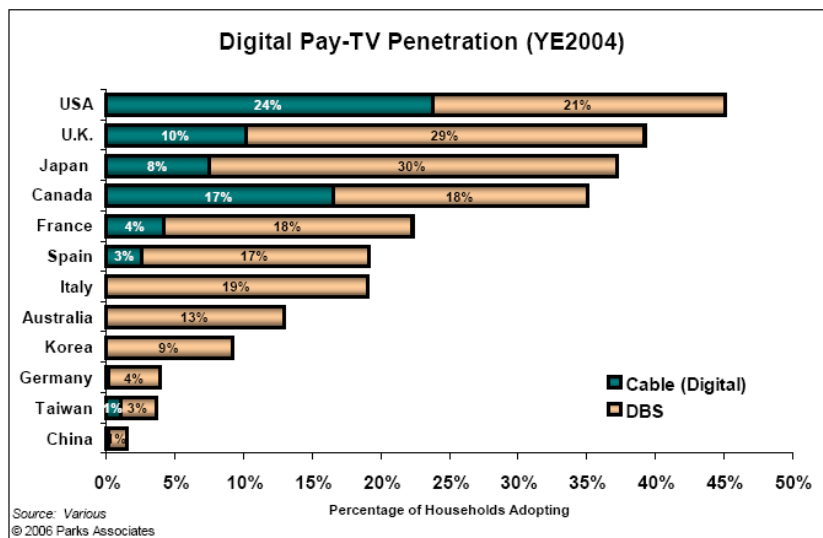
Drivers

- Telecom competition
 - Inter-modal comp.
 - Pricing and sell strategies
- Broadband deployment
- Content providers
 - New ubiquitous distribution platform
- Convergence
 - Bundling strategies
- User
 - Switching behavior

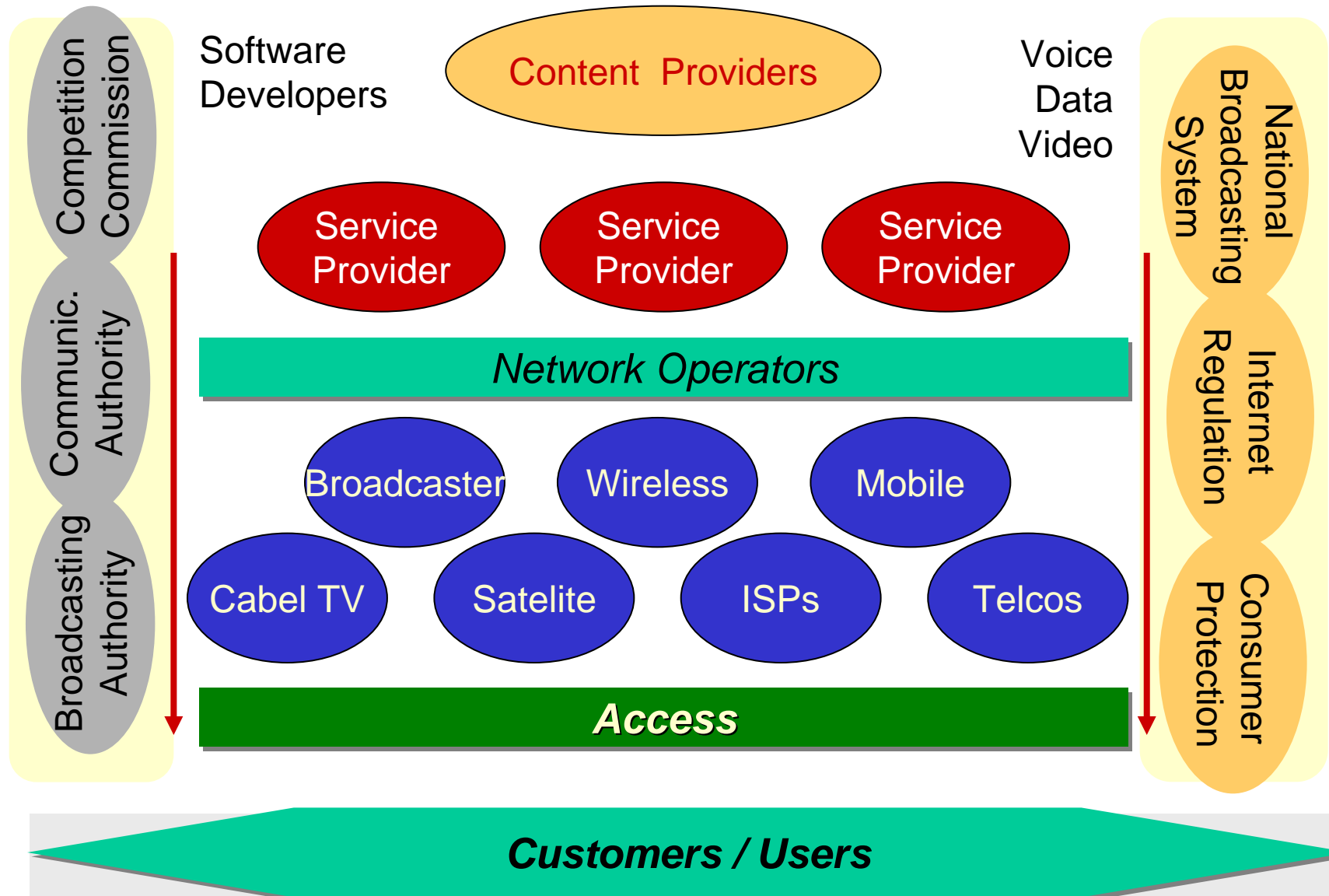
Obstacles

- Regulatory environment
- Standardization process
- Margin redistribution
- New form of service
 - Interactivity
- User
 - Cost of the STB / Hardware providers / Operators
 - Willingness to migrate
 - Willingness to pay for: TV Services / Video on Demand / Next generation services
 - Consumer protection

Customers Sensitivity



IPTV: Who has the power?



IPTV: Implications

- o Infrastructure requirements
 - 6-16 MBit/s for HDTV / Narrow Band TV
 - Bandwidth / Generalized mobility
 - ADSL2+/VDSL/FTTx/3G/4G/WiFi/WiMAX
- o Standardization process (STB)
- o Compression Methods
- o Value Creation Chain
 - True margin redistribution
- o Triple-play
 - Distribution platforms /Interaction
 - Broadcasting /One way communication
- o Regulatory reform





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IPTV: Regulatory considerations

Policy/Regulatory Goals

- o Socio-economic goals
- o Investment
- o Innovation

Regulatory Focus

- o Static and dynamic efficiencies
- o Monopolistic bottlenecks
- o Market failures
- o Ex-post r. v. ex-ante r.

IPTV

- o Application and service
 - New markets
 - Fosters competition
- o New architecture and bottlenecks
- o New cost models
 - Market analysis
 - Cross-subsidies
- o Boundary: infrastructure and the content
- o Cross-ownerships



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IPTV regulatory requirements

- o Infrastructure
 - From legacy infrastructure to investment
 - Inter-modal competition
 - Local loop un-bundling
 - Net neutrality
 - Interconnection
 - Universal service
- o Symmetric regulation
 - Quality of services
- o Consumer protection
- o Definition of IPTV in legal systems
 - IP Hybrid-service / Information service / Broadcast service / Linear versus non-linear services

Global Agreements

- Global Agreement on Trade in Services
 - IPTV on managed networks: Cross-border service provision
 - IPTV in open environment raises similar concerns as for the e-services
- Basic Agreement on Telecommunications
 - Institutional issues
- Information Technologies Agreement
 - As an effect of the convergence more often updates required

Conclusions

- Telecommunications converges with broadcasting industry very fast
 - Required strict distinction of transport and content regulation
 - Imposing old regulatory schemes to the new technologies may weaken growth dynamics
- Institutional issues
 - New dimension of regulatory reform
- Competition issues
 - All-IP environment fosters competition
 - By this complexity rapid move ex-post regulation is not possible
- Symmetric versus asymmetric regulation



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**Thank you very much for
Your attention**

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The Future of Voice

- o Research Programme
 - o Background Materials Page
 - o Three Background Papers
 - o Three Regional Studies
 - Asia
 - Africa
 - South Eastern Europe
 - Latin America
 - o Workshop: January 2007
- www.itu.int/spu/voice**



New Initiatives Programme



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