

Convergence in Electronic Communications Markets

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‘Impact of disruptive technologies on the
traditional telecommunications markets: the
Internet paradigm’

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The challenges facing the telecommunications sector, based on 'A Green Knowledge Society', a report for the recently ended Swedish Presidency

- ▣▣▣ Ubiquitous connectivity
- ▣▣▣ High speed networks
- ▣▣▣ Social capital to make them useful
- ▣▣▣ Delivery of public services and e-government
- ▣▣▣ Single market
- ▣▣▣ Simplified regulation and speedier competition policy
- ▣▣▣ New IPR rules
- ▣▣▣ Trust, security, privacy

Getting the plumbing right I

- ▣ Changing from (sunk) copper to (non-sunk) fibre requires a re-think
- ▣ Mixture of policy objectives in play: market failure, industrial goals, universal service
- ▣ Traditional cost-based access rules may delay the investment
- ▣ Observable tendency to relax, abate, defer or limit LRIC pricing

Getting the plumbing right II: the escape routes from re-monopolisation

- Competitive networks: end-to-end, duct sharing etc
- Multi-fibre deployment
- Public investment, where State aid rules impose general access obligations
- Wireless as a constraint

Getting the plumbing right III- public investment

- Goal of public investment must be clear
- Scale of available funds make 'crowding-in' of private investment the key goal
- Should public funding focus on demand or supply side, depth or breadth (FTTH/FTTC), more or less risky projects, local/national initiatives?
- State aid rules require some form of open access, but which?

Getting the plumbing right IV- wireless

- ▣ New wireless networks for broadband require considerable investment, including in back-haul; some are already cracking under the strain of the i-phone
- ▣ Considerable pressure in favour of network-sharing
- ▣ But how far should it go- active, passive elements, spectrum? Do the competition rules need review?
- ▣ Problems associated already with tightly oligopolistic industry structure.

Net neutrality: help or hindrance?

- ▣ Debate picks up business model differences (see below)
- ▣ Focus should be on end user welfare, not retaining current status of the internet
- ▣ Highlighted by FCC proposals for non-discrimination and transparency

Net neutrality: transparency

- ▣ Is there a need for traffic management? Clearly yes.
- ▣ How much is reasonable? Varies with time and circumstance
- ▣ Should consumers be told what service they will get? Clearly yes
- ▣ Is competition among ISPs enough to protect them from abuse?

Net neutrality: discrimination

- ⌘ Are consumers vulnerable to discrimination? Yes
- ⌘ Are separated content owners vulnerable to harm from integrated ISPs? Yes
- ⌘ Is this a ground for prohibiting all discrimination on transport- ie, no tiering? Doing so could harm static efficiency and deter innovation
- ⌘ Conclusion- right approach is case-by-case, based on dominance, as in the European Regulatory Framework
- ⌘ Because wireless networks have more competition-friendly cost structures, for this reason they are weaker candidates for net neutrality rules.

Business models: a fork in the road

- ▣ The proprietary model- licensed software, paid for content, heavy copyright restrictions, bundled provision
- ▣ The open source model- open source software, creative commons licences, monetisation by advertising, light IP protection, unbundling, the 'radical price'.

Business models: a mobile example

- ▣ Apple: iPhone entry strategy- Apple contracts with single network, bundles its own and other applications in relationship with consumer
- ▣ Apple: later phase- decouples from network, retains role in apps; demand side bundle co-ordinated by consumer
- ▣ Google: Android and/or Nexus sold with Google apps to consumers, who then contract with network; or network offers Google handset
- ▣ Contrasting models, but network role weakened in both.

What might the internet to look like? Emerging options from a Delphi study

- ▣ The (mostly wireless) internet supports global prosperity, or
- ▣ The internet becomes the major weapon against global warming, or
- ▣ The internet becomes a tool for the commercial interests of major interests, especially retailers, or
- ▣ Users dominate a co-operative chaotic internet, or
- ▣ The internet is taken over by the non-OECD world and used for development goals.

What should the authorities do?

- ▣ Maintain the focus on end user welfare
- ▣ Stick to policy/regulation distinction
- ▣ Promote new high speed networks, welcoming sensibly applied pro-competitive public investments
- ▣ Avoid US net neutrality blandishments
- ▣ Remain neutral among business models, recognising the link between openness and competition but protecting IPR and investment incentives (NRAs and NCAs should not take 'the fork in the road', even if firms must do so).