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Issues for the Reform of Telecommunications in Emerging Markets

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Rapid development in the sector

- How to ensure this contributes to economic wealth?
- How to improve performance of operators?
- How to improve technology available to meet various user needs?
- How to improve the range of services available?
- How to improve connection and usage rates?
- How to improve prices and quality of service?

**Answer: Liberalisation supported by
pro-competitive regulation**



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Big questions for emerging markets ...

- Maintain monopolies or introduce competition?
- Can monopolies meet the needs of business and consumers?
- What process should be followed to introduce competition?
- Should competition be introduced rapidly or gradually?
- Should competition cover the full sector or should it only be partial?

...useful evidence from developed markets



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Gains from liberalisation...

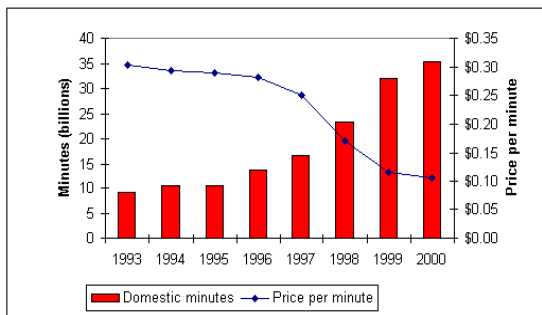
- Significant price reductions
- Price rebalancing (subject to regulation)
- Universal service (subject to regulation)
- Increase in connection rates and usage
- Network and bandwagon effects
- Consumer choice and carrier responsiveness
- Productivity improvements

...enhances overall economic development



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Significant price reductions ...



...are likely to continue



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Price Caps and Sub-Caps ...

Service	Productivity Gain	Price Cap
Average of all services	10%	RPI minus 8%
Services where price is greater than cost		
Long distance calls	10%	RPI minus 12%
International calls	10%	RPI minus 15%
Services where price is less than cost		
Local calls	10%	RPI minus 5%
Line rental charges	10%	RPI minus 0%

...can be used to achieve gradual price rebalancing



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Universal Service Obligations (USO)

The best way to increase service usage, including higher connection rates, is:

- Ensure prices properly reflect costs, and are not distorted
- If some users need to be subsidised, this is best achieved through a specific universal service obligation
- Specify the USO
- Cost the USO
- Fund the USO

Explicit subsidies are better than hidden subsidies



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Don't double count USO subsidy

Example: Net Contribution to profit from:

	Commercial Service Areas	Non-Commercial Service Areas	Universal Service Areas
Access	20	-30	-10
Local	20	-20	0
Long Distance	40	20	60
International	50	20	70
Total	130	-10	120

Subsidise subscribers (by area), not services



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Competition evolved in the US A...

Initial competition emerged from 1970s and 1980s, but lack of equal access

- 1984 break up of AT&T, into LD company and 7 RBOCs
- Equal access helped increase competitors LD share to over 50%...

But little local network competition:

- Competitive Access Providers (CAP) and Competitive Local Exchange Carriers (CLECs) ...
- ... had maybe 2% of lines
- ... and 1% of revenues

...through trial and error, in stages



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US Telecommunications Act 1996

"A pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecoms and information technologies"

- Encouraged long distance competition by allowing the RBOCs to enter this market ... if their own markets were open to competition
- Encouraged local market competition by removing the support for local monopoly that applied in many states ... a 14 point plan to be completed by the RBOCs
- Removed rate controls on cable TV markets ... and removed restrictions on telephone companies entering the market for such services

...encouraged local network competition



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Unbundled network access

Requires the incumbent carriers to provide "non-discriminatory access to network elements on an unbundled basis to any technically feasible point"

- New carriers choose which elements of the access networks they should buy and which part they may build
- Charges for these are based on forward-looking long run incremental cost (LRIC)

Price of unbundled access lines:

- Most provided at a rate of less than US\$15/month
- over 90% are less than \$US20/month
- Compared with retail charges typically about US\$20 to \$25/month
- Market share increased to about 10% by 2000
- Investment went up 10-fold to US\$13B

...encouraged efficient competition



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Competition in UK and Australia

Legislation prevented competition, so a policy decision was needed to introduce a 7 year duopoly, then full competition

Maybe this approach allowed a strong second player to emerge ...

- ... but it also left a dominant full-service incumbent

Strong pro-competitive regulation

- LRIC-based interconnection prices
- Accounting separation
- Price controls
- USO

Applied equal access in various ways:

- ...dial code access
- ...carrier preselection
- ... unbundling of the local loop is coming slowly

More structured approach to competition



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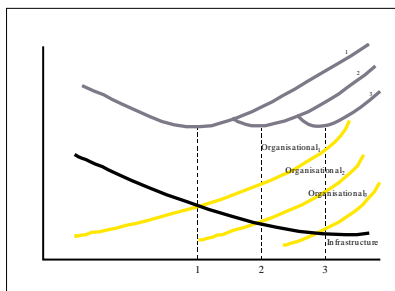
Competition in Europe

- 1990 services directive liberalised all services except voice
 - 1996 competition directive required all members to liberalise all remaining services from 1 January 1998
 - Incumbents retain significant market power...
... so are subject to price regulation
 - Entry is controlled in each market by carrier licensing
 - Rights of way to allow carriers to rollout varies considerably
 - Access to networks is mandated ... and interconnection charges must be transparent and follow a cost orientation
 - Regulations emerging to allow local loop unbundling in many countries ... rates about 8 to 15 Euros/month
- ...at an early stage of development



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Resale by many service providers



... they need regulated network access
... but reduce long run average cost



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Next generation networks

The defining characteristics of NGNs are:

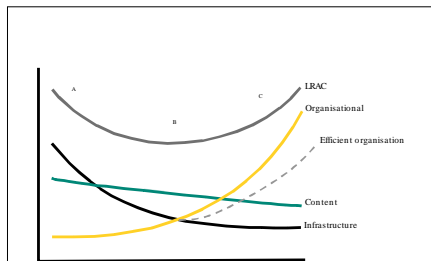
- a single multi-service network which carries all voice, data, and video traffic and which uses IP transmission links
- a network over which guaranteed quality of service can be offered for different traffic types
- a network in which complex services can be offered and managed separately from transmission and access

Advantages over PSTN and IP networks



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Convergence is coming...



... it could reduce LRAC further
...hard to achieve without liberalisation



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Liberalisation needs pro-competitive safeguards

- Resale with network service at a discount to retail prices
- Equal access for new carriers...
... dial code access and preselection
- Local loop unbundling (ULL) for local network competition
- Access and ULL priced on Long Run Incremental Cost
- Accounting separation
- Competitive neutrality and Independent regulator
- Privatisation
- Consumer protection while competition is emerging

... to support effective competition



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Liberalisation makes consumers and business users better off

Liberalisation itself is in the long term interests of users

- Gains to consumers have tended to compound...
- ...because of the economies of scale in the industry
- ...increases connection rates and usage levels
- ...lowering prices and making more services economic
- ... a powerful driver of economic growth and wealth creation

Effective liberalisation has very powerful long term benefits for emerging markets