
Fostering the Next Generation Network: Regulations for a Modern Society

Dr David Nugent



30 June, 2005

elucidare.co.uk

Acknowledgments



Exam Question

Question: How can regulations be used - were appropriate - to encourage the deployment of fibre closer to the home?

When to regulate: Ex ante or ex post?

Where to regulate: Should broadband be covered by the USO?

How to regulate: Should regulators be technology agnostic?

Who to regulate: How can we detect market dominance?

Why to regulate: On whose behalf are we regulating?

Timeliness of investigation

Today: Strategic Review of Telecommunications

Tuesday: BT signs deal with Microsoft for IPTV

May: Referendum highlights European weaknesses

Tuesday: Traffic decongestants are failing

Timeliness of investigation

Strategic Review of Telecommunications

Strategic Review of Telecommunications

“There **may be some instances where the installation of deep-reach fibre** (either to the home or to the kerb) **may be economically viable**. BT’s analysis of predictions of future revenue from ‘broaderband’ services **do not yet justify the estimated costs of extensive network roll-out... BT does not envisage significant deep-reach fibre installation** beyond the new-build portion **in the near or medium term**, although we are closely monitoring developments and have launched several trials to understand in more depth the technical, operational and commercial issues involved.”

“... **there is unlikely to be a widespread demand leading to significant investment in “broaderband” networks.**”

Source: BT plc June 2004

Strategic Review of Telecommunications

“For very high speed access, **fibre is the accepted solution**. As discussed earlier, **fibre is still too expensive to install for residential users because of the physical cost of network build**. Such investments will only be made if a **massively profitable** business model can be designed to justify the investment, and the investment payback period spread over a very long period.”

Source: Easynet June 2004

Strategic Review of Telecommunications

“Energis doubts whether next-generation access networks (which we understand to be fibre-to-the-home or at least much deeper into the network) **are economically justifiable under existing market conditions for residential markets.** The only users we expect will have significant demand for next-generation access at prices that reflect the cost of supplying that access are large business customers (who of course already receive those services through existing fibre access products such as PPCs or direct connections to rivals’ networks).”

Source: Energis June 2004

Strategic Review of Telecommunications

“It is **unlikely** for the **foreseeable future** that a **national next generation access network** will be **deployed** in the UK – **by BT or by any other player.**”

Source: France Telecom June 2004

Strategic Review of Telecommunications

“Marconi believes that **it will ultimately prove essential to invest in “broaderband” access networks in order to maintain national competitiveness** and to deliver other desirable outcomes such as social and political inclusion, virtual workforce mobility, regional development and relief of transport congestion.”

Marconi June 2004

“The **logical end game is to drive fibre all the way to residential and small business users**. The short term requirement is to start to drive fibre progressively closer to such users.”

Nortel Networks June 2004

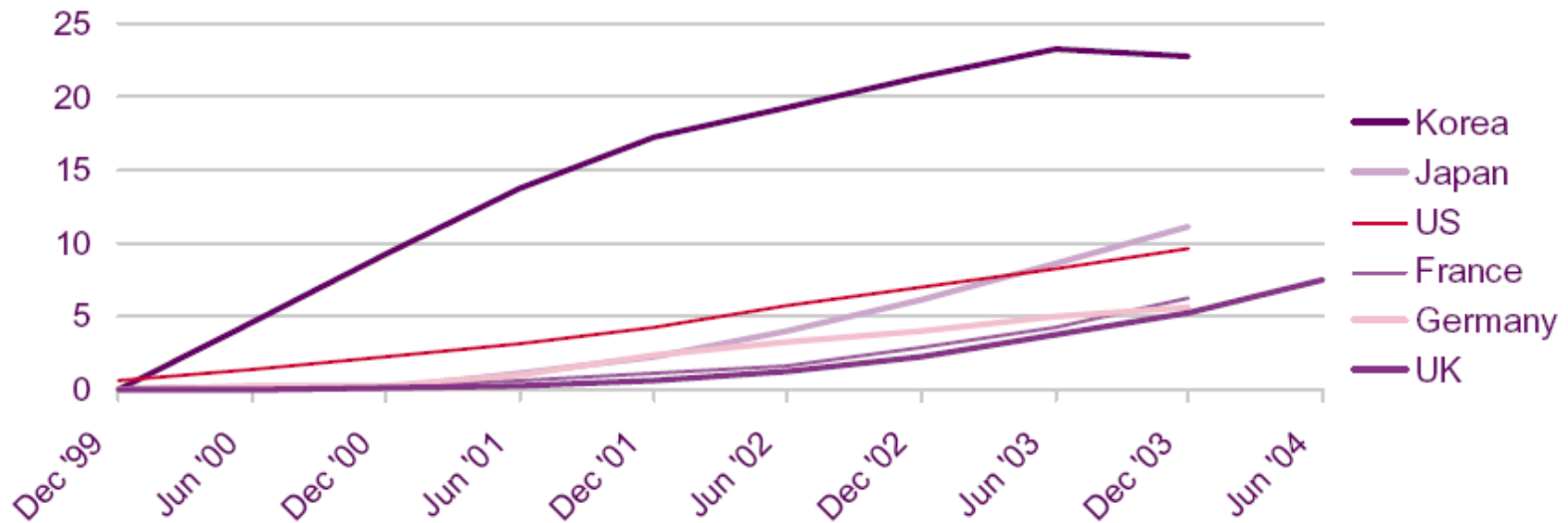
“Fully functional, rewarding triple-play services for multiple users in the household will require **significantly larger bandwidth that is on offer today for residential users**. The experience from Japan and Korea, or Italy, for that matter, demonstrate that there is a large number of households willing to pay for high-quality services enabled by very high bandwidth.”

Intel June 2004

Strategic Review of Telecommunications

Figure 1: Broadband internet penetration

Subscribers per 100 population



source: Ofcom Market Intelligence, OECD, NRAs

Timeliness of investigation

Today: Strategic Review of Telecommunications

Tuesday: BT signs deal with Microsoft for IPTV

May: Referendum highlights European weaknesses

Tuesday: Traffic decongestants are failing

Regulation for Modern Society

Evolution of UK telecom regulations

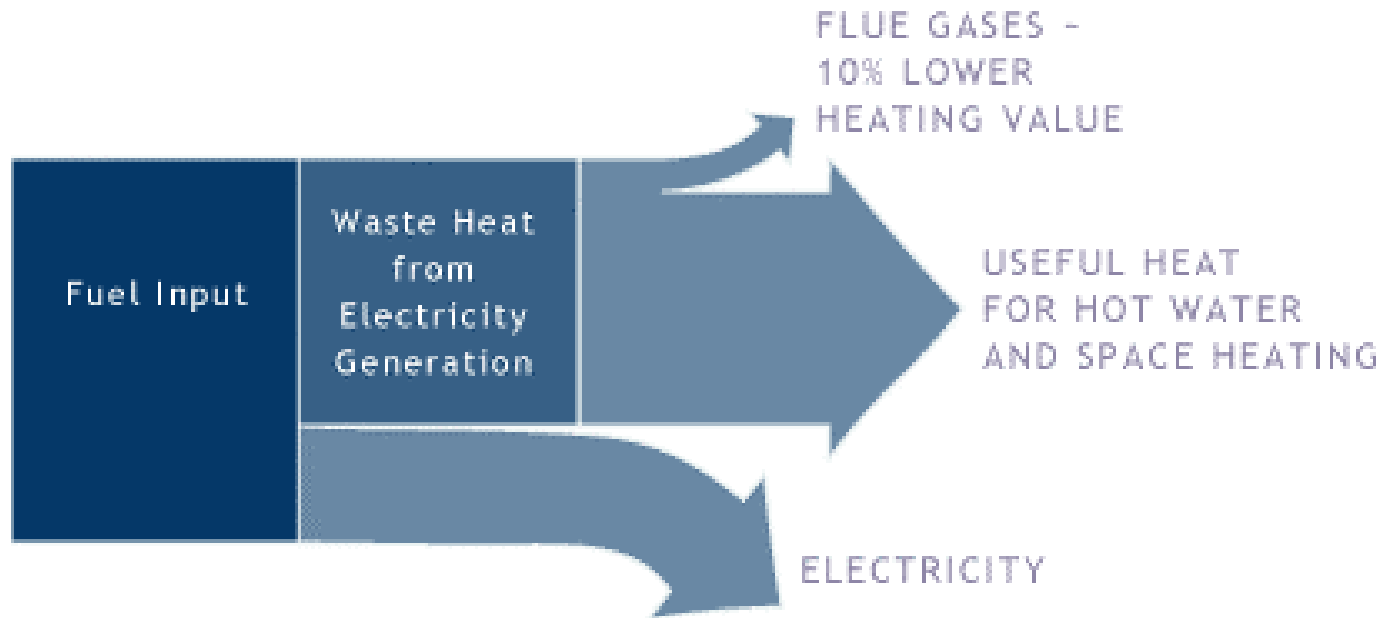
On whose behalf are we regulating?

Phase 1: 1984-2004	Consumer
Phase 2: 2004-2008	Competitor
Phase 3: 2008-	Modern Society

Regulation for Modern Society

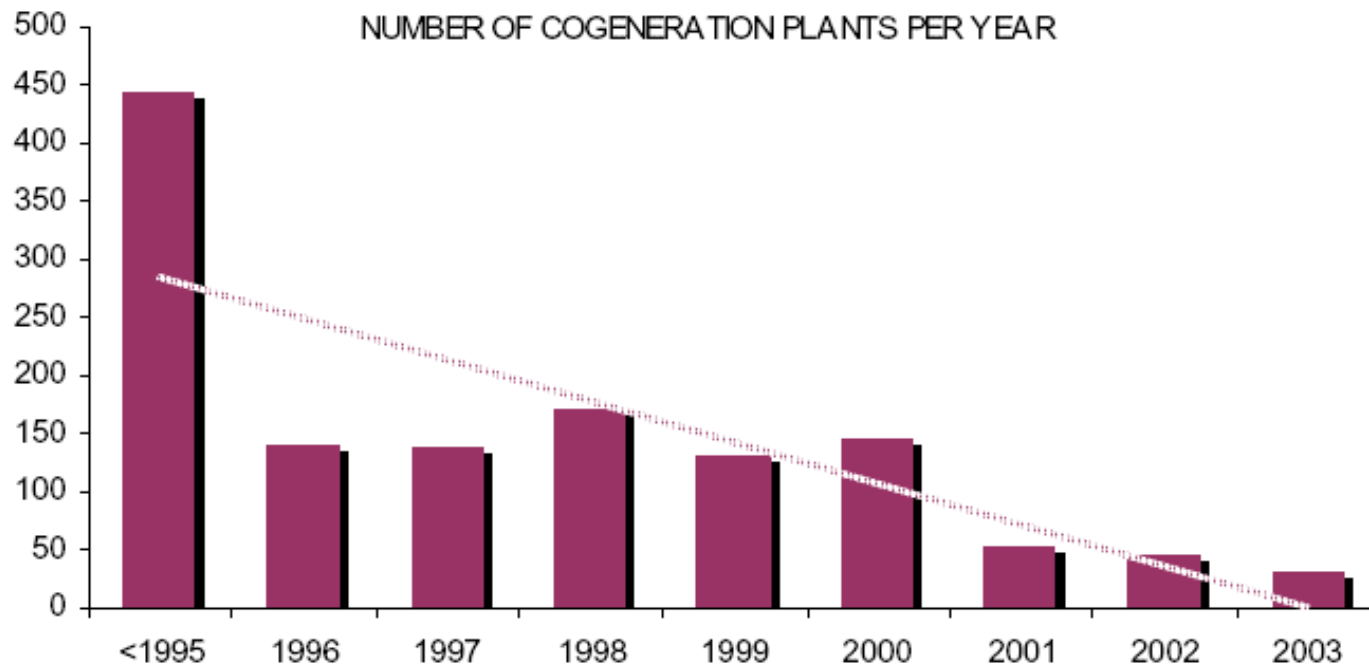
Combined Heat and Power

Theory of CHP



Regulation for Modern Society

Example: Collapse of CHP in Spain following energy market liberalisation



Regulation for Modern Society

“Ofgem considers that a new licence obligation to make an offer to purchase microgeneration output **might tend to distort the electricity market**. It might **impose unjustified costs on licensed electricity suppliers**. Moreover, additional regulatory requirements should be created only where absolutely justified.”

Source: The Regulatory Implications of Domestic Scale Microgeneration 2003

“If there is real, commercially-viable demand [for broadband services], companies will move to supply ever greater bandwidths. If not, the **regulator should not skew the regulatory environment in order to persuade them to do so.**”

Vodafone June 2004

Regulation for Modern Society

Legislation **IS** now being put in place to deliberately alter the electricity supply market to encourage adoption of CHP systems

UK: Electricity (Microgeneration) Act 2005

Germany: Co-generation Act

Spain: Royal Decree

Conclusions

Europe **needs to do more** to catch up with its global trading rivals

Advanced telecommunications networks will **play a crucial role** in that endeavor

Strategic Review by Ofcom should give the market in general – and BT in particular – the **reassurance to invest** in the Next Generation Network

Failing that a new regulatory model designed to support **modern society** as distinct from the **consumer** may be required

Fostering the Next Generation Network: Regulations for a Modern Society

Dr David Nugent



30 June, 2005

elucidare.co.uk
