All IP networks: Regulatory Business As Usual?

ITU-T IPTV Global Technical Workshop

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Agenda

- Telecom regulation around the globe
- Why NGN's? Painting the scenery
- If NGN's, who will make money and how?
- Role of regulation?



Telecom Regulation Diverse

- USA: fixed duopolies
 - Hard deregulation
 - Real Competition?
- Asia: government intervention
 - Japan: ull ¥120 2004 onward, FTTH investmt
 - Korea: government aid, competition,
- EU: focus on incumbent telco's
 - Driven by economic theory
 - Variation in results across countries



Market Trends

- Decreasing Revenues "Old Economy"
 - -Fixed and wireless telephony
 - -Music and movie
 - Mass media advertising
- Increasing competition
- Increasing revenues "New Economy"
 - Online advertising, sales
 - -Gaming
- Increasing consumer awareness
 - -Pricing, abuse
 - -Non-professional use: blogs, etc



Consequences

- Traditional telecom and media revenues down, margins down
- Revenues new information and software services up
- Ergo: Concentration
 - -Horizontal (ISP, CATV M&A)
 - -Vertical integration (MySpace)
- Which means
 - Cost increasing
 - -Increasing scale

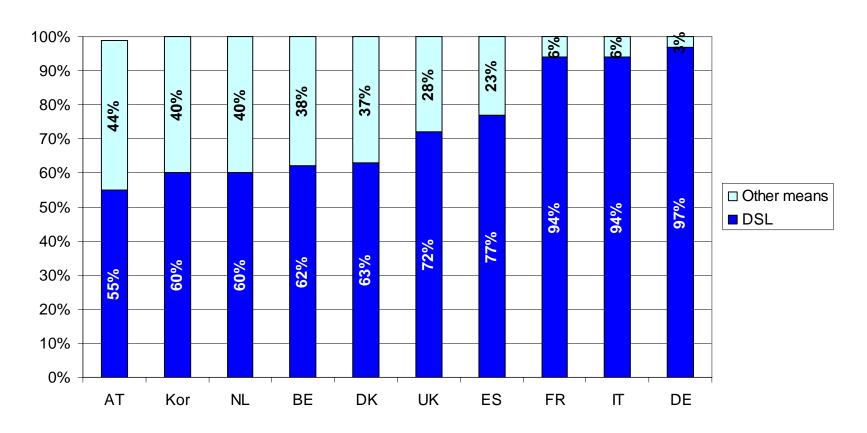
NGN's Not Automatic

- For consumers?
 - –Demand for multiple play?
- Increasing revenues?
 - -What services?
- Cost cutting?
 - -BT?
- Competition?
 - -CATV-countries vs. Non-CATV countries
 - -Godell report: offensive or defensive



Competitive forces in wireline telecom

Total fixed broadband retail lines by technology, October 2005





Resulting in: competitive picture

Country	1Mb	4Mb	8Mb	100Mb
Korea		±26	±26	49.94
Japan			±22	±52
Netherlands	19.94	25.54	49.94	
France	38.47	42.40	29.90	
Sweden	29.94		36.84	
UK	28.39	43.92	31.16	
Spain	31.00	63.31	174.66	
Denmark	47.46	66.01	106.99	
Germany	26.59		59.48*	

(Source: Telecompaper, Oct 2006, VAT incl, * figures March 2006)

NGN: Mixed Picture

Japan

-NTT VDSL; FTTH

Korea

–KT VDSL; FTTH

• USA

-Verizon: FIOS VDSL-2, FTTH

-ATT: Lightspeed VDSL-2

• UK

-BT: 21CN Core network, ADSL-2

Netherlands VDSL-2

Germany VDSL-2

NGN Is Not Regulatory Business As Usual

• 1998 monopoly

metered services/telephony

separate networks and services

 Legacy networks, high margins, limited economies of scale and scope

 2006 IP, always on, high cpu penetration converged: fixed-fixed and mobile-fixed

 New networks, low margins, massive economies of scale and scope



Investment NGN non-legacy

- Anyone can invest, even without government
- DSL-based operators face new challenge
 - -New investment?
 - -Continue dependence on incumbent?
 - –Pressure on regulator?
- How many infrastructures do you need?
 - -New vs sunk investment
 - -Wireless vs wireline
- What business models will arise?
 - Me2?
 - New business?



NGN and Me2-competition

Me2= competition on all basic telecom services

- Possible only if dominant position
 - Regulated competition on access
 - Regulated competition on data services
- Even if dominant position very difficult to achieve
 - –IP/data is pure commodity
 - -Economies of scale with infrastructure owner
 - -Revenues and margins low



NGN and New Business

- New services
 - Information (Google, etc), Transaction (eBay, ecommerce), Entertainment services (gaming, etc)
- Communication services always included
- Revenues go to platform owner
 - -Operating software, Portal, Content producer
- Possible only with access for service providers
 - -Regulated or not? Importance of buying power
- Possible only with access for users
 - -Consumer or producer?



Conclusion

- NGN developments not likely
- More so in markets where competition is heating up
- Regulators face difficult puzzle
 - -Path to NGN riddled with difficulties
 - -What are relevant markets
 - -Who will dominate?