

Realities of Regulation in a Changing World

Upcoming challenges

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On rush of technology

- technology developing at a speed that makes it difficult for all involved to keep up
- product life cycles extremely short
- creates acute difficulties for manufacturers
- no time for operators to depreciate assets in normal way
- regulators uncertain which technologies will turn out to be successful

Regulatory response

- regulator should not attempt to prejudge the outcome
- at risk of distorting the market
- regulation should be based on:
 - technology neutrality
 - forward looking costing
 - open networks
- let the market work

Internet Protocol (IP)

- Internet Protocol (IP) has become the key enabling technology for the future
- single agreed protocol for the handling of digital information; ubiquitously available
- supports common approach to network and higher level functions
- is rapidly becoming the basis for network operation

Very high speed packet switching

- provides the solution to problems of digital bottlenecks:
 - broadband switching
 - break out from optical fibre
- enables a more flexible merging of data streams
- including efficient handling of voice and moving pictures
- becoming the technology of choice

Voice over Internet (VOIP)

- one manifestation of the digital revolution
- no going back
- provides the most efficient way of handling voice traffic
- reflects the realities of the economics of the IP network: once the network is created, usage costs are close to zero
- operators must embrace it and regulators should allow them to do so

Sector response

- telecoms companies (telcos) need to find a way to recover their costs in the new environment
- the likely outcome appears to be:
 - move to access subscription based charges;
 - with some provision for congestion where appropriate; and
 - content charging using micro-transaction software
- together with some fairer charging for Internet transmission facilities

Regulatory support

- regulators need to support these changes in principle, in the interests of users
- while making suitable provision for transitional arrangements
- and ensuring that competition delivers user choice in terms of tariff structure preferred
 - eg tariff packages allowing users to choose between high fixed charges and low usage charges or the other way round

Spectrum Management

- increasing use of wireless in telecommunications
- traditional means of administered spectrum management (“command and control”) under pressure
- dissatisfaction with auctions and wish to develop improved market mechanisms
- development of concept of spectrum trading

Technical developments

- new developments increasingly solving the problem of frequency shortage
- Wi-Fi: extended use (unlicensed)
- spectrum-agile radio devices
- ultra-wideband radio: spread spectrum transmission and reassembly
- “Mesh” technology: devices forming network
- potential for sharing spectrum to point where scarcity problem disappears

Ofcom (UK) spectrum vision

1. spectrum should be free of technology and usage constraints as far as possible. Policy constraints should only be used where they can be justified;
2. it should be simple and transparent for licence holders to change the ownership and use of spectrum; and
3. rights of spectrum users should be clearly defined and users should feel comfortable that they will not be changed without good cause

Progress towards frequency trading

- UK spectrum proposals:
- some increase in licence exempt spectrum (to 6.9% by 2010)
- allow market forces to prevail through trading and liberalisation where possible (71.5% to be subject to trading by 2010)
- continue to manage remaining 21.6% using current approaches
- consultation on implementation issues

Broadband

- broadband provides the universally capable network platform for converged communications (text to moving pictures)
- could be used as a means of re-monopolising local network operation
- should become the basis for sustainable competition and choice across full sector
- market segmentation possible at all levels
- main regulatory challenge: ensuring fully open networks (“real equality of access”)

Elements of real equality of access (UK example)

- business separation:
 - Access Services Division
- separate supervision:
 - Equality of Access Board
- “equivalence of input”, full access products:
 - Wholesale Line Rental (WLR)
 - Local loop unbundling (LLU)
 - Fibre access and backhaul products
- 21st Century Network designed accordingly

SPAM

- liberty should never be confused with licence
- the dream of an unregulated Internet was always a chimera
- the reality is that all forms of communication must respect the law
- which provides protection from infringements of human rights, privacy, consumer rights, decency and good taste
- spam is one aspect of this confusion

Response

- technology can restore much of the initiative to the recipient
- to control what unsolicited material to receive
- but spam has gone beyond this to pose a major threat to the viability of the Internet:
 - “it is now necessary to presume that an e-mail message is guilty of abuse until proven innocent” – UKERNA News September 2005
- solution must rest with international co-operation between regulators, operators and governments: ITU programme for control

Current action on Spam

- programme of discussion and action in implementation of the Declaration of Principles and Plan of Action
- adopted on 12 December 2003, at the first phase of the World Summit on the Information Society (WSIS)
- on agenda for Tunis phase of WSIS
- generation of effective international action to counter the problem
- promoting global culture of cybersecurity

Legislation on Spam

- ITU survey for WSIS:
 - 44.8% of respondents (mostly from the Americas, Asia, Australasia and Europe) have already enacted legislation
 - 17.2% have other related legislation
 - 16.5% have legislation in progress
 - 22.4% have no legislation
- acknowledged need to harmonise all legislation in different countries
- in support of self regulatory measures