

Converging wireless market: who regulates – who wins?

PANEL SESSION



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Information systems are becoming increasingly mobile and interconnected

Information services increasing for individuals and portable/mobile



Rely more and more on network infrastructure and open network standards



Multiple players participate in delivering services





Big changes in the wireless industry are leading to increasingly complicated coordination problems

Data transport mechanisms and improving handset capabilities support new services



Growing importance of computer, content and specialized players



Wider range of devices



How will coordination be achieved?

- Major technological shifts
 - Industry convergence
 - Entrance of new players
- New interfaces to specify
More players to coordinate

Competi



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My research looks at wireless industries in US & UK . . . gaining some knowledge of regulatory regimes



UK and US have key similarities

- Advanced economies
- Free market leaning regulators
- Forefront of fixed deregulation
- Light touch on mobile wireless
- Leading innovation in spectrum trading



**Key
regulator**

FCC

Ofcom

Established

Communications Act 1934
Telecommunications Act 1996

Communications Act 2003

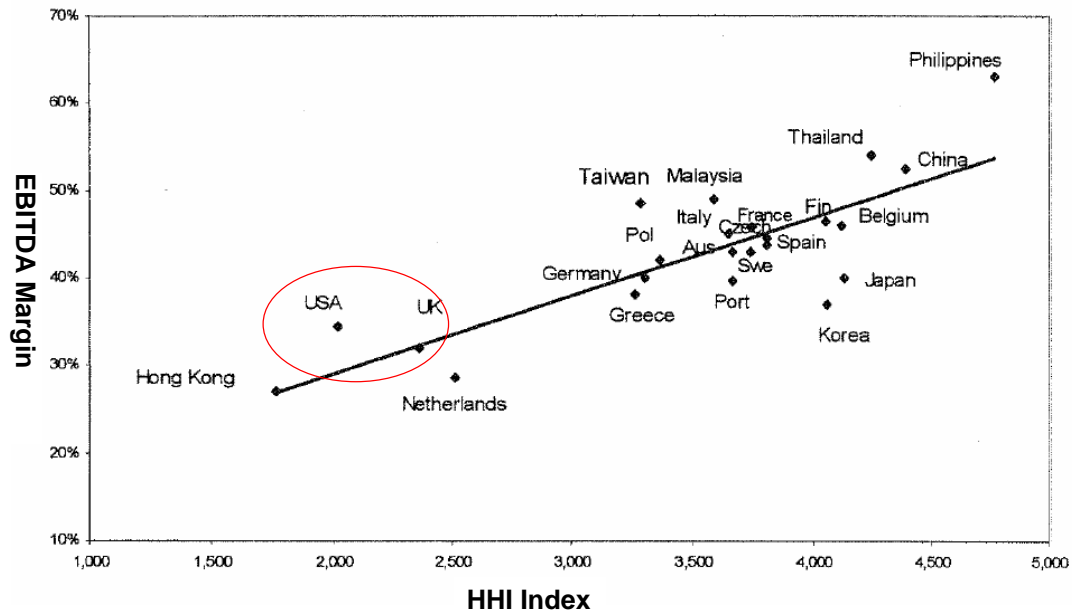
Combined telecom, broadcast
standards and radio
communications regulators

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US and UK have very competitive mobile industries

Global wireless industry profitability vs. Herfindahl-Hirschman Index (HHI)



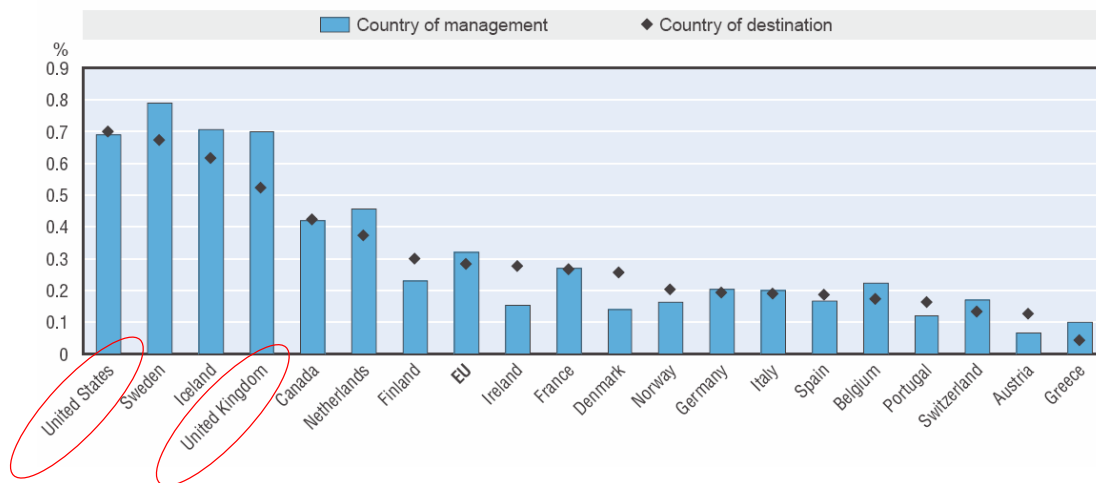
Source: Deutsche Bank, 2005

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VC funding major driver of innovation – level determined by factors outside wireless industry

Venture capital investment by country of management and destination, 1999-2001
(Percentage of GDP)



Source: OECD

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My take on questions posed to panel (1/2)

Question	My take
Vision of the converging communications markets in 2010?	<ul style="list-style-type: none"> • Interactions among visions: manufacturers, operators, users etc. • Technology development e.g. batteries • Strong brands command more of consumer communications and entertainment spend • Ability to execute and deliver

Multiple paths to network convergence – many actor-network configs explored

- France Telecom / Orange quad play include free fixed broadband
- NTL / Virgin Mobile - quad play
- BT is an MVNO, Fusion, and TV via 21CN network.
- BSkyB purchased ISP
- Carphone Warehouse will offer fixed telephony and broadband services

..... but AT&T had trouble executing after acquiring TCI

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Why Euro mobile internet failed compared to Japan?	<ul style="list-style-type: none"> • Relative Internet and PC penetration • Central coordinator (DoCoMo) • Different business models (40/60 vs. 90/10) attract different types of service providers • Lifestyle differences (commuting pattern, smaller homes)
What should be regulated / left to market?	<ul style="list-style-type: none"> • Leave everything to the market except <ul style="list-style-type: none"> • Monopolies e.g. mobile call termination • Overarching public interest e.g. security E911 • Guarantee ISP competition? • Support harmonization of frequency allocations • Regulate access? • Maintain technology neutrality in allocations (e.g. 2.5 – 2.7Ghz)

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My take on questions posed to panel (2/2)

Role of regulators towards innovation and market?

- Be disinclined to regulate
- Support competition as driver of innovation
- Provide un-licensed sandboxes for new concepts (e.g. Wi-Fi)
- Don't have national champions
- Support venture capital and investment in general

What kind of regulation needed to guarantee data security?

- Public safety / security is valid reason to meddle in market
 - Emergency services (e.g. E911)
 - Protect kids / avoid producing stalker toolkits (LBS)
- Privacy and data security – in-line with legislation for on-line and other businesses

How should radio frequencies be regulated in future?

- Auctions for most commercial uses of spectrum
- Push for higher spectrum utilization
 - Prevent spectrum hoarding
 - Allow spectrum trading
- Provide sandbox for cognitive radio, SDR

Should regulatory frameworks be redesigned for convergence?

- FCC and Ofcom are wireless, wireline and media regulators
- Most of Ofcom's business still within silos



Questions?