

Regulating European Broadband Internet Content: Medium Law?

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Abstract

Reidenberg and Lessig have popularised the view that two types of code regulate behaviour on the Internet: legal code and software code. There is a third type which receives less attention - codes of conduct for intermediaries, including Internet Service Providers, and the terms of use for their end users, which deal with inappropriate behaviour on the Internet. It is this third type amongst 'code, code, code' that this paper examines. In particular, it asks whether harmful and illegal content types can be regulated effectively by legal code or ISP conduct codes. If such codes are ineffective, or require such radical intervention into freedom of expression that the end-to-end principle enshrines, the paper considers software code's role in facilitating regulation. It does so by examining the third of three separate content types that users rule inappropriate and that have attracted public policy attention: unsolicited commercial messages (spam), malicious code (spyware and viruses particularly), and harmful or inappropriate content (typically unsolicited adult material, particularly for children). A regulatory response that institutes rules at either the network or user level to prevent these content types is increasingly urgent in broadband networks. The paper draws conclusions for regulatory policy based on a study of European mobile self-regulatory types. Without a unified constitutional and competition law approach, a regulatory model that is less suitable for both network openness and freedom of expression will emerge.

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1. Regulating European Broadband Internet Content: Medium Law

Can we now talk about medium law? Is content delivery converging such that only one medium's regulation matters? That medium is the broadband Internet, which for consumers has emerged in the period since the 'dotcom' bubble burst in March 2000. In advanced developed countries, the majority of Internet users now use a connection of 512Kb/s or higher. This means that the Internet's WWW GUI interface, popularized in 1993 with the launch of the Mosaic browser, no longer is confined to text and images. The growth of audio and video over this medium means that the Internet may no longer be treated as an extension of the print medium that was its roots. The consequence is that the non-regulation of the Internet may be replaced by something much closer to a merger of printed press and audiovisual regulation. We may be seeing the 'regulation of the Internet'.

Of course the Internet has always been regulated. As Reidenberg¹ and later Lessig² stated, and I explore in Section 2, the environment of the Internet is itself a determinant of its physical and virtual boundaries. The software that makes the Internet work is a pre-existing 'law' of the Internet, just as gravity and other Laws of Motion regulate the humans who interact via the Internet. But the use of legislative and jurist's tools to regulate the Internet has largely been by means of applying existing offline laws to the online environment: for jurisdiction, for criminal obscenity, for libel, and more prevalent, for copyright infringement (see Section 4.3).

The new development in Internet regulation is the application of offline medium-specific content rules to the Internet. That means especially the corpus of rules applying to the audiovisual medium. It was a fate that the Internet escaped in 1996-7 when in both United States and Europe regulators were persuaded not to intervene in the emergent

¹ See further Reidenberg, J. (2005) Technology and Internet Jurisdiction, 153 UNIV. OF PENN. L. REV. 1951 <http://ssrn.com/abstract=691501>

² Lessig, L. (1999) *Code and Other Laws of Cyberspace*, Basic Books

medium³ (a judgment proved correct by the later adoption of broadband than previously predicted). In the Supreme Court's quashing of the Communications Decency Act in *ACLU vs. Reno* (1996) and the decision of the European Parliament narrowly to avoid extension of the Television Without Frontiers (TVWF) Directive of 1989 to the Internet in its 1997 revision⁴, the regulators gave the new medium a breathing space to self-regulate and otherwise demonstrate its maturity and disprove the need for regulation⁵. That breathing space, which I explain in some detail in Sections 3-4 is now over.

In autumn 2005, the legislators signalled their intent to regulate the Internet via the Audiovisual Content Services Directive (ACSD) combined with the new Recommendation on the Protection of Minors⁶ (EU) and the new proposed Communications Act⁷ (US). I concentrate here on the former, as a European constitutional and competition lawyer. I note in Section 6 that the regulation of more oligopolistic industries than Internet content⁸ proved conducive to that self-regulation that the Internet has not apparently achieved. Examples are the mobile Internet and interactive gaming environment⁹, to which one may be able to add the Video on Demand industry. However, for the 100 billion pages¹⁰ and perhaps 100 million sites on the Internet, such regulation has proved impossible to coordinate. The European Commission is determined to step into the gap as the Internet becomes more powerful and pervasive. It also intends to fulfil its cultural and economic goals in ensuring that the unregulated Internet is not able

3 See: European Commission (1996) Green Paper on the protection of minors and human dignity in audiovisual and information services on 16 October 1996; Council resolution on illegal and harmful content on the Internet of 17 February 1997 OJ C 70, 6. 3. 1997; Economic and Social Committee Opinion OJ C 214, 10. 7. 1998; European Parliament Opinion OJ C 339, 10. 11. 1997; Economic and Social Committee Opinion OJ C 287, 22. 9. 1997; Committee of the Regions Opinion OJ C 215, 16. 7. 1997.

4 See Tongue, C. (1999) Chapter 5 in Marsden, C. and Verhulst, S. (eds) (1999) *Convergence in European Digital TV Regulation*.

5 Notably via the Recommendation on the Protection of Minors (1998) in the EU, and the PICS system of self-rating and filtering adopted by the W3C.

6 See COM(2004)0341 European Parliament legislative resolution on the proposal for a recommendation of the European Parliament and of the Council on the protection of minors and human dignity and the right of reply in relation to the competitiveness of the European audiovisual and information services industry – C6-0029/2004 – 2004/0117(COD) at <http://www.europarl.eu.int/sipade3?PUBREF=-//EP//TEXT+TA+P6-TA-2005-0330+0+DOC+XML+V0//EN&L=EN&LEVEL=0&NAV=S&LSTDODC=Y&LSTDODC=N>

This will soon replace and update the Green Paper on the protection of minors and human dignity in audiovisual and information services, COM (96) 483, 16.10.97; Communication on Illegal and Harmful content on the Internet, COM(97) 487, 16.10.97; Council Recommendation 98/560/EC on the development of the competitiveness of the European audiovisual and information services industry by promoting national frameworks aimed at achieving a comparable and effective level of protection of minors and human dignity OJ L 270, 7.10.1998.

7 See draft at http://energycommerce.house.gov/108/News/09152005_staff_disc.pdf and commentary at http://blog.pff.org/archives/2005/09/long_live_publi.html

8 Noam 2004

9 See Leonardi, Marsden and Tambini 2006 forthcoming.

10 Estimate by University of Southampton, though obviously the number is a moving target. An approximation is that, given the firewalls which cut off much of the public Internet from search engines, there are perhaps 10 firewalled pages for every one that search engines can access.

without impediment to substitute in advertising revenues for the broadcast audiovisual environment. As the Internet grows in power, it also grows predictably in scrutiny, as I point out in the concluding Section 7.

Regulators do not universally share this view. At the Liverpool Audiovisual Conference held by the Presidency of the Council of Ministers, the Chair of OfCom, UK regulator, stated¹¹:

Ofcom's concern is that the practical benefits to producers of a harmonised regime may be finely balanced in comparison with the costs of additional regulation ... as the Commission itself has repeatedly acknowledged, many, possibly all, of these benefits can be achieved through the empowerment of consumers to protect themselves through mechanisms such as rating, filtering and parental controls, coupled with effective industry initiatives to block access to some forms of material. We need to avoid regulatory double-banking.

He goes on to observe the practical difficulties in regulating the Internet:

In broadcasting, it is possible to impose additional rules beyond the straightforward criminal law because broadcasters require regulators' permission to operate... For some forms of new media distribution, similar pegs might be found - for instance for mobile content. But for pure, internet-delivered content it is difficult to see how any meaningful licensing controls could be imposed and hence how any sanction could be enforced. These problems arise even if the regulatory instrument of choice is a co-regulatory scheme in which industry operates against a long-stop of possible enforcement action by the regulator.

So Ofcom's view, boiled down to its essential, is one of scepticism about the case made for the extension of scope, in so far as it seeks to extend regulation to services currently in their infancy, and concern about the practicalities involved.

James Murdoch, Chairman of Sky Television, the largest broadcaster in Europe, responded very negatively, as had his father at the previous

¹¹ Lord Currie, Speech 21 September 2005, available at: http://www.ofcom.org.uk/media/speeches/2005/09/liverpool_conf

Audiovisual Assizes in Birmingham in 1998¹². The European Commissioner's response is less measured and frankly protests too much that the subject is NOT regulation of the Internet¹³:

I have heard and read here and there, that Brussels intends to regulate the Internet, to introduce new red tape. Frankly, this is nonsense! Never ever has the Commission had such a foolish idea! But let me ask you some questions: who in this room is in favour of child-pornography on the new media? Who stands for the freedom to spread incitement to racial hatred on the new media? If one of the service providers present here in this room considers that these abuses are just business-as-usual, he should stand up and take the floor. It is the duty of the Commission to propose a framework under which these **shared European values** are protected. **But I have no intention to “regulate the Internet”!** (emphasis in original)

Other politicians in the room remarked that, even for elected politicians rather than regulatory specialists, these Cybercrime Convention¹⁴ comments (therefore irrelevant for economic legislation fora) were at least five years' out of date for European rhetoric, and pre-*ACLU v. Reno* for US politicians. She made the bizarre comment that:

The debate gave rise to many passionate statements, sometimes largely inspired by fantasy. I have listened, always with interest, sometimes with amusement.

There is thus a pre-Millennial air of regulatory overbearance in European revision of Internet regulation. The European Parliament passed a Resolution expressing that it:

22. Considers that the revision of the Directive should ensure the development of new technologies and new services, in order to secure the growth of the European economy in accordance with the Lisbon strategy;

24. Fears that, on such an important subject, the debate and consultation will give preference to economic considerations and inter-governmental relations; is aware that the market alone will not resolve the problems and that the institutions must respond to the concerns of Europeans about the cultural content of television;

26. Is concerned about the pressure to reduce regulation in this sector and recalls that the Directive establishes minimum

12 http://www.advanced-television.com/2005/news_archive_2005/Sep19_Sept23.htm

13 Reding, V. (2005) Better regulation for Europe's media industry: the Commission's approach, Speech 05/532.

14 Convention on Cybercrime CETS No.185 entered into force on 1 July 2004, see

<http://conventions.coe.int/Treaty/Commun/QueVoulezVous.asp?NT=185&CM=1&DF=&CL=ENG>

standards which have not succeeded in preventing a deterioration in the quality of programmes.¹⁵

This regulatory approach is however, firmly rooted in co-regulation, in new forms of self-regulation underpinned by legislative foundation and the possibility of intervention by the regulator, as I explain in Section 5¹⁶. Co-regulation is therefore the approach proposed by the ACSD, in similar terms to the extremely detailed piece of ‘soft law’ that is the 2005 updated Recommendation on the Protection of Minors. This piece of ‘political signalling’ (a Recommendation has no binding force) is intended to address the online industry by reference to its self-regulatory mechanisms.

The law does play a role in the Internet. The Council of Europe Cybercrime Convention came into force early in 2005, and a Protocol to the Convention mainly intended to cover hate speech (European law but vehemently opposed by the US negotiators in the Convention) was signed in 2004 but has not yet gained the ratifications to bring it into force – and will not in the US. There is here a change of role, in that generally the Council of Europe – a pre-existing human rights body formed in 1949¹⁷ with the signature of the European Convention on Human Rights¹⁸ (ECHR) in 1950 before the European Economic Community was formed in 1955 – issues soft law instruments such as Recommendations, or Conventions that are generally supplanted by European Community law. However, and despite the huge body of soft law emanating from the Council of Europe, it is the hard law of the Convention which has led the way.

There is also the Electronic Commerce Directive (ECD) 2000/31/EC to consider. Its standing in Community law will be decided in the next twelve months, as it is due to be reviewed in late 2006, and no doubt the greatly expanded jurisdiction of the ACSD will affect greatly the application of the ECD. Currently, it remains the legal instrument most

¹⁵ P6_TA-PROV(2005)0322 European Parliament resolution on the application of Articles 4 and 5 of Directive 89/552/EEC ("Television without Frontiers"), as amended by Directive 97/36/EC, for the period 2001-2002 (2004/2236(INI)) at

<http://www.europarl.eu.int/omk/sipade3?PUBREF=-//EP//TEXT+TA+P6-TA-2005-0322+0+DOC+XML+V0//EN&L=EN&LEVEL=0&NAV=S&LSTDOC=Y&LSTDOC=N>

¹⁶ Examples include broadcast advertising, where a Charter – a Code of Conduct - exists for the European Association of Advertising, and computer games, where a ratings system – PEGI – has been in place for 2 years. The latter is fascinating in its use of comparative regulatory techniques, using rating by NICAM in Holland, the pan-sectoral self-regulatory system, and dispute resolution using UK adjudication, judged as the most time- and cost-efficient as well as procedurally sound.

¹⁷ See <http://conventions.coe.int/Treaty/Commun/ListeTraites.asp?CM=8&CL=ENG>

¹⁸ See Convention for the Protection of Human Rights and Fundamental Freedoms CETS No.: 005 entered into force 3 September 1953, at <http://conventions.coe.int/Treaty/Commun/QueVoulezVous.asp?NT=005&CM=8&DF=04/10/2005&CL=ENG>

suited to the online environment. Indeed, much of the ACSD is intended to harmonize broadcasting law online by reference to the legal definitions used in the ECD. The inter-service negotiation between the arbiters of the ECD and those of the ACSD will be an extremely important element in the internal European Commission discussion of the ACSD, prior to its introduction to the Council of Ministers (and then European Parliament) in December 2005.

The ECD leaves much detailed regulation to the market actors themselves, in much the same way as the ACSD in draft. It is therefore in assessing regulation of the Internet – and medium law as I have characterized it – that we look more closely at this novel form of ‘code’ which joins software code and legal code in the policing of the online world. We will see all the pitfalls as well as advantages of self-regulation that are highlighted by Pitofsky:

From a public policy perspective, self-regulation can offer several advantages over government regulation or legislation. It often is more prompt, flexible, and effective than government regulation. Self-regulation can bring the accumulated judgment and experience of an industry to bear on issues that are sometimes difficult for the government to define with bright line rules. Finally, government resources are limited and unlikely to grow in the future. Thus, many government agencies, like the FTC, have sought to leverage their limited resources by promoting and encouraging self-regulation.

Of course, self-regulation can be anticompetitive. Competitors may use the self-regulatory process to disadvantage new rivals or new forms of competition.¹⁹

I will suggest in conclusion that this is exactly the intention of the actors lobbying the European Commission over the new ACSD, even when the official pronouncements of the actors are in favour of self-regulation. The Commission’s relative lack of interest in ensuring continued low barriers in this domain in favour of well-resourced and socially responsive actors is an act of supreme political courage. Raising the drawbridge on the European broadband Internet to new entry is surely one of the most profound changes in European public policy towards the Information Society.

¹⁹ ‘Self Regulation And Antitrust’, Prepared Remarks of Robert Pitofsky Chairman, Federal Trade Commission, D. C. Bar Association Symposium, February 18, 1998, Washington, D.C. at http://www.ftc.gov/speeches/pitofsky/N_2_N_2

In this paper I do not attempt an analysis in detail of the definitions of content in European law, which I and others have covered elsewhere²⁰, but clearly this policy paper acknowledges that the ‘political signalling’ of a Directive which regulates Internet content does not signify any real compliance or enforcement motivation on the part of most Member States – most especially the UK. Nevertheless the political winds are blowing towards a gesture that will regulate Internet video without regard for its definition. As the competitive telecoms operators group states, there are multiple forms of movement possible on websites: re-transmission of traditional broadcasting; video-on-demand services; interactive computer gaming; animated GIFs; online animation (e.g. Flash); dynamic HTML to switch between images. They state:

There is a serious risk that, whatever boundaries the focus groups, or indeed the Commission, envisage, the reality will be considerable legal uncertainty and huge differences in the scope of regulation at national level. The Commission should provide a full cost benefit analysis of any regulation it proposes with a complete indication of the expected impact on website creation and the effects that can henceforth be used freely.²¹

The Commission in response has stated that live moving images with editorial control will make the editor a ‘broadcaster’ so long as commercial compensation is intended, for instance by an advertising feed to a blogger’s website or a webcam mounted on a company’s site. If that content is on-demand, the editorial controller is a provider of non-linear services but is still expected to conform to most of the broadcaster obligations. Further all providers must allow a right-to-reply, even those providing non-linear blog-type services. It is currently unclear whether peer-to-peer video transfer or video search such as Google Video will be obliged to conform. Non-EU nationality is no release from the ACSD requirements – if content can be viewed in the EU, it has been proposed that those providers are obliged to register in the EU²².

United States observers have by now realised that what they are observing is a broadband video Yahoo! v. France. That is correct and the tide is coming in.

20 See Woods, L. and Scheuer, A. (2004) Advertising Frequency and the Television Without Frontiers Directive, 29(3) European Law Review at 366-384.

21 ECTA Comments on the DG Information Society’s Issues Papers for the Liverpool Audiovisual Conference at <http://www.europa.eu.int/comm/avpolicy/revision-tvwf2005/docs/ip1-3-4-5-ecta.pdf>

22 See ‘Issues Papers’ at http://www.europa.eu.int/comm/avpolicy/revision-tvwf2005/consult_en.htm

2. The Internet and the Information Society

The Internet is a ‘networks of networks’ that connects users by sending packets of bits (digital data) from any point on that network of networks to any other point. Kahn and Cerf adopt the broad Federal Networking Council definition of the Internet²³:

“Of particular note is that it defines the Internet as a global information system, and included in the definition, is not only the underlying communications technology, but also higher-level protocols and end-user applications, the associated data structures and the means by which the information may be processed, manifested, or otherwise used”.

"The Federal Networking Council (FNC) agrees that the following language reflects our definition of the term "Internet".

"Internet" refers to the global information system that -- (i) is logically linked together by a globally unique address space based on the Internet Protocol (IP) or its subsequent extensions/follow-ons;

*(ii) is able to support communications using the Transmission Control Protocol/Internet Protocol (TCP/IP) suite or its subsequent extensions/follow-ons, and/or other IP-compatible protocols; and (iii) provides, uses or makes accessible, either publicly or privately, high level services layered on the communications and related infrastructure described herein."*²⁴

For the ‘official’ history of the Internet, see Leiner et al²⁵. For most domestic, consumer users, it is a combination of the World Wide Web, a graphical interface that permits hyperlink surfing (‘clicking’ from one webpage to another) and electronic mail²⁶. However, it is actually the most prevalent and fastest growing information sharing network ever devised. It grew from a small scientific network into a network accessed

23 Robert E. Kahn and Vinton G. Cerf (December, 1999) What Is The Internet (And What Makes It Work)
Internet Policy Institute, Washington D.C. at http://www.internetpolicy.org/briefing/12_99.html

24 October 24, 1995, Resolution of the U.S. Federal Networking Council in Kahn and Cerf, op cit.

25 Barry M. Leiner, Vinton G. Cerf, David D. Clark, Robert E. Kahn, Leonard Kleinrock, Daniel C. Lynch, Jon Postel, Larry G. Roberts, Stephen Wolff, "A Brief History of the Internet," www.isoc.org/internet/history/brief.html

26 It is defined by its inventors, Cerf et al. for the Internet Society with a brief introduction to the history of the Internet at:
<http://www.isoc.org/internet/history/brief.shtml>

by almost a billion people in less than 10 years (1994-2003), only exceeded in rate of diffusion by mobile telephones²⁷.

The dynamic development of Information and Communications Technologies (ICTs) has the potential to lower information, and hence transaction, costs. The key to the transformative effect of these productivity gains is that networks increase the productivity effect with each new addition to the network (this is known as Metcalfe's Law), thus creating an exponential 'bandwaggoning' growth in the adoption of ICTs.

Economic Process ²⁸	Component	Cost-Efficiency Effect
Moore's Law	Microprocessor	Doubles every 18 months e.g. from 2GHz to 4GHz
Metcalfe's Law	Network	Increases potential value of network by square of number of nodes – any new user is both receiver and sender of information e.g. e-mail
Disc Law ²⁹	Storage – hard disk	Doubles storage cost-efficiency each year
Data Transfer	Data Compression	Increases: boosted by improved codecs e.g. DivX, RealPlayer, Windows Media
Gilder's Law	Transmission Equipment	Potential bandwidth increases three times faster than microprocessor power – Moore's Law x3 – every 6 months
Fibre Law	Transmission Network	Capacity doubles every 9 months

All these laws of the network and device have 'network effects' on the others – high processing speed (Moore's Law) and storage (Disc Law) are needed in PCs to process and store the highly compressed (Compression) data files sent via switchers (Gilder's Law) and optical fibre (Fibre Law) over the Internet (Metcalfe's Law).

The late adoption of Internet services by Europeans, dating to the free ISP service provided first by Freeserve in the U.K. in November 1998³⁰,

27 Numbers of Internet users have consistently been under-estimated in official statistics, and there is no accurate estimate for the global total. See Minges, M. (2003) at http://www.itu.int/ITU-D/ict/publications/wtdr_03/material/WTDR03.pdf explaining the World Telecommunications Development Report. There are no definitive totals of Internet users worldwide, unsurprising given the numbers of email accounts, use of cybercafes, numbers online through a third party subscription (e.g. work, school, library). Global Internet Statistics estimates 940 million online by end-2004: <http://www.gleach.com/globstats/index.php3> As GSMA Association statistics cover subscribers, it is not an exact comparison – prepay phones and the fact that Internet users are not measured by subscribers to ISPs distorts the comparison. GSMA statistics claim 987.2million subscribers at end-January 2004, with 100 million or more CDMA subscribers to wireless systems in the Americas: <http://www.gsmworld.com/news/statistics/index.shtml> accessed 28 February 2004.

28 See Gilder, G. (1993) Metcalfe's Law and Legacy, Forbes ASAP 13 September at <http://www.seas.upenn.edu/~gaj1/metgg.html>

29 See further, Seeley Brown, John (2002) The Social Life of Innovation in the Digital Age, 15 July presentation at [http://www.ruschlikon.net/INTERNET/rschweb.nsf/\(ID\)/6C5A73B4FEBA95A9C1256C13002820A2/\\$FILE/JSB-speech-.pdf](http://www.ruschlikon.net/INTERNET/rschweb.nsf/(ID)/6C5A73B4FEBA95A9C1256C13002820A2/$FILE/JSB-speech-.pdf)

means that mass business and consumer adoption of the Internet is taking place. The potential productivity increases thus realized have economic and social ramifications, in that each extends the distant communication and execution of transactions. There is therefore a socio-economic impact which has been more rapid than any previous technological advance in its permeation of markets and societies. The broader effect of ICTs on globalization and the meta-narrative of structural transformation of the world economy and civil society does not “fit” within a static state-centric or neo-classical worldview. Globalization raises the question whether the international political economy driven by ICTs is better explained by dynamic or static models? It has become increasingly evident that the dynamic model is the better, though this evidently increases contingency. Henderson explains³¹:

Forecasters from many disciplines: economics, technology assessment, game theory, ecology, or chaos and complex adaptive system models, now agree that equilibrium models drawn from Cartesian-Newtonian worldviews of a deterministic, "clockwork" universe no longer fit.

Both the politics and the economics of communications are messy hybrids of state and market processes³². The regulation of this space must necessarily therefore be contingent, dynamic, flexible and trans-disciplinary. In the following section ,I outline some initial thoughts on how the Internet may be characterised as a regulatory subject, before in the substantive Section 4 analysing the current ‘state of the art’ in Internet content self-regulation. Sections 5 and 6 then go on to look at recent developments in broadband co-regulation in Europe, from which I draw conclusions in Chapter 7.

30 Marsden, C. (2000) MM-S-PL 1999-12 Final: Pluralism in the Multi-channel Market: Suggestions for Regulatory Scrutiny at section 5, at http://www.ijclp.org/4_2000/ijclp_webdoc_5_4_2000.html

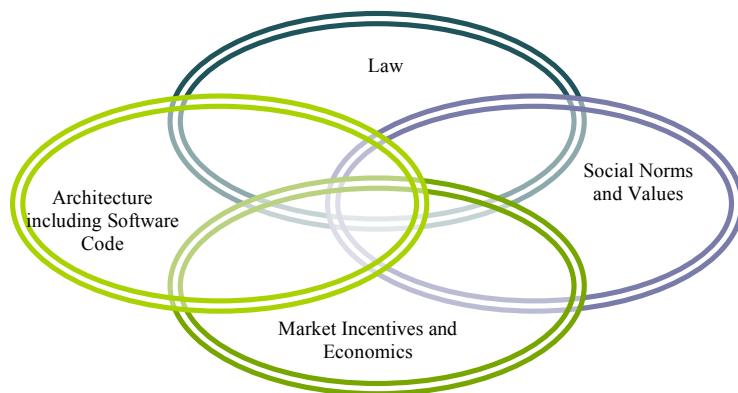
31 Henderson, Hazel (1998) Viewing "The New Economy" From Diverse Forecasting Perspectives, 30 Futures 4, PP. 267-275

32 An excellent thorough examination of these issues is Braithwaite, J. and Drahos, P. (2000) Global Business Regulation, Cambridge University Press

3. Code as Law and Technological Determinism: Lex Informatica³³

Cyberspace is built on software code and hardware engineering. The Internet has of course gone through many maturing phases since its anarcho-libertarian and vehemently public sphere (or ‘Commons’) origins up until the early 1990s. A new type of radical free market libertarianism grew up from then, consistent in its espousal of free speech but more concerned with corporate and commercial freedom: avoiding government economic and access, as opposed to social, regulation. Lessig views software as the ‘code of cyberspace’, not in a narrow engineering sense, but more widely, in the civil law sense as the constitution of cyberspace³⁴. He sees regulation developing from law, economics, normative values and architecture. The last such is – for Internet regulation - the software code of the Internet Protocol and other software.

Figure: The Intersecting Elements in Lessig’s Model of Regulation



Lessig’s formula, which calls for multidisciplinary examination of the Internet from social sciences and engineering, is from an analysis shared with many Internet experts from engineering (e.g. David Clark and Vint Cerf), law (e.g. Joel Reidenberg and Yochai Benkler), economics (e.g. Posner and Eli Noam) and sociology and politics (e.g.

³³ Several legal authors have discussed the technical engineering of the Internet and its effect on law and policy, notably Reidenberg, J. (1993) Rules of the Road for Global Electronic Highways: Merging the Trade and Technical Paradigms, 6 Harvard Journal of Law and Technology 287. Reidenberg is also notable for her international perspective, when much of the U.S. scholarship is insular.

³⁴ Lessig (1999) at Chapter 7: What Things Regulate

Dutton and Drake)³⁵. These commentators draw different conclusions, but all examine the Internet from a range of interdisciplinary perspectives.

Norms are here defined as a rule supported by a pattern of informal sanctions, following Ellickson³⁶, who observes three faults in individual actor analysis: neglects of socialization, of socially enforced norms, and of the human quest for status. Lessig aims to explicitly model the three Ellickson constraints, in addition to market constraints. He terms socialization “architecture”, viewing society in these terms. His version of regulation is broader than intentional policy action³⁷, including ‘architectural’ constraints, for instance geographical distance³⁸. Lessig aims not to diminish law in relation to the three exogenous constraints, but to examine its effects on those restraints. That law is a clumsy blunt instrument is itself relatively well founded, and an attempt to reassert the role of law by Lessig is a statement of the interdependence between the four constraints described. Legal effects can thus be both direct and indirect, in that it can regulate the regulatee (e.g. ISP), or regulate the other three constraints – while those constraints act upon each other and the ISP³⁹. He admits that the theoretical application shares the universalist dilemma: “The regulation of this school is totalizing. It is the effort to make culture serve power.”⁴⁰

Verhulst considers Lessig’s four forces of regulation in terms of their overall impact on ‘regulability’ of the Internet. It is particularly interesting to note that the prior design of the Internet regulates behaviours between users without needing any intervention by the conventional apparatuses of social control – the market, social forces, or political and legal activity. This engineering solution, which applies to much of the basic protocols of the Internet, raises challenges for policymakers’ presumption that legitimacy stems from the social and political. If engineering can either protect users in a space, or otherwise prevent normal social controls from applying, is the presumption of social control reversed, replaced by a technologically determined

³⁵ Insert cites

³⁶ Ellickson, R.C. (1998) Law and Economics Discovers Social Norms, XXVII Journal of Legal Studies Part II at 537-552, at 549, fn 58.

³⁷ See Ogus, A. I. (1994) Regulation: Legal Form and Economic Theory, at 1-3

³⁸ Bentham, J. (1995) *The Panopticon Writings*;; Foucault, M. (1979) *Discipline and Punishment: The Birth of the Prison*, Lessig *supra* n.192 at 665, 691.

³⁹ *Supra* n.192 at 667.

⁴⁰ *Ibid* at 691.

environment in which policy makers must establish harm before intervening? The potency of this argument has lost much of its force in the ‘democratising’ period of mass Internet adoption, for at least three reasons:

- harm is seen to have occurred as online behaviour prompted offline crime;
- technologically determinist legitimacy claims for such a pervasive medium of communication are increasingly difficult to maintain in the face of public scepticism in the role of experts in nanotechnology, biotechnology, environmental science, and now the Internet;
- governments have increasingly intervened in the Internet’s architecture to secure surveillance and other tools to invade users’ anonymity, puncturing the myth of the ‘unregulable’ Internet, particularly in surveillance post-9/11.

Table: Adapting Verhulst’s Characterization of Lessig ‘Realms of Social Order’

	Architecture – ‘Code’	Economics	Social Norms	Law
Enforcement Agent	Designers	Market	Peer Group	Police courts
Prior or Post Facto Constraint	Prior - design	During process	Prior/Post - reputational	Post - sanction
Constraint Type	Physical	Economic	Opprobrium	Sanction
Basis of Interaction	Structural design	Production and exchange	Social/group	Power
Basis of Participation	User	Buyer/Seller	Group member	Citizen/Subject
Primary Institutions	Protocols Engineering	Corporation Market	Family Community	State Public Information

3.1. Social and Economic Regulation: Commerce and Code

The incursion of the new means of distribution and transaction over the Internet via electronic commerce into the previously open public space of the Internet is the ‘commerce’ which, to those sympathetic to free expression but sceptical of monopolistic corporate control of the underlying architecture of the Internet, such as Lessig, were taking over the ‘code’ in the late 1990s. The architectures of cyberspace are

causing such re-examination of regulation and legitimacy. If the Internet is to create an information society, from the early hacker and libertarian communities, that will prove a global challenge. The alternative is to permit techno-economic factors, commerce and architecture as code developers, to construct an information economy with increasing dissonance from nation-state societies and polities.

There is thus a three-way conflict of values, between cyber-libertarians epitomised by John Perry Barlow, corporate free marketers, and those espousing social responsibility on the part of Internet social and commercial entrepreneurs, to maintain the Internet's dynamism, freedom and vitality, but control its wilder anarchic excesses. Often the debate is highlighted by sensational excesses, such as the webcasts of celebrity births, or the tragic criminal cases of crimes inspired by the Internet, including recent convictions of killers in Germany and England, whose fantasies for cannibalism and necrophilia were expressed on the Internet but then acted out with tragic off-line physical results⁴¹.

4. Whom to Regulate on the Internet?

Concerns regarding inappropriate and potentially harmful content on the Internet are as old as the public Internet itself, but began to surface in public policy debate in about 1994, when Vint Cerf⁴² classified three types of regulation: technical constraints, legal constraints and moral constraints. He stated that: 'In reality, all of these tools are commonly applied to channel behavioural choices.' He explains that it was university and research institute conditions of use, including Codes of Conduct, that regulated online behaviour from the Internet's invention. After the privatisation of the Internet in 1989-94, Codes of Conduct, inherited from the public service past, continued to be the default approach. Legacy inheritance thus conditioned private Internet use. Cerf emphasises the need for motivated self-regulation: 'guidelines for conduct have to be constructed and motivated in part on the basis of self-interest'.

41 See Wearden, Graham (2004) UK Police Chief: Shut Down Abhorrent Websites, at <http://news.zdnet.co.uk/internet/0,39020369,39147312,00.htm>

42 Cerf, Vint (14 Aug 94) Guidelines For Conduct On And Use Of Internet Draft v0.1 at <http://www.isoc.org/internet/conduct/cerf-Aug-draft.shtml> Though an incomplete draft it is fascinating as an example of very early public policy making on Internet content.

In a 1995 response to the threat of legislation against illegal and harmful material on the Internet,⁴³ the World Wide Web Consortium began to develop the Platform for Internet Content Selection (PICS)⁴⁴, the basis of filtering that was immediately incorporated into browser software and used to classify web pages by the major ISP-portals in the United States – and by default worldwide. The idea was simple: to engineer websites and user software to enable control of content at the device – the end of the network – rather than by ISP or another intermediary.

In European debate, the overall regulatory response was considered in a ‘convergence’ report commissioned by DG InfoSoc, published in September 1996⁴⁵. This report formed the backdrop for the debates⁴⁶ which led to the 1999 Commission proposals for a new framework for communications regulation⁴⁷, coming into force in August 2003. The July 1997 Declaration at the Bonn Ministerial Conference made plain

43 The Communications Decency Act, Title 47 U.S.C.A., 223(a) and (d), 1996 was introduced on 30 January 1995, passed by Congress in December 1995 and signed into law by President Clinton in January 1996, before being substantially but not wholly declared unconstitutional by the Supreme Court in *ACLU v. Reno* Supreme Court Case No. 96-511, 1997.

44 Paul Resnick and James Miller (1996) PICS: Internet Access Controls Without Censorship, Association for Computing Machinery vol. 39(10), pp. 87-93 at <http://www.w3.org/PICS/iaewcv2.htm>

45 KPMG (1996) Public Policy Issues Arising From Telecommunications and Audiovisual Convergence, A Report for the European Commission, at <http://www.ispo.cec.be/infosoc/promo/pubs/exesum.html>

46 Commission of the European Communities, 1997, Green Paper on the regulatory implications of convergence between the telecommunications, media and information technology sectors: towards and Information Society approach. The Convergence Green Paper. COM (1997) 623, Brussels, December, at: <http://europa.eu.int/ISPO/convergencegp/97623en.doc> (accessed 16.03.03).

47 See variously: Commission of the European Communities, 1999, Communication of the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions –Review of the telecommunications regulatory framework– a new framework for electronic communications infrastructures and associated services. The 1999 Communications Review. COM (1999) 539, Brussels, December, at: <http://europa.eu.int/ISPO/infosoc/telecompolicy/review99/review99en.pdf> (accessed 16.03.03).

Commission of the European Communities, 2002a, Eighth report on the implementation of the telecommunications regulatory package COM(2002) 695 final, Brussels, December, at: http://europa.eu.int/information_society/topics/telecoms/implementation/annual_report/8threport/finalreport/annex2.pdf

Commission of the European Communities, 2002b, Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, (“Framework Directive”), OJ L 108, at:

http://europa.eu.int/information_society/topics/telecoms/regulatory/maindocs/index_en.htm

Commission of the European Communities, 2002c, Directive 2002/20/EC of the European Parliament and of the Council on the authorisation of electronic communications networks and services, (“Authorisation Directive”), OJ L 108, at:

http://europa.eu.int/information_society/topics/telecoms/regulatory/maindocs/index_en.htm

Commission of the European Communities, 2002d, Directive 2002/19/EC of the European Parliament and of the Council on access to, and interconnection of, electronic communications networks and associated facilities (“Access Directive”), OJ L 108, at:

http://europa.eu.int/information_society/topics/telecoms/regulatory/maindocs/index_en.htm

Commission of the European Communities, 2002e, Directive 2002/22/EC of the European Parliament and of the Council on universal service and users’ rights relating to electronic communications networks and services (“Universal Service Directive”), OJ L 108,

at:http://europa.eu.int/information_society/topics/telecoms/regulatory/maindocs/index_en.htm

Commission of the European Communities, 2002f, Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (“Directive on privacy and electronic communications”), OJ L 108, at: http://europa.eu.int/information_society/topics/telecoms/regulatory/maindocs/index_en.htm

Commission of the European Communities, 2002g, Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (“Radio Spectrum Decision”); OJ L 108,

http://europa.eu.int/information_society/topics/telecoms/regulatory/maindocs/index_en.htm

the Council of Ministers' desire to see end-user filtering rather than intermediary liability⁴⁸:

Responsibility of the actors

41. Ministers underline the importance of clearly defining the relevant legal rules on responsibility for content of the various actors in the chain between creation and use. They recognise the need to make a clear distinction between the responsibility of those who produce and place content in circulation and that of intermediaries.
42. Ministers stress that the rules on responsibility for content should be based on a set of common principles so as to ensure a level playing field. Therefore, intermediaries like network operators and access providers should, in general, not be responsible for content. This principle should be applied in such a way that intermediaries like network operators and access providers are not subject to unreasonable, disproportionate or discriminatory rules. In any case, third-party content hosting services should not be expected to exercise prior control on content which they have no reason to believe is illegal. Due account should be taken of whether such intermediaries had reasonable grounds to know and reasonable possibility to control content.
43. Ministers consider that rules on responsibility should give effect to the principle of freedom of speech, respect public and private interests and not impose disproportionate burdens on actors.

Facilitating users' choice

53. Ministers urge the software industry to provide the necessary tools to enable users to select categories of content which they do or do not wish to receive so as to deal with information overload and undesired or harmful content.
54. Ministers therefore welcome the development of powerful services and software tools which enable information search and

⁴⁸ Bonn Ministerial Declaration 8 July 1997 at http://europa.eu.int/ISPO/bonn/Min_declaration/i_finalen.html

retrieval, and delivery directly to the user of specifically requested information.

55. Ministers stress the importance of the availability of filtering mechanisms and rating systems which allow users to decide on categories of content which they wish themselves, or minors for whom they are responsible, to access.

A further allusion to the international challenge of Internet regulation, even in the case of criminal law, is made:

65. Ministers recognise the specific challenges posed by the misuse of Global Information Networks. They consider, therefore, that international co-operation is essential in this area. Ministers will actively encourage the reinforcement of police and judicial co-operation, particularly in the area of technology training and mutual assistance, to prevent and combat illegal content and high technology crime. They support the establishment of international networks of hot-lines.

66. Ministers welcome the recent initiative of the OECD aiming at a comparative study of national legislations and an exchange of experiences on the issue of illegal content on the Internet. Supporting a multilateral as well as a European approach, they consider that the international dimension is crucial in the building of trust and confidence in the Global Information Networks.

Discussion during the renegotiation⁴⁹ of the ‘Television Without Frontiers’ Directive⁵⁰ led to a Recommendation in 1998 that continues to serve as the Commission’s policy towards content regulation. Further Commission legal instruments including the E-Commerce Directive of 2000 has maintained the co-regulatory approach to Internet regulation laid out in the 1998 Recommendation⁵¹.

49 See Whitehead, Phillip (1997) Draft Report on the Commission Green Paper on The Protection of Minors and Human Dignity in Audiovisual and Information Services (COM [96] 0483 - C4-0621/96) PE 221.804 of 24 April 1997, which formed the basis of European Parliament debate.

50 Directive 97/36/EC of the European Parliament and of the Council of 30 June 1997 amending Council Directive 89/552/EEC on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities OJ L 202, 30. 7. 1997

51 See further Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications OJ L 201, 31.7.2002; Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market OJ L 178, 17.7.2000; Decision No 276/1999/EC of the European Parliament and of the Council of 25 January 1999 adopting a Multiannual Community Action Plan on promoting safer use of the

4.1. Internet Use and Consumer Harm

Internet users are increasingly using the Internet for electronic commerce, information and entertainment, education, forming friendships and virtual communities. However, trust in the medium is affected negatively by software viruses, unsolicited electronic mail (spam), real and perceived inappropriate or harmful contact and content from a social and cultural context, threat of prosecution for copyright and even criminal activity online. Invasion of privacy – the alternate to freedom of expression – is a constant source of discomfort to Internet users. The European Commission expresses some of the pitfalls of Internet surfing compared with television or radio:

Whereas in traditional broadcasting (analog or digital) the individual broadcaster is easily identifiable, it is difficult and sometimes impossible to identify the source of content on the Internet. Access to harmful and illegal content is easy and can even occur without intent. In addition, the volume of information in the Internet is massive in comparison to broadcasting.⁵²

It has long been maintained that Internet service is not analogous to broadcasting, but print publishing. In this view, the lack of control of the network by any one company, relatively low entry and distribution costs to publishers and authors, and pluralism of supply means that there is competition for users. In this case, the only ‘control’ is on the distribution of the material to the final user, as in a newsagent’s kiosk, and the editorial choice of the end-user. In the tangible case of print, newsagents might refuse to sell pornography to minors, but in the case of the Internet, that choice is more difficult due to the technology. Below, we show the controls used for analogue free-to-air and digital pay-TV, the printed press and basic voice telecommunications.

Table: Vertical layer control of the media industries⁵³

Control Stage?	Analogue ‘free-to-air’ TV	Printed Press	Telecoms	Digital pay-TV
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Internet and new online technologies by combating illegal and harmful content primarily in the area of the protection of children and minors OJ L 33, 6.2.1999, p.1 as amended by Decision No 1151/2003/EC of the European Parliament and of the Council of 16 June 2003 OJ L 162, 1.7.2003.

52 See Second Evaluation Report From The Commission To The Council And The European Parliament on the application of Council Recommendation of 24 September 1998 concerning the protection of minors and human dignity COM(2003) 776 final of 12 December at http://europa.eu.int/comm/avpolicy/legis/reports/com2003_776final_en.pdf at p6.

53 Adapted from Cowie, C. and Marsden (1999) Convergence: Navigating Through Digital Pay-TV Bottlenecks 1 Info 1 at 55. Flynn offers SIXTEEN separate bottlenecks in the transmission chain: Flynn, B. (1999) Opening the Box: Issues in Digital Gatekeeping, in Montreux Symposium '99 of 10-15 June, Symposium Records pp698-706 at p699.

Content creation and production	Monopsony of terrestrial broadcasters – self-regulation supervised by state agency	No – low entry barriers	Peer to Peer except premium content self-regulated by IARN	Yes – premium sports rights and movies
Bundling content into ‘portals’ or channels	Command and control – licensed by state agency	No – low entry barriers	Not applicable	Yes – scale economies & long term exclusivity create dominance
Packaging multiple software into multimedia	Command and control – broadcasters allocated channel by agency	No – low entry barriers	Not applicable	Yes – control over interactive services by platform owner
Transmission and delivery⁵⁴	Command and control – transmission controlled by agency	No – multiple distributor s, post common carriage	Common carriage	Yes – access regulated but only light touch regime
Navigational control of user	No – TV remote control only	No – 1000s of media; subscription	Not applicable – open interface	Yes – 500 channels and Electronic Programme Guide
User Controls: Decoder or software browser	No – Tax on TV Households; content imposed by evening ‘watershed’	No	Not applicable – open interface	Yes – PIN numbers for premium and adult content

In addition to the regulatory models seen above, there are other purer self-regulatory models in broadcast advertising, film and video classification, and computer games rating, that rely on rating the content and using information regulation to inform the end-user that content may be unsuitable for minors. However, trust in the medium of the Internet appears to be weak, and knowledge of ‘trust marks’ – logos that indicate that a site has been certified by a self-regulatory body such as ICRA – is very poor in Europe. Only 10% of EU citizens in 2003 were aware of trustmarks, including only 8% of otherwise ‘cyber-savvy’ Swedes and 15% of risk-averse Germans⁵⁵. This lack of trust is also hampering Internet use for e-commerce transactions in Europe, with only 16% of EU citizens having made an online purchase,

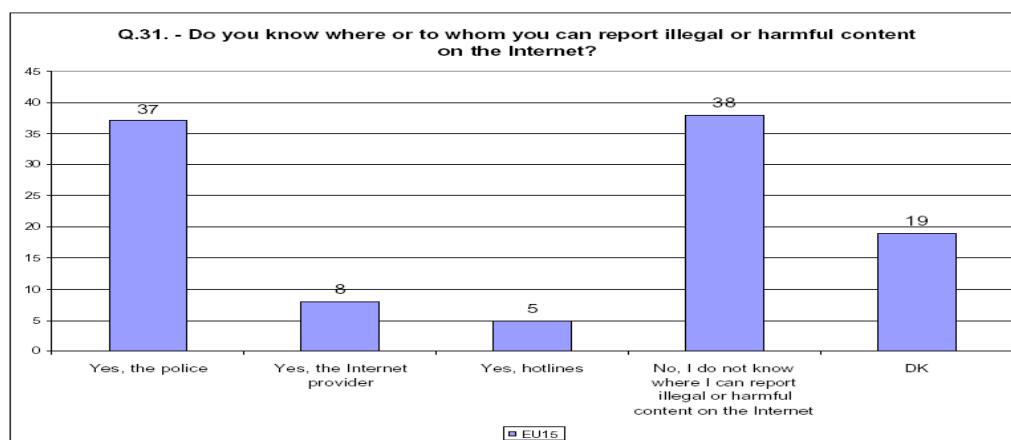
⁵⁴ Note the environmental restraints which apply to all distributional technologies – both terrestrial and satellite receiving apparatus is unsightly and may be banned in historically preserved areas, for instance parts of London and Amsterdam. Cable installation creates different and temporary environmental disturbance. Local environmental policy may ban one or more of these technologies, substituting a monopoly, which is generally in SMATV – multichannel provision to a single apartment building via cable. This situation pertains in many cities, for instance Stockholm.

⁵⁵ Source: Eurobarometer (2004).

compared to an estimated 40% of US consumers, who spent \$17.2 billion in Q4 2003⁵⁶. Denmark and Sweden had comparable figures to the US. In part, this may be a reflection of market and consumer information, as students (27%), managers (32%), and graduate (28%) levels of e-commerce purchasing were close to US levels. Whereas 37% of US consumers raise security as a concern when shopping online – which is a metric that may reveal overall trust on websurfing – the European picture is fragmented. The figures show that less Europeans trust security on the Internet than Americans (this is not necessarily a like-for-like sample so caution should be exercised), with Spanish most worried (91%) and Austrians least (66%). However, distrust relates more to fraud than information accuracy. Most non-purchasers do not have access or claim non-interest: trust is only the third-most cited reason.

EU citizens' ignorance about to whom to report potentially harmful content is particularly profound: 57% do not know whom to contact, and only 13% are aware of a self-regulatory solution of ISP or hotline (with Netherlands citizens highest at 26%).

Figure: Eurobarometer figures for 2003 from sample of 17,000 citizens



4.2. Internet Industry and the Role of ISPs

Noam has shown that consolidation in the Internet industry increased in the U.S. from about 1996, though most sectors remain competitive⁵⁷. He examines eight sub-sectors: Internet backbones; Internet service providers (ISPs); broadband providers; portals; browser software; search

⁵⁶ Source: Electric News reporting on Jupiter survey November 10 2003. See also www.theregister.co.uk

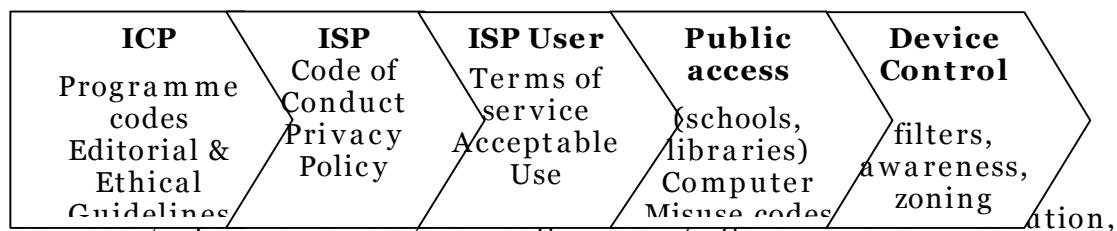
⁵⁷ Noam, Eli (2003) Oxford Internet Institute Issue Brief No.1 The Internet: Still Wide Open and Competitive? (August 2003). He defines the Internet sector as: 'the core industries that provide instrumentalities and infrastructure components underlying the Internet's basic functioning' (at 2).

engines; media-player software; and Internet Protocol (IP) telephony. He explains that:

common elements are high economies of scale (scalability) based on the high fixed costs and low marginal costs, and the way they are often complemented on the demand side by network effects (which economists call ‘positive externalities’).

Representing the value chain diagrammatically:

- ICP (Internet Content Producer) encompasses **portal** (though often integrated into ISP functions), **search engine**, and **IP telephony**;
- Network which would be located prior to ICP, encompasses **broadband providers and backbone providers**, such as UUNet;
- **ISPs** provide the actual connectivity to the end-user, and the two most common **browsers**, Netscape and Internet Explorer, are owned by two large ISPs, AOL and MSN respectively⁵⁸;
- The two largest **media player** companies are integrated into conglomerates with an ISP (Windows Media) and an ICP (Real Networks).



cybercafe or school, and the device itself, are not included in Noam's list; but the filtering software that end-users and these intermediaries rely on is integrated into such software as search engines, media players, portals and especially browser software. Filtering software is now compulsory in libraries in the US⁵⁹ and schools in France⁶⁰ – where the state can control public access to harmful content, it does so.

⁵⁸ The terms Internet Access Provider and ISP (Internet Service Provider) are often used interchangeably, though some people consider IAPs to be a subset of ISPs. Whereas IAPs offer only Internet access, ISPs may provide additional services, such as leased lines and Web development. In contrast to both IAPs and ISPs, Internet Content Providers provide their own proprietary content, often in addition to Internet access. See Yen. A. (2000) Internet Service Provider Liability for Subscriber Copyright Infringement, Enterprise Liability and the First Amendment 88 Georgetown L.J. At

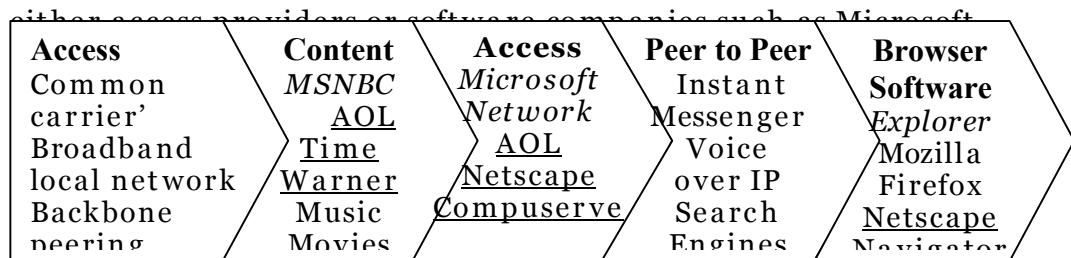
http://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID236478_code000726304.pdf?abstractid=236478

⁵⁹ Child's Internet Protection Act 2003, building on the Communications Decency Act 1996.

⁶⁰ Reuters (March 18 2004) Central Filter Against Web Hate for French Schools at <http://www.reuters.com/newsArticle.jhtml?storyID=4599516>

4.2.2. Vertical Integration of ISPs with IAPs and ICPs

Internet Service Providers have integrated with content services and access suppliers. Most large ISPs provide a default home page ‘portal’, with news, features, search facility. The largest ISPs are subsidiaries of



Often, ISPs are joint venture partners with content or access providers, such as BT Yahoo! (UK) or Yahoo! Softbank (Japan), or AOL Deutschland (formerly a Bertelsmann joint venture). Both Microsoft and AOL are also content providers, own search engines, have Instant Messenger services. All European access providers and US cable companies provide proprietary Internet services for their customers, making AOL and Microsoft unusual ISPs in that their content-software focus has prevented their leveraging their ISP dominance into access. In broadband markets, those ISPs who also control access include T-Online, Wanadoo in France, Telefonica, BT Yahoo! Though other ISPs can access the local loop at wholesale prices, competitors fear that the regulated access price leaves them disadvantaged.

Table: Vertical layer control potential of the Press, Telecom and Internet industries

Control Stage?	Printed Press	Telecoms	Internet
Content creation and production	No – low entry barriers	Peer to Peer except premium content	No – 100 billion web pages. Note importance of peer-to-peer sharing of music and video
Bundling content into ‘portals’ or channels	No – low entry barriers	Not applicable	Yes – economies of scale and long-term exclusivity result in dominance
Packaging multiple software into multimedia	No – low entry barriers	Not applicable	Control over interactive services e.g. media players, voice over Internet Protocol
Transmission and delivery⁶¹	No – multiple distributors, Post common carriage	Common carriage	Access regulated at wholesale level

61 Note the environmental restraints which apply to all distributional technologies – both terrestrial and satellite receiving apparatus is unsightly and may be banned in historically preserved areas, for instance parts of London and Amsterdam. Cable installation creates different and temporary environmental disturbance. Local environmental policy may ban one or more of these technologies, substituting a monopoly, which is generally in SMATV – multichannel provision to a single apartment building via cable. This situation pertains in many cities, for instance Stockholm.

Navigational control of user	No – newsagent supplies thousands of media; subscription available	Not applicable – open interface	Yes – virus scanning, spyware denial and search engines
Controls on Viewing: Decoder box or software browser	No	Not applicable – open interface	Possible – PIN numbers for premium and adult content; filtering; supervision by NetNanny, SurfPatrol

4.3. Liability for Harmful and Potentially Illegal Content on the Internet

Internet operation requires the passive reproduction and distribution of material. ISPs automatically reproduce and distribute material to subscriber requests. Content creators upload to web pages by instructing the ISP's computer to store a copy of the uploaded material. The ISP's computer also makes copies of the material every time a computer asks to view the subscriber's web page and sends those copies through the Internet... that file does not travel directly to the user. Instead, it generally goes through other computers hooked up to the Internet. Each of these computers makes at least a partial copy of the relevant file. As Yen has described, "a practically unlimited scope of liability soon follows." President Clinton's 1995 Copyright Taskforce supported such liability⁶². In order that these nodes on the network between content provider and end-user are not all held strictly liable⁶³ for the billions of web files they continually copy in the act of transmission, legislators in the US and European Union have held that only a limited liability holds for these intermediaries, typically ISPs⁶⁴. In the US, liability regimes have differed according to speech-based and copyright-based liabilities. The Communications Decency Act of 1996 provides that "No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider"⁶⁵. This language might shield ISPs from liability for subscriber copyright infringement as well.

62 Working Group On Intellectual Property Rights, Information Infrastructure Task Force, Intellectual Property And The National Information Infrastructure 1-6, 114-24 (1995).

63 Some legal commentators forcefully argued that strict liability should apply. See Trotter Hardy, The Proper Legal Regime for "Cyberspace", 55 U. PITT. L. REV. 993, 1042-46 (1994) (advocating strict ISP liability); Kelly Tickle, Comment, The Vicarious Liability of Electronic Bulletin Board Operators for the Copyright Infringement Occurring on Their Bulletin Boards, 80 IOWA L. REV. 391, 416 (1995) (favoring limited ISP liability).

64 See, for example, Niva Elkin-Koren, Copyright Law and Social Dialogue on the Information Superhighway: The Case Against Copyright Liability of Bulletin Board Operators, 13 CARDOZO ARTS & ENT. L.J. 345, 399-410 (1995), who argues opposing liability.

65 Section 30, 47 U.S.C. § 230(c)(1) (Supp. II 1996).

However, Section 230(e)(2) specifically states, “Nothing in this section shall be construed to limit or expand any law pertaining to intellectual property.” As Yen states:

the general philosophy motivating these decisions—namely, that the liability against ISPs for subscriber libel would result in undesirable censorship on the Internet—remains vitally important in assessing the desirability of ISP liability.

Holznagel has indicated that US courts have applied these ‘safe harbour’ provisions to widely protect ISPs, even where [a] it was aware of unlawful hosted content; [b] if it had been notified of this by a third party; [c] if it had paid for the data⁶⁶. Frydman and Rorive see courts as “in line with the legislative intent...applied the immunity provision in an extensive manner”⁶⁷.

In Europe, ‘safe harbour’ protection of ISPs from liability was only implemented on 17 January 2002, when the E-Commerce Directive came into force. Article 12 protects the ISP where it provides ‘mere conduit’ with no knowledge of, nor editorial control over, content or receiver (“does not initiate [or] select the receiver”). Benoit and Frydman establish that it was based on the 1997 German Teleservices Act, though with “slightly more burden on the ISPs in comparison with the former German statute”⁶⁸. Where ISPs provide hosting services, under Article 14 they are protected from liability, in two ways:

[a] the provider does not have actual knowledge of illegal activity or information and, as regards claims for damages, is not aware of facts or circumstances from which the illegal activity is apparent; or

[b] the provider, upon obtaining such knowledge or awareness, acts expeditiously to remove or to disrupt access of the information.

Like the proverbial three blind monkeys, ISPs, IAPs, and web hosting services should ‘hear no evil, see no evil, speak no evil’. As mere ciphers for content, they are protected; should they engage in any filtering of content they become liable. Thus masterly inactivity except when

⁶⁶ Holznagel, B. (2000) Responsibility for Harmful and Illegal Content as Well as Free Speech on the Internet in the United States of America and Germany, in C.Engel and H. Keller (eds) *Governance of Global Networks in Light of Differing Local Values*, Nomos, Baden Baden.

⁶⁷ Frydman, B. and Rorive, I. (2002) Regulating Internet Content Through Intermediaries in Europe and the USA, *Zeitschrift fur Rechtssoziologie* Bd.23/H1, July 2002, Lucius et Lucius.

⁶⁸ Ibid at 54.

prompted by law enforcement is the only – and economically most advantageous - policy open to them. Frydman and Rorive state “undoubtedly the Directive seeks to stimulate coregulation”. It does this by formally permitting national courts to over-ride the safe harbour in the case of actual or suspected breach, of national law, including copyright law.

Whereas in the US, the absolute speech protection of the First Amendment and procedural concerns mean that Notice and Take Down is counter-balanced by ‘put back’ procedures, in Europe no such protection of free speech exists, where speech freedom is qualified by state rights. In both jurisdictions, Notice and Take Down regimes cause Frydman and Rorive state that “this may lead to politically correct or even economically correct unofficial standards that may constitute an informal but quite efficient mechanism for content-based private censorship”⁶⁹. It is clear that the economic incentive for ISPs is simply to remove any content notified, otherwise do nothing to monitor content, and let end-users, the police and courts, and ultimately the ethics of the content providers decide what is stored and sent over their access networks. Frydman and Rorive state that:

Business operators should never be entrusted with ... guidelines defining the limits of the right to free speech and offering procedural guarantees against censorship... which belong to the very core of the human rights of a democratic people⁷⁰.

That is nevertheless the situation which ISP Codes of Conduct seek to self-regulate.

Could a stronger case be made to make ISPs responsible for a class of their content, where it serves their commercial benefit? Vicarious liability tests the ability to BENEFIT and CONTROL, [i] the right and ability to supervise and [ii] a financial direct interest. This tends to make ISPs choose not to monitor even for law enforcement. The financial direct benefit is interesting in view of the ‘killer application’ for broadband: does this include Peer-to-Peer if the access charges received by the ISP is based on traffic i.e. adverts on portal or bandwidth usage? ISPs arguably benefit from the existence of copyright infringement on the Internet. Thousands of users desire

⁶⁹ Ibid at 56.

⁷⁰ Ibid at 59.

Internet service precisely because it offers free access to copyrighted materials. As Yen argues⁷¹, an ISP (like the *Polygram* trade show operator⁷²) could make copyright compliance part of its system rules and then monitor for violations. Thus, do ISPs have the same degree of financial interest in infringement on the Internet as trade show? How about mobile networks and spam removal – do ISPs there exercise the right and ability to monitor content? Can they control information on their network? Vicarious liability could therefore follow.

ISPs, evolving into much more complex content, service and access providers, are the key link in control of the end-user's Internet experience, and the focus of this study. The final section of the section considers their current development.

4.4. Growth of the Internet in Europe 1999-2005

In Europe, the explosive growth of Internet access to households followed what became known as the Freeserve model – named after then-Dixons plc, now France Telecom subsidiary Freeserve.com. Offering 'free' ISP service by revenue sharing per-minute charging with the incumbent telco, a wave of ISPs quickly achieved a million subscribers or more: Freeserve launched in September 1998 and achieved 1million in February 1999. The economic model was transitory because it depended on per-minute charging, and of the early 1999 successes, Freeserve was purchased by France Telecom and Worldonline/LibertySurf were bought by Tiscali, all in 2000-1. The model had lasted less than 18 months. This extremely weak and fragmented European ISP market was dominated by US multinationals that grew by acquisition in the late 1990s: AOL (buying Compuserve 1998 and Netscape 1999), UUNet and Microsoft. The latter dominated through its parent company's size and assets, but the first two through acquisitions (finally merging with Time Warner and MCI WorldCom respectively in 1998-9 at the peak of the bubble).

By 2000, two critical decisions were made that regularised ISP markets in Europe. In the UK, flat rate Internet access was mandated by Ofcom, the telecoms regulator, against the opposition of British Telecom, and in response to complaints by WorldCom⁷³. In the rest of Europe, Local Loop

⁷¹ Ibid at 19.

⁷² Polygram Int'l Publ'g v. Nevada/TIG, Inc., 855 F. Supp. 1314, 1317-18 (D. Mass. 1994).

⁷³ See Ofcom's Direction of May 2000 at <http://www.ofcom.org.uk/static/archive/ofcom/publications/internet/fria0400.htm>

Unbundling⁷⁴ permitted ISPs to offer access over ISDN lines (digital lines at 15-130% faster speeds than analogue phone lines) which could be upgraded to broadband Digital Subscriber Lines⁷⁵.

Table: Development of European Consumer Internet Market

Date	Development	Companies	Result	Legacy
1995-date Phase 1	US investment	Compuserve AOL UUNet MSN	>1million European HH subscribers	Early adopter market and tech-savvy ISPs
Winter 1998-9 Phase 2	'Freeserve' model	Freeserve Tiscali LibertySurf WorldOnline	1million to 10million European HH subscribers	Mass market consumer ISPs
2000-2 Phase 3	FRIACO	Freeserve AOL Yahoo	Increased time online, reduced charges – down to under 10 euros unlimited per month	Mature market and e-commerce
2000-date Phase 4	LLU and broadband – VOIP	Tiscali FastWeb Tele2	Broadband Internet, potential for rich content – served by video, viruses and P2P copyright theft in absence of legal services	Voice call revenue decline and capital-intensive BSPs: regulation?

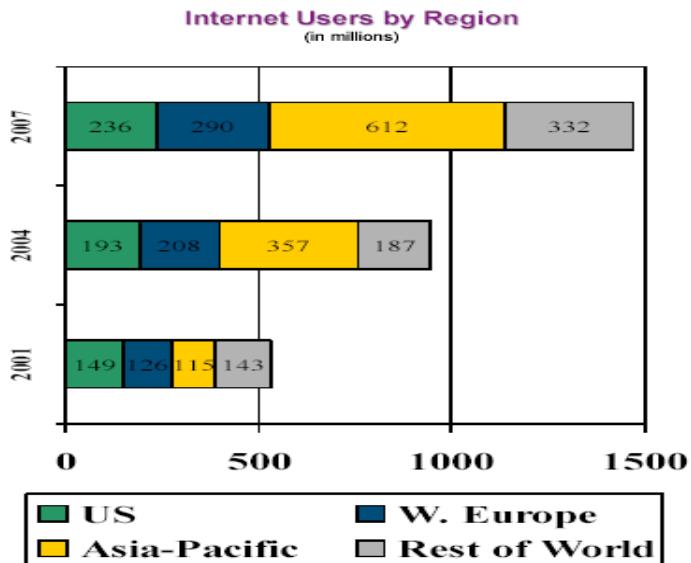
There is now a more mature ISP market in Europe, dominated by incumbent ISPs. Strong entrants include AOL, Wanadoo (outside France where it is incumbent), and Tiscali. However, given that almost all the major development innovations, both scientific and commercial, on the Internet have been North American, unsurprisingly the initial governance model has mirrored that development.

The Internet since that early beginning has become a global phenomenon. There are now more Europeans than North Americans on the Internet since 2002, and that difference will grow by 2007, though more Asians than Europe-U.S. combined will be connected.

⁷⁴ The lines are bought wholesale from the incumbent and resold to ISP customers. The incumbent's ISP competes for end-customers, theoretically from the same wholesale price. Independent ISPs continue to allege that incumbent wholesale prices to their retail ISP allow illegal subsidy to be recovered. See www.ectaportal.com for latest developments in competitor's regulatory strategy.

⁷⁵ In the UK, British Telecom was permitted by Ofcom to charge and provision at sufficiently unattractive terms that LLU produced almost no commercial interest until 2003, a total of only 7600 lines at September 2003, see:

http://www.ofcom.org.uk/static/archive/ofcom/publications/internet/internet_brief/broad1003.pdf at p22. OfCom's priority on replacing the abolished Ofcom on 28 December 2003 was to adjust the terms of LLU: see <http://www.ofcom.org.uk/consultations/current/wbam/wbam.pdf>



Source: Computer Industry Almanac

5. Regulated Self-Regulation and European Concepts of Self-Regulation

The European Commission recognizes that co-regulation can be used as a means to implement objectives set by Directives and has outlined in the White Paper on European Governance⁷⁹ a set of conditions under which it will consider the use of co-regulation. Co-regulation is a pragmatic response to the common perception that regulatory frameworks must quickly adapt and continually be optimized to maintain relevance and effectiveness to rapidly evolving markets.

European debate⁸⁰ led to a Recommendation on co-regulation in 1998 that continues to serve as the Commission's policy towards Internet content regulation⁸³. Further Commission legal instruments including the E-Commerce Directive of 2000 have maintained the co-regulatory approach to new media regulation laid out in the 1998 Recommendation⁸⁴. The European Commission states: "Whereas in traditional broadcasting (analog or digital) the individual broadcaster is easily identifiable, it is difficult and sometimes impossible to identify the source of content on the Internet. Access to harmful and illegal

⁷⁹ Com (2001) 428 Final, European Governance – A White Paper, at p21, see http://europa.eu.int/eurlex/en/com/cnc/2001/com2001_0428en01.pdf

⁸⁰ See: European Commission (1996) Green Paper 16 October 1996..

⁸³ Communication COM(97) 487, 16.10.97; Council Recommendation 98/560/EC OJ L 270, 7.10.1998.

⁸⁴ See further Directive 2002/58/EC OJ L 201, 31.7.2002; Directive 2000/31/EC OJ L 178, 17.7.2000.

content is easy and can even occur without intent. In addition, the volume of information in the Internet is massive in comparison to broadcasting.”⁸⁵ The European Commission has readdressed co-regulation of the media in 2004:

The Recommendation on the protection of minors has a **cross-media approach** and emphasizes the **cross-border exchange of best practices** and the development of **coregulatory and self-regulatory mechanisms**.

(emphasis in original).

It explains how best to achieve the regulatory goals:

A co-regulatory approach may be more flexible, adaptable and effective than straight forward regulation and legislation... Co-regulation implies however, from the Commission’s point of view, an appropriate level of involvement by the public authorities.

End-user tools such as filtering or the famous ‘V-chip’, imposing rules on children’s use of computer games and the World Wide Web, and reporting inappropriate or illegal content to hotlines established by Internet companies have had only limited success.

There are markets for regional and/or national television, radio, newspapers, telecoms, satellite and cable pay-TV, all recognized in case law⁸⁶. The use of data-compression and increases in cost-effective bandwidth such as Digital Subscriber Lines (DSL) allows more and better point-to-point delivery⁸⁷. In this environment flexibility of regulatory frameworks will be of paramount importance to ensure that regulators meet the current and future needs of the market place and maintain the confidence of consumers through the protection of public interests. The dynamic development of the sector and its regulatory landscape, lacks clarity as to the nature of the co-regulatory/self-regulatory approaches taken, the areas where they are applied, consistency with public interest objectives, impact on the single market and ultimately, effectiveness in achieving regulatory objectives.

85 See Second Evaluation Report COM (2003) 776 final of 12 December at http://europa.eu.int/comm/avpolicy/legis/reports/com2003_776final_en.pdf at p6.

86 See Harcourt, A. (1998) Regulation of European Media Markets: Approaches of the European Court of Justice and the Commission’s Merger Task Force, 9 Utilities Law Review 6 at 276-291; Larouche, P. (1998) EC Competition law and the convergence of the telecommunications and broadcasting sectors 22 Telecommunications Policy 3

87 See Marsden, C. Video over IP: the challenges of standardization – towards the next generation Internet [2003] Chapter 8 in Noam, et al (eds) Internet Television.

5.1. Theoretical and methodical framework –What is co-regulation?

Co-regulation expresses a form of regulation which is neither state command-and-control regulation in its bureaucratic central or IRA (Independent Regulatory Agency) specialized functions⁸⁸, but is also not ‘pure’ self-regulation as observed in industry-led standard setting. The state, and stakeholder groups including consumers, are stated to explicitly form part of the institutional setting for regulation. Co-regulation constitutes multiple stakeholders, and this inclusiveness results in greater legitimacy claims. However, direct government involvement including sanctioning powers may result in the gains of reflexive regulation – speed of response, dynamism, international cooperation between ISPs and others – being lost. It is clearly a finely balanced concept, a middle way between state regulation and ‘pure’ industry self-regulation. Ayres and Braithwaite state⁹²:

Practical people who are concerned with outcomes seek to understand the intricacies of interplays between state regulation and private orderings... administrative and regulatory practice is in a state of flux in which responsive regulatory innovations are politically feasible.

Responsive regulation reflects a more complex dynamic interaction of state and market, a break with more stable previous arrangements. Teubner states: “European conceptions of law as “moving away from the idea of direct societal guidance through a politically instrumentalised law ... Instead, reflexive law tends to rely on procedural norms that regulate processes, organisation, and the distribution of rights and competencies”⁹⁴. This applies to other globalising phenomena than digital TV and the Internet, for instance financial and environmental law⁹⁵, where negative externalities are

88 Baldwin, R. et al (1998) Socio-Legal Reader on Regulation, at 3 explain that “At its simplest, regulation refers to the promulgation of an authoritative set of rules, accompanied by some mechanism, typically a public agency, for monitoring and promoting compliance with these rules.”

92 Ayres, Ian and John Braithwaite (1992) Responsive Regulation: Transcending the Deregulation Debate at 4

94 G. Teubner, ‘The Transformation of Law in the Welfare State’ in G. Teubner (ed.), Dilemmas of Law in the Welfare State (Berlin: W. de Gruyter, 1986), at 8.

95 See for instance Gaines, Sanford E. and Cliona Kimber (2001) Redirecting Self-Regulation Env. Law 13(157)

highlighted for public concern. In advertising co-regulation, protection of minors and consideration of broadcast regulation's extension to new media including the Internet and 3G/UMTS mobile phones, co-regulation is a vitally important concept to define, refine and examine against a rigorous methodological template.

Price and Verhulst assert the limits of both government and private action in this sphere, and assert the interdependence of both – there is little purity in self-regulation without at least a lurking government threat to intervene where market actors prove unable to agree. They draw on empirical studies of advertising and newspaper regulation, demonstrating that in areas of speech, the Internet included, government preference in liberal democracies is for co-regulation⁹⁷.

The term 'co-regulation' encompasses a range of different regulatory phenomena, which have in common the fact that the regulatory regime is made up of a complex interaction of general legislation and a self-regulatory body. The varying interests of actors result in different incentives to cooperate or attempt unilateral actions at the various points of the value chain. Without regulation responsive to both the single European market and the need for constitutional protection of freedom of expression and protection of minors at national levels, co- and self-regulatory measures cannot be sufficiently responsive to economic and cultural environments to be self-sustaining.

5.2. What can be learnt from existing studies in analysing co-regulation?

There have been many studies of self- and co-regulation in the media sector since Boddewyn's pioneering 1988 study of advertising⁹⁹, notably those of Oxford University PCMLP¹⁰⁰, (www.selfregulation.info), of PCMLP faculty and associates independently¹⁰¹ and with collaborators¹⁰²,

97 Price, Monroe and Verhulst, Stefaan (2000) 'In search of the self: charting the course of self-regulation on the Internet in a global environment', Chapter 3 in Marsden, C. (ed) Regulating the Global Information Society; Price, M. (1995) Television, The Public Sphere and National Identity Oxford: Oxford University Press

99 Boddewyn J. J. (1988) Advertising Self-regulation and Outside Participation. See also Bollinger, Lee C. (1976) "Freedom of the Press and Public Access: Toward a Theory of Partial Regulation", 75 Michigan Law Review 1

101 Price, M., Verhulst, S. (2004) Self-Regulation and the Internet; Larouche, Pierre (2001) 'Communications convergence and public service broadcasting', at <http://infolab.kub.nl/uvtweb/bin.php3?id=00011353&mime=application/pdf&file=/tilec/publications/larouche2.pdf>

102 Marsden, C. (2001) ed. Regulating the Global Information Society; Marsden, C. and Verhulst, S. (eds) Convergence in European Digital TV Regulation (1999). See also Humphreys, Peter J. (1996) Mass media and media policy in Western Europe; Harcourt, A. (2004) European Institutions and Regulation of the Media Industry.

of Braithwaite and collaborators in Australia and the United States¹⁰³, while shorter country- or sector-specific contributions have been published in the past five years in IRIS¹⁰⁵.

Schulz and Held have investigated co-regulation in the German context, specifically in the case of protection of minors¹⁰⁶. In their view, self-regulation in Anglo-American debate is concerned with “reconciliation of private interests” whereas their formulation – regulated self-regulation¹⁰⁷ – is indirect state regulation based on constitutional principles. It is the combination of “intentional self-regulation” – the actions of market actors, whether in social or economic settings – with the state sanction in reserve which results in self-regulation which is ‘regulated’ by the possibility of state intervention. At the Birmingham ‘Assizes Audiovisuels’ in 1998, the formulation used was: “Self-regulation that fits in with a legal framework or has a basis laid down in law”.

The term ‘co-regulation’ also gives a sense of the joint responsibilities of market actors and state, in the activity under investigation. It has been used by the UK’s telecom regulator to suggest a state role in setting objectives which market actors must then organize to achieve – with the threat of statutory powers invoked in the absence of market self-regulation¹⁰⁸. However, co-regulation is used in such a wide variety of circumstances that its specific meaning must be seen in the national, sectoral and temporal context in which it is used.

Schulz and Held suggest that ‘regulated self-regulation’ can be any of these categories: co-regulation, intentional self-regulation, or a third category - ‘audited self-regulation’. Independent audit of self-regulation is a U.S. concept of using an independent standard or professional body to audit a self-regulatory organization or individual company according to pre-set standards. In the case of ISPs, audited self-regulation might involve at least a standard being set that an audit

103 Braithwaite and Drahos, P. (2000) Global Business Regulation, both contextualizing media co-regulation within the broader regulatory debate.

105 See special issues of IRIS in 2002-3, notably IRIS Special (2003) Co-Regulation of the Media in Europe, Strasbourg, Council of Europe at http://www.obs.coe.int/oea_publ/iris_special/2003.html.en Schneider, Andrea “Child Protection on German Television – The Voluntary Television Review Body (FSF)”, IRIS 1995-3:7/13.

106 Schulz and Held (2001) Regulated Self-Regulation as a Form of Modern Government.

107 See Hoffman Reim, Wolfgang (1996) Regulating Media.

108 See Richard Thomas’s report to the National Consumer Council (UK) “Better business practice: how to make selfregulation work for consumers and business” at http://www.ncc.org.uk/pubs/pdf/self-regulation_gpg.pdf and OFCOM (2004) Consultation Document ‘Criteria for Transferring Functions to co-Regulatory Bodies’ <http://www.ofcom.org.uk/consultations/past/co-reg/?a=87101>

firm could certify organizations against (or at least that organizations could self-certify with reporting requirements), but could involve the setting of an international standard, as increasingly occurs in accountancy, for instance. At a minimum, dedicated budgetary and personnel resources, with activity reports, would be required to demonstrate regulatory commitment. The German concept of regulated self-regulation gives the state a role when basic constitutional rights need to be upheld: “The extent of possible delegation [to self-regulation] depends ... on the relevance ... in terms of basic rights”. Co-regulation in the European context must also be proportional to the aims of the legal instrument, as well as conforming to the competition law of the European Union. Enforcement is the ultimate responsibility ('the safety net') of the state. In Schulz and Held's case study, Australia, practical self-regulation is illustrated in the application of the 1997 Telecoms Act and 1992 Broadcasting Services Act, where four types of regulatory scheme can be identified:

Regulatory Type	State Role
1. Intentional or 'Pure' Self-regulation	No state IRA involvement
2. Industry Codes	Registered with the state IRA
3. Industry standards	Mandatory codes set in the absence of pan-industry code agreement
4. Command-and-control	Set by state IRA pre-empting attempts at self-regulatory action

However, there are clearly nuanced approaches that industry can take, in choosing the menu of 'regulated self-regulation' to adopt. Multinational actors can choose to engage in game-playing with the regulator and other actors in order to secure their preferred environment for regulation, and it is here that national 'regulated self-regulation' according to national constitutional standards are arbitrated by multinational actors seeking a more co-ordinated international regulatory framework. That is not to suggest the extreme and celebrated case in which Yahoo! attempted to substitute U.S. First Amendment speech standards over French government controls

on illegal Nazi memorabilia auctions (clearly a Type 4 regulatory discussion)¹⁰⁹, but to suggest that Types 1-3 above afford substantial latitude for rational multinational actors to seek to arbitrage regulators in favour of their ‘home state’ standards for speech and commercial freedom (which in the U.S. coalesce more frequently than in Europe, which does not protect commercial speech to the same extent).

However, there are clearly nuanced approaches that industry can take, in choosing the menu of ‘regulated self-regulation’ to adopt.¹¹⁰ The Oxford PCMLP project researched in the fifteen pre-2004 Member States in the areas of: broadcast co- and self-regulation; mobile telephony and child protection; Internet self-regulation; computer games and video cassette ratings schema; print news media self-regulation. Based on the www.selfregulation.info report and other prior work, they offer some tentative initial hypotheses¹¹¹. Three options suggest themselves:

1. Adopting best practice in self-regulatory approaches taken from the US and potentially UK models;
2. Developing and extending a sophisticated version of co-regulation such as that found in Australia or Germany, with a pan-sectoral focus.
3. Extending either practice to a pan-European role, as in the Internet sector, where hotlines (INHOPE), ISP Codes of Conduct (EuroISPA) or video games ratings (PEGI) have adopted a successful model. However, the role of free speech, cultural diversity and the enforceability of such regimes remain problematic.

These three options are in addition to nation-specific and sector-specific status quo options, which one might term Option 0.

In considering the range of self-regulatory solutions across Europe, it is necessary to reflect on exactly why there is a range of responses, and whether it is possible to conceive of a European model of media co-regulation:

- What is the most important national factor with regard to co-regulation, and what are the barriers to international cooperation?

¹⁰⁹ See Reidenberg, J. (2004) States and Law Enforcement, 1 Uni.Ottawa L.& Tech.J. summarising Reidenberg, J. (2002) Yahoo and democracy on the Internet, 42 Jurimetrics 261.

¹¹⁰ See Reidenberg, J. (2004) States and Law Enforcement, 1 Uni.Ottawa L.& Tech.J. summarising Reidenberg, J. (2002) Yahoo and democracy on the Internet, 42 Jurimetrics 261.

¹¹¹ PCMLP refers to its conclusions, final chapter and executive summary for the IAPCODE project, which contain detailed options for co-regulation in the media co-regulatory area, including specifications for regulatory audit.

- Is it legal and constitutional and the implications for co-regulation or rather the differences in cultural content standards?
- Is it rather a more complex set of factors relating to institutional political economy?

To place this survey in the context of country-level differences and EU-wide changes that impact on member states in contrasting ways, the level of analysis must be useful for:

- understanding co-regulation on the national level,
- for policymaking that is concerned with coordinating national media approaches across sectors, and
- for evaluating prospects for convergence in practices on the EU level.

There are difficulties in assessing changing political cultures. Cultural as well as economically rational motivations differentiate state and market actors. Pan-European options present further complexity: multilateral solutions may therefore be theoretical solutions to intractable real-world problems. Yet, when co-regulation is put into practice this is often first done on the national level, and here attention to economic governance, political culture, civil society and institutions in general may make a crucial distinction in assessing which co-regulatory schemes succeed and which fail.

5.3. Analysis of Successful Co-Regulation in the Media

The vital lessons from co-regulatory studies are:

- Co-regulation is a moving target – the national and sectoral templates for co-regulation have to be modified following each survey in order to encompass the different and dynamic practices of co-regulation in each geography and sector examined. This makes continued experience of designing and implementing co-regulatory surveys essential – law in books is of little assistance in so informal and dynamic a field;

Codes of conduct, in order to be legitimate, credible, transparent and effective need to include clear and workable procedures for review and amendment of the code. Ideally this should include some input from the adjudication body. The most effective and skilled code operators take the following issues into account when revising their codes:

- the convergence of national, regulatory and corporate cultures;

- the changing nature of the relationship between government and industry;
- the evolving technological architecture that underwrites self-regulation;
- the further development of standards, Codes, and rules; and
- the growth and change of cultural norms and of public understanding surrounding self-regulation.
- third party consultation or audit.

There are general recommendations which specifically can help the effective development of media Codes of Conduct, and co-regulation of Internet content. Technological progress brings about change and co-regulation can respond more rapidly and efficiently than state regulation. There is no universally acceptable recipe for successful co-regulation, as regimes must be adjusted to the needs of each sector and other circumstances (technological change, changes in policy to respond to changes in technology, a country's legal system, case law of European courts, and so on).

To illustrate, broadcasting is an area in which technological progress brought complexity and the increase of co-regulation responds in part to policy changes prompted by those technological changes. The European monopolistic broadcasting model which developed with radio, maintained for television, was first challenged by commercial terrestrial services. Further pluralism brought about first by cable and satellite, and then digital technologies including the Internet, forced changes in the regulatory environment and public authorities increasingly delegated the power to regulate to market actors. The trend is towards continued delegation (with regulatory authority audit of the resources, procedures, transparency, stakeholder participation and market effect of the self-regulatory scheme adopted).

Adequate resourcing is the key to successful co-regulation. Policy on co-regulation must take into account a broader view of the sustainability, effectiveness and impact on free speech of self-regulatory codes and institutions. Auditing procedures establish sustainable co-regulatory institutions and codes. Notwithstanding the centrality of speech freedoms in constitutions, this regulatory audit burden is a minimal price to pay for effective co-regulation in the public interest.

Significant economies of scale are likely to be realized through functional integration of certain key aspects of the content regulation value chain horizontally across sectors and across EU Member States.

Computer games rating by IFSE (PEGI) has illustrated the potential for developing a common pan-European ratings structure. Germany (KJM) and the Netherlands (NICAM) operate a cross-media rating and labeling scheme. In a situation of increasing cross border trade within the EU, this trend is set to continue. Although the *legislative* role of the European institutions in the media sectors is currently limited (with non-ratification of the EU Constitution), several recommendations can be made. And it is likely that in a single market context, there will be a significant self-interest on the part of industry in co-regulation. More research and development, benchmarking and technical assistance in disseminating best practice between Member States is clearly essential to assist industry bodies in the exploitation of economies of scale and scope in co-regulation across the various converging media sectors in the single market, and to ensure greater effectiveness of co-regulation.

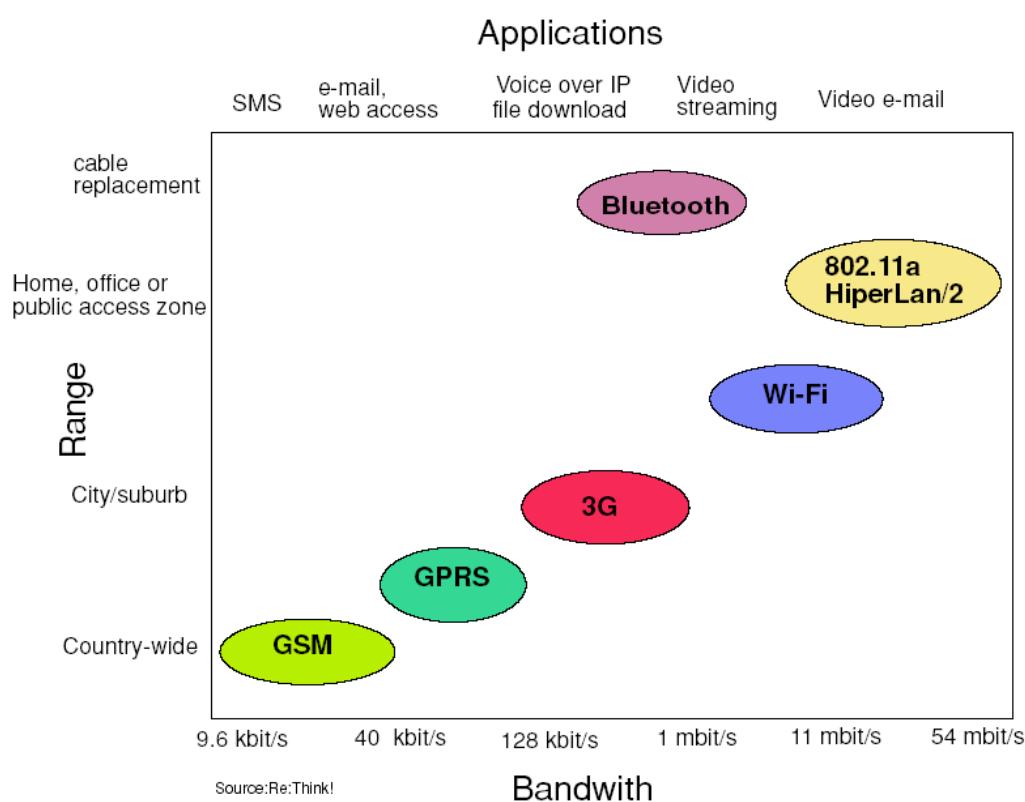
The general trend is towards an expansion of scope of co-regulation, often at the expense of statutory regulation. IRAs such as Ofcom in the UK are exploring the possibility of ‘sunsetting’ particular regulations in the event that co-regulatory alternatives can be found.

Where there is a clear industry interest in co-regulation to improve market penetration, or to head off threats of statutory regulation, there are adequate market incentives for resources to be allocated to co-regulatory activities. However the calculation of enlightened self interest required is vulnerable to changing personnel and market structures such that co-regulatory institutions, where they do not have access to compulsory funding, will not enjoy the funding necessary to meet standard requirements of transparency, accountability and due process. A wide variety of models of co-regulatory tools exist. Some of these are based on adequate standards of transparency, inclusion, due process, resources, and some clearly are not. As a result there is some concern with the development of codes that insufficient standards apply to both law enforcement/child protection and protection of freedom of expression rights. If these mechanisms are improperly structured we can expect public harm to result in the medium term.

6. Mobile Internet Services and Codes of Conduct

Mobile phones can now be used to access the public Internet and download graphic files, sound and video clips. They can be used for adult services and premium services, such as the 3 'G's: girls, video gaming and gambling. The graph illustrates how the late 1990s simple 2G/GSM phone has become an Internet access device.

Figure: From GSM Digital Mobile Handsets to Advanced Internet Access Devices¹¹²



Mobile services have been used to serve web pages to European users since approximately 2000. The first generation of mobile Internet devices used Wireless Application Protocol (WAP) to deliver specially programmed, normally simplistic and graphic-poor pages over narrow-band Global System for Mobile (GSM) networks. These 2G networks delivered data at about 65% of the speed of the modems used for fixed line computers circa. 1994/5. The screen for GSM-only devices is typically very small and monochrome, and the pixilation

¹¹² Source Croxford and Marsden (May 2001) typo in original.

(granularity) of the screen means that photographic images are cartoon-like. Text services (Short Messaging Services or SMS) on GSM devices have developed as 160-character text messages, rather than WAP-enabled chat or listserve.

Table: Explaining the Evolving Generations of Standards and Handsets for Mobile Internet

	2 GSM	2.5 GPRS	3 G	WiFi & Smart Bluetooth Phones
Download speed kb/s	9	26	64-384	c.5000 (WiFi); 50,000 (WiFi5) ¹¹³
Typical phone				
Content types	SMS, WAP surfing and ringtones	Graphics, photos, games and MP3 downloads	Video streaming and captures, broadband capture, application	All including DVD quality video download
				– Public Internet

The 2nd Generation of handsets, for GPRS services, offers 64k colour screens, access at up to 27kb/s to 2.5G networks, and larger screen size. Text is enhanced by images. The 3rd Generation – so-called SmartPhones – and the data-card connected Personal Digital Assistants and laptop computers – are all enabled to receive web pages without re-coding for WAP. These are therefore the first portable Internet devices. Accessing the WWW at GPRS speeds, increasing to 3G (perhaps 384Kb/s) and WiFi (up to several megabits), they can approximate the wired Internet use experience. With larger full-colour screens, they are fully specified Internet devices for image, sound and video.

¹¹³ Depends on ‘backhaul’ DSL speed – see generally Croxford and Marsden (2001).

From the consumer's point of view, the main differences between old and new generation mobiles are characterized by the different applications they facilitate, which can be summed up as follows:

- 2G allows short messaging services (SMS), Wireless Application Protocol (WAP) and SMS applications;
- 2.5G allows Multimedia Messaging Service (MMS) including low-resolution video, Java and BREW games;
- 3G allows rich media, streaming, full-motion high-resolution video.

This means that the concerns raised by the need to protect children from harmful material accessed via PCs might also be raised by mobile access to the Internet.

Such technological advances have however also led to the development of new business models for network operators, which focus largely on collecting revenue from online content. The models range from:

- Vertical Integration: network operators offering their own content (e.g. Vodafone Live!) to
- Intermediation: network operators allowing third parties to provide content (payment authorized by the network operator) to
- Transit only: providing open access to the Internet (with payment, if any authorized by third parties such as Bango.net).

In the UK, mobile operator 3 is currently the only operator offering open access to the Internet for adult subscribers, whereas the other operators employ walled gardens. It is important to recognize the existence of these different models, as the possibilities for co- and self-regulation associated with the content delivery model will clearly vary according to the sources of content.

6.1.1. Legal and Regulatory Framework: Mobile Service

Mobile networks in Europe have very limited competition, with between 3 and 6 networks in major markets. The costs of terminating calls on mobile networks, previously unregulated, have recently been examined and regulated in the UK¹¹⁴. The first national commercial broadband network for mobile is that of Hutchison Whampoa's 3 service in the UK and Italy (as at 01/03/04). By end-2004, most EU

¹¹⁴ See http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/ctm_2002/docs_index.htm for a full list of documents submitted by Ofcom, or the full Competition Commission report at http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/ctm_2003/ctm2.pdf
The Report is 15 chapters with 9 appendices and took a year to research and publish.

member territories have metropolitan broadband wireless services – by 3G and WiFi ‘hotspots’ – which means that customers with handsets have a real Internet experience.

The European Commission has reported on Member States’ regulation of mobile content:

Germany, France and Finland indicated that transmission via mobiles, in particular through UMTS [3G], is covered by regulation. Sweden considers that its legislation on illegal content is in principle applicable to mobile phone transmissions, but mentioned that this had not been tested in the courts. The Netherlands argued that the self-regulatory provisions had been drafted in a technologically neutral way, but were limited to “hosted information”.¹¹⁵

In addition to these ‘blanket’ regulations of fixed content extended to mobile, the UK and Norway responded by pointing to codes of conduct being developed to learn from fixed ISP self-regulation. The UK code is the central case study in this chapter.

6.1. Self-Regulation in Practice in Mobile Content

Mobile networks already have two examples of regulated self-regulation in place before Codes of Conduct are considered. These are:

- an ombudsman service for customer complaints over pricing and service, and
- a premium rate regulator (for instance RegTel in Ireland or ICSTIS in the UK).

Both are shared with fixed line telephony, and are mandated under European law.

Ombudsman Scheme for Consumer Disputes:

In the UK, Vodafone was instrumental in establishing OTelO, and T-Mobile and Orange in establishing the Communications and Internet Services Adjudication Scheme (CISAS), an ombudsman for ISPs and phone companies. OTelO charges all members a fee, CISAS is free – an interesting example of regulatory competition¹¹⁶.

¹¹⁵ COM (2003) 776 Final at 12: http://europa.eu.int/comm/avpolicy/legis/reports/com2003_776final_en.pdf

¹¹⁶ See <http://www.arbitrators.org/cisas/> for ISP and mobile ombudsman; http://www.out-law.com/php/page.php?page_id=ipsandtelcosmustl069270107&area=news for news of CISAS’ establishment and parentage, and

Premium Service Self-Regulator:

ICSTIS is a member of the International Audiotex Regulators Network (IARN), the European (and Australian) self-regulatory network for premium services. Operating since 1995, the 15th meeting in November 2002 has been followed by a long period of inactivity¹¹⁷. Member self-regulators have indicated that continuing support for IARN depends on resumed activity. If IARN were to fail, that would signal decreased pan-European coordination in premium services, at a critical time when the mobile industry needs such a co-ordinatory network.

European broadcasters, fixed and mobile operators increasingly use premium services to fund interactive television ‘reality’ and quiz programmes, such as Gross Bruder/Big Brother/Gran Hermano. In the UK, mobile premium texting is doubling in value each year, and was worth £200million/€300million annually in 2003¹¹⁸. Total premium voice calls were worth €1billion in 2003, with mobile about 10% of that total. Directory enquiry calls were worth €400million. The entire UK premium rate industry – the largest in Europe – was worth €1.7billion.

Tables: ICSTIS 2002 Annual Report Breakdown of Complaint Types and Services¹¹⁹

<http://www.otelo.org.uk/content.php?menuID=2&pageID=23> for details of the OtelO membership board. For legal measures, see Article 34 of the Universal Service Directive: 2002/22/EC of 7 March 2002:

http://europa.eu.int/information_society/topics/telecoms/regulatory/new_rf/documents/l_10820020424en00510077.pdf

117 See <http://www.iarn.org/> last visited 3 March 2004, and interviews with national self-regulators February-March 2004.

118 Source: IAPCODE estimate based on ICSTIS 2003 figures.

119 ICSTIS (2003) Annual Activity Report 2002 at p7. Note that complaints increased by 60% from 2001 to 11,552 :

http://www.icstis.org/icstis2002/pdf/ACTIVITY_2002.PDF

WHAT ARE COMPLAINTS ABOUT?			WHAT TYPES OF SERVICE CAUSE COMPLAINTS?		
	2002	2001		2002	2001
Inadequate pricing	235	699	Adult entertainment	2,547	1,113
Misleading information	258	365	Fax	1,260	994
Failure to supply requested information	176	30	Competitions	1,214	1,172
Inadequate contact details	156	224	Text message	1,210	159
No prior permission	119	57	Information	315	328
Pricing prominence	113	184	Ringtones and logos	271	375
Inappropriate promotion	92	88	Dating	268	113
Unreasonable delay	92	93	Live conversation	146	104
Non-fulfilment of competition prizes	88	74	Consumer credit	142	443
Legality	69	110	Data capture	128	62

The biggest increase in complaints were for adult, text message and dating services. Interviewees have explained that many complaints and especially telephone enquiries relate to adult services, which are in fact spurious based on family members discovering breaches of callers' anonymity.

6.1.3. Other Regulatory Requirements on Telephony Content

- **Intercept, Integrity and Surveillance:** Networks must comply with network integrity and security measures to ensure surveillance is possible, that the European emergency number 112 is accessible.
- **Mobile Handset Theft:** Mobile networks also have systems to deactivate the SIM card of phones reported as stolen.
- **Number Portability:** Further measures to monitor phone use include a Home Location Register (HLR) in each Member State, to permit mobile numbers to be ported by subscribers from one network to a new subscription on a different network.
- **Spam Blocking:** In several Member States, unsolicited commercial messages (spam) are regulated by, for instance, the UK Telephone Preference Service (www.tpsonline.org.uk/) and E-Mail Preference Service, again in common with fixed telephony. Mobile networks also undertake unilateral action.

6.2. Analysis of Adult and Illegal Content Regulation

In the position paper presented in November 2003, Ahlert, Alexander and Tambini explain that:

Major concerns for the self-regulatory framework include adult content (porn), interactive services, unsolicited messages, commercial transactions, location based dating, gambling, and peer-to-peer. The major necessary strategies for dealing with these concerns are content rating, filtering and blocking, notice-and-take-down procedures, public awareness, cooperation with the government.¹²⁰

They identify the scale economies which make effective and sustainable regulation of the mobile Internet possible:

The emerging market for 3G services in the European Union will be dominated by a few major mobile network operators, which in theory should make self-regulation a realistic and viable alternative to state regulation. Uncertainty of actual consumer uptake despite projected high popularity of 3G, media convergence, and the evolving EU regulatory framework all offer incentives for 3G mobile operators to invest in self-regulation.¹²¹

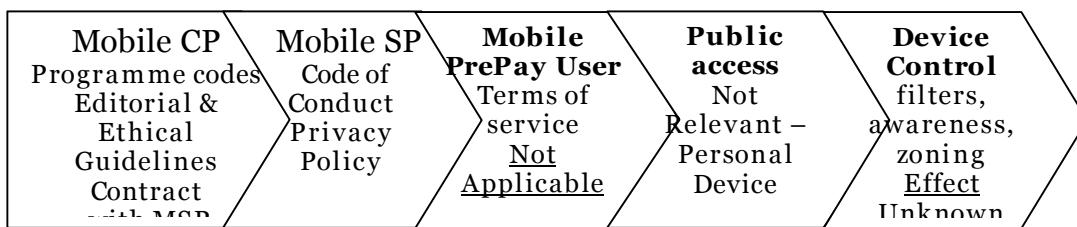
Note in the value chain below several innovations compared with the familiar fixed line Internet value chain. First, for services in the mobile portal, there is a strong contractual sanction for MCPs failing to fulfil their self-regulatory duties, which in the fixed environment is true only for the largest portals, such as MSN, Yahoo! and AOL. Second, the pre-pay user has no regulatory sanction from the MSP, with no contract and no billing relationship, though the MSP could discover the identity and block service to the SIM card of users if unacceptable use is discovered. Third, the type of network control at the institution of work/research/education that the public access layer establishes, is not relevant in the mobile environment except in the case of group contracts for mobiles given to employees.

Even before the start of the value chain there is a fourth critical difference: the MSP owns the network and can control the content flow onto networks in a manner unfamiliar to narrowband fixed ISPs.

¹²⁰Ahlert, Alexander and Tambini (2003) European 3G Mobile Industry Self-Regulation: IAPCODE Background Paper for World Telemedia Conference at 2: see <http://www.selfregulation.info/iapcodamobiles-revised-bckgrd.pdf>

¹²¹Ibid at 2.

Therefore the lack of control over end-users is replaced by a control over the network. This is a critical change from end-to-end where control must be exercised close to or at the end-device, in that mobile networks can institute control in the network itself, are required so to do for law enforcement purposes, and choose so to do to stop spam overwhelming the network. That is not to suggest that as a policy choice such a radical departure from fixed Internet regulation is to be recommended, not least on speech grounds, but it does represent a different architecture of the ISP-network provider relationship.



The mobile industry is identified as learning lessons from a decade of Internet regulation, and from earlier experience in Japan and South Korea, where 3G networks have operated since 2001/2. The early experience of spam, child prostitution and peer-to-peer breaches of copyright were noted prior to the drafting of the first European Code of Conduct, that in the UK¹²². It is predicated by the broad content controls instituted across all electronic media distribution networks in Germany¹²³. Note that smaller markets in the same language normally follow the larger: hence Austria and Switzerland follow Germany, and Ireland follows the UK¹²⁴.

6.2. UK Case Study

The UK Code was drafted by a committee including all six UK network operators and virtual operators (3, Vodafone, Orange, T-Mobile, Virgin Mobile, O2). Informal consultation with content providers, infrastructure and handset suppliers and government at national and European Commission levels took place. The Code itself was written in the ‘regulatory vacuum’ of 2003 as the new super-regulator OfCom was being established, against a background of discrete coordinated lobbying by mobile networks, and pressure for self-regulation from

122 Mobile Network Operators (January 2004) UK code of practice for the self-regulation of new forms of content on mobiles available at www.orange.co.uk

123 See Ahlert et al at p20 on the KJM interstate regulatory commission, implementing the 2003 Interstate Treaty on the Protection of Minors and Human Dignity in the Media

124 Interviewee from Austrian 3G network licensee, London 30 January 2004.

Parliamentary debate during the Communications Bill 2002-3. There was therefore a combination of regulatory commitment (fostered by cooperation in 2002-3), resource freed by the handover period from existing regulators to OfCom (second half 2003), and political pressure to establish a workable regime prior to the broad 3G launch in 2004.

The six operators include all four of the largest pan-European operators¹²⁵. A draft was presented for public consultation prior to the full publication of the Code in January 2004. Details of the Code's implementation (see below) were announced on 7 February 2005 with the launch of the Independent Mobile Classification Body (IMCB)¹²⁶. The Code itself is unremarkable, but its ex ante adoption, prior to many adult services being known to the general public, is exceptional and reflects high awareness in the sector both of potential harms and of the value of self-regulation. In part, this can be attributed to the market size and regulatory resources of the four giant companies behind the drafting.

The main points of the code are:

- All commercial content unsuitable for under-18s will be classified as “18”, and will only be made available to customers when the networks are satisfied that the customer is 18 or over.
- The classification framework will be comparable to those applied to other media, and will be created by a body independent of the mobile operators.
- Chat rooms available to under-18s will be moderated.
- Parents and carers will be able to apply filters to network operators' Internet access service to restrict the content available via a particular phone.
- Mobile operators will work to combat bulk and nuisance communications.

In addition, the Code observes the same ‘notice and take-down’ requirements with regard to illegal material as those applying to fixed-line ISPs. Thus Section 3 of the Code states:

“Mobile operators will work with law enforcement agencies to deal with the reporting of content that may break the criminal law. Where a

¹²⁵ 56% of the 2000 European subscriber market was O2, Vodafone, T-Mobile and Orange – TIM and Telefonica Moviles, with less significant interest outside their domestic markets, are small in pan-European terms. See Ahlert et al (2003) at p4.

¹²⁶ See Classification Framework at <http://www.imcb.org.uk/assets/documents/ClassificationFramework.pdf>

mobile operator is hosting content, including web or messaging content, it will put in place notify and take-down provisions.”

There are, however, several limitations on what the Code covers. The UK Code explains that:

“The Code covers new types of content, including visual content, online gambling, mobile gaming, chat rooms and Internet access.

It does not cover traditional premium rate voice or premium rate SMS (texting) services, which will continue to be regulated under the ICSTIS Code of Practice.”¹²⁷

Nor does it cover wider Internet content not directly supplied by third parties to the mobile operator. Responsibilities here mirror those of fixed-line ISPs. However, the Mobile Entertainment Forum (MEF), a trans-Atlantic grouping of over 70 content providers, has issued its own Mobile Code of Conduct, dealing with premium content. This may prove a precedent for a Code dealing with adult content¹²⁸.

The code also fails to cover issues which have already stimulated media concern such as the use of camera phones and Bluetooth technologies for content creation and distribution that does not require downloading from a website, or other forms of P2P file-sharing.

The extent of likely Internet filtering by mobile operators is somewhat unclear. Under Section 4, operators pledge to ‘continue’ to take action against spam – they already have prevented much content arriving on-net. To at least this extent, then, Internet content is to be filtered. Further, although the Code committed each operator to introducing an adult content filter only Vodafone has so far fulfilled its commitment, with the UK’s other operators missing their agreed end of 2004 deadline.

The UK Code for Content does not have a central arbitrator for disputes: “Each mobile operator may choose or need to use different organisational and technical solutions to enable it to meet aspects of the Code.” The content scheme is an opt-in self-classificatory scheme overseen by an independent classification body¹²⁹. Content is classified as ‘18’, adult content, or not – with optional interim ratings for younger children (in Section 7). Enforcement of the Code is formally dependent on individual operators and it is unclear how this will be

127 UK Code at p2.

128 The Code was launched in the UK on 19 January 2005, and worldwide on 15 March 2005: see <http://www.m-e-f.org/news032005.html>

129 See <http://www.imcb.org.uk/>

recorded and publicized: “Each mobile operator will enforce the terms of the Code through its agreements with commercial content providers.” However, in practice the IMCB is likely to set precedents for all operators: the IMCB has to date issued no rulings.

This approach covers most of the potential areas of concern for parents, and demonstrates to government that the industry has taken its corporate responsibility seriously, but does still leave unanswered some important questions. Issues include how to build a relationship of cooperation between mobile operators and commercial content providers, particularly smaller non-MEF members, raising awareness of the code and the role of retailers. Also, the code is heavily dependent on age verification procedures which are still far from fool-proof and are open to fraud.

It is also worth noting that age verification procedures to be applied by the mobile industry are clearly only of use where a phone is being purchased or a new contract established; in so far as many children may just inherit or borrow phones from other family members or friends, it is vital that the code and the child protection measures available are publicized as widely as similar measures for PC-accessed Internet. In other words some responsibility must lie with parents and carers, and not just government and industry.

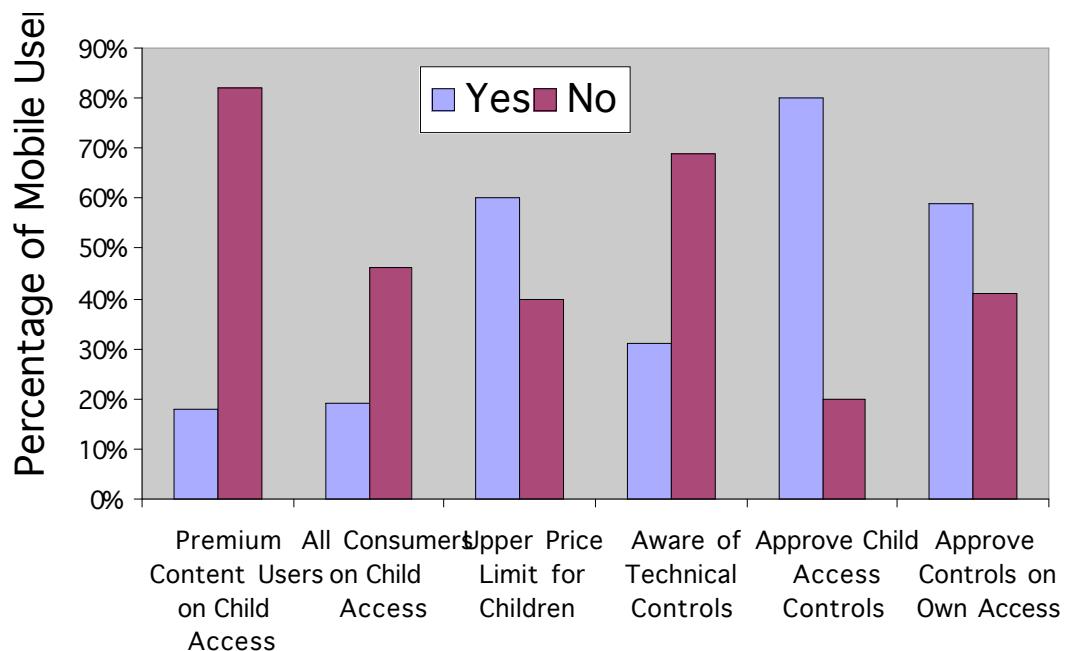
It also still remains to be seen just how successful content rating systems will be. The UK body responsible for setting content rating guidelines, the Independent Mobile Classification Body was only launched in February 2005 and whilst it is initially up to the content production industry to label their services correctly, it will be mobile operators who are ultimately responsible for ensuring the appropriate rating of the content they carry. It remains to be seen how this relationship will pan out but such a contractually required labelling system for “commercial” content coming from third parties should work, because inappropriate content is to be filtered out at the “gateway” between the network operator and the provider. Content on the open Internet will pose larger problems. Therefore, it is likely that the most effective approach will be to combine the utilization of filtering software, content labels, and URL block lists¹³⁰.

Since the UK Code was introduced in 2004, two other European countries have introduced their own variant (Ireland and Italy), whilst

¹³⁰ Zittrain 2004 for OSCE.

dialogue is ongoing in at least one other state (France) as to the desirability and feasibility of such a code. Australia has been holding a public consultation around proposals for changes to its rather more heavily regulatory framework for dealing with content delivered via mobile devices, whilst, in the US, Federal Communications Commission has seemingly asked for an industry-led mobile and wireless industry education campaign for parents, but also suggesting that carriers review the adequacy of their existing code of conduct. Internationally, policymakers are sizing up to the opportunities and risks presented by the growth of 3G services and the increasing ubiquity of Internet-enabled mobile phones and other devices. In Japan, evidence of public concern leading to legislation to outlaw spam subject to opt-in, and to outlaw children's access to dating sites, has emerged¹³¹. ICSTIS, the UK premium regulator and Vodafone commissioned research in 2003 to identify consumers' attitude to premium rate mobile services. It demonstrates overwhelming approval for child access controls, and own-access controls¹³².

Table: Consumer Attitudes to Mobile Content 2003 (ICSTIS/Vodafone)



131 See ITU (2004) Shaping the Future Mobile Internet Society: The Case of Japan, Document SMIS/06, authored by Srivastava and Kodate, at <http://www.itu.int/osg/spu/ni/futuremobile/general/casestudies/JapanCaseLS.pdf> at p50: (2002, July) Law on Regulation of Transmission of Specified Electronic Mail – spam law, and (2003, September) Law of regulating the act that attracts children using the Internet opposite-sex introduction sites – anti-paedophile law.

132 Beaufort International (2003) Premium SMS Services Research, at p5, at http://www.icstis.org.uk/icstis2002/pdf/SMS_RESEARCH_REPORT_MAY03.PDF

6.3. Six Differences Between Fixed and Wireless Internet Regulation

The Code itself is unremarkable, but its early adoption, prior to many adult services being known to the general public, is remarkable. In part, this can be attributed to the market size and regulatory resource of the four giant companies behind the drafting. However, there are also vital concerns that make the adoption of content controls by the mobile industry both different to narrowband ISPs and potentially a forewarning of broadband fixed ISPs' role: this Code is actually the first BSP Code.

There are several features of mobile phones which make such concerns either more and less pressing. For example, risks might be decreased in the sense that it is easier for network operators to adopt content controls, such as filters, as they are the only gatekeeper to the Internet for individual users of their services. In addition, network operators also have influence over which online services will be available to consumers as they currently have a degree of control over the user interface on their handset due to their role in providing the software and operating systems in conjunction with the handset manufacturers.¹³³ An increased risk is that children's use of mobile phones is much less open to supervision by parents and educators and might therefore pose a greater risk than PC-based access to the Internet¹³⁴. These nuances can be summarized as follows:

1. Ubiquity: given the increasing pervasiveness of colour screen technology in even standard mobile phone models, many secondary and even primary school students are likely to have phones with colour screens at the birth of the wireless Internet, whilst most children have only gained access to the Internet via PCs at a later stage in that technology's development.¹³⁵ This means the need for protective measures is pressing.
2. Supervision: unlike PC-based access to the Internet, mobile use is more likely to be private and by its nature is mainly unsupervised. This may be tempered to some extent by the

¹³³ This is not the case with all newer devices, and indeed may change in the future if we see increasing convergence between palmtop PC and mobile phone functions. For example, some new PDAs and some smart phones, run on Windows CE with voice communication as an additional feature incorporated into this Microsoft operating system.

¹³⁴ Categories adapted and extended from Marsden (2004).

¹³⁵ Figures from the UK Department for Education and Skills show that in 2002 41% of children between 5 & 18 owning a mobile phone, a figure which is likely to have increased still further in the past two years (DfES 2002). A recent consumer survey suggested that mobile phones are owned by over 5 million under-16s in the UK. (MobileYouth 2005).

possibility of parental monitoring of itemized phone bills, although in the UK as elsewhere in Europe, large numbers of mobile users have Pay-as-you-go accounts, with under-16s especially likely to have such accounts;

3. Control: with PCs, access to the Internet is provided and controlled by an Internet Service Provider (ISP) and users can choose which ISP they contract with after buying their PC. Such choice and competition amongst ISPs means that individuals could easily opt in or out of various filtering options by shopping around amongst ISPs. In the case of mobile-accessed Internet, however, a handset is usually bought as part of a contract with a particular operator. Even if it is practically possible to change network, this is not something which many customers would do on a regular basis. So long as this remains the case it is easier for network operators to adopt content controls, such as filters, as at any point in time they are the only gatekeeper to the Internet for individual users of their services. This feature, combined with the different models for content delivery described above means that mobile network operators can and do provide so-called ‘walled gardens’, which effectively limits Internet access to content approved by (and financially benefiting) the network operator.
4. Filtering Defaults: it was widely expected that on mobile phones, filtering defaults when available would largely be opt-in, unlike opt-out Internet Explorer, AOL and Google, meaning that 2.5/3G mobile phone users would by default have access to adult content. In the UK, this position has been reversed, in large part due to lobbying by child protection groups, meaning that those purchasing new mobile phones will now usually need to opt out of filtering applications, which will only be possible after age verification.
5. Convergence of Capture and Distribution in One Device: most devices now offer digital image capture capabilities and also enable distribution of these images - picture messaging is an example of this. This means that in principle, the distribution of inappropriate pictures, or even pornography is only ‘One Click Away’ from digital image capturing; but in a way that cannot be controlled by filters at the network level. This is a potential loophole in the widely acclaimed filtering strategies currently

used by network operators, although it remains to be seen whether this will be a significant concern in practice.

6. **Peer-to-Peer File Sharing:** Given that 3G bandwidth is still much slower than standard broadband connections, p2p file-sharing of photos, movies or music is still unlikely as it is time consuming and costly. However, as operators are now starting to offer seamless roaming packages whereby mobile phones can be used at home with standard wireless broadband connections and on the move with wireless hotspots, P2P may further drive usage of mobile-accessed Internet by children.

Technically, the mobile Internet can be much more restrictive than fixed Internet use. 3G services do not allow wider access to the Internet, limiting access to a ‘walled garden’ of online services. This may restrict uptake but does effectively eliminate networked P2P problems of illegal file-sharing via the Internet (though not by Multimedia Messaging Services [MMS], such as the picture messaging used in an infamous Irish schoolgirl pornography case of 2003/4¹³⁶) even though this is perhaps an over-reaction to existing and emerging problems.

Similarly, filters may prove overly effective. Filtering technologies in use are much more effective in mobile phones – if the measurement for effectiveness is that some adult sites are simply fully blocked – than in the traditional fixed line environment. However, early anecdotal evidence also suggests that sometimes over-blocking occurs and perfectly legitimate services such as Hotmail or other Internet sites are not reachable. At the same time it remains to be seen how easy it is to get around the filters, as this will be one of the most crucial points in evaluating self- and co-regulatory approaches to mobile content.

Another difference, in terms of policy concerns, is history: the 3G debate profits from many lessons learned over a decade of Internet availability. Therefore broadcast video on 3G, whether time-delayed or live-streamed, presents fewer problems than the early video-over-broadband debates circa 1995 because of principles which were laid down then: don’t regulate directly but expect networks to observe watersheds and adult content rules wherever possible. Revisions to the EU ‘Television Without Frontiers’ debate are being discussed just as video over mobile appears, but mobile platforms are currently excluded from direct regulation.

¹³⁶ See http://www.out-law.com/php/page.php?page_id=irishpoliceinvest1074855914&area=news

6.4. Free Speech Only Within a Walled Proprietary Garden

Technically, mobile Internet on-net can exclude off-net and really ‘wall in’ mobile Internet users. That would eliminate P2P including pornographic images by banishing mobile users from the wider Internet, which appears an over-reaction to existing and emerging problems, which creates restrictions on speech freedoms. It is the approach which has been taken by all UK operators except ‘3’, which in September 2005 finally permitted 3G broadband mobile users to access the open Internet, but only sites that had been optimised for mobile surfing, a tiny proportion under 0.1% of all web pages (about 3 million sites).

Broadcast video on 3G, whether time-delayed or live-streamed, presents less problems than the early video-over-broadband debates circa 1995. That’s because of principles then laid down: don’t regulate directly but expect networks to observe watersheds and adult content rules wherever possible. Revisions to the EU ‘Television Without Frontiers’ debate are being discussed just as video over mobile appears, but mobile platforms are currently excluded from regulation.

Legitimate adult content will be a major driver for wireless Internet profits: adult content filtering (Vodafone’s Content Control bar launched this spring, bango.net’s filters) will be opt-in, not opt-out. Legitimate networks and content owners need to protect ‘on-net’ brand and limit liability from the porn and P2P piracy that ‘off-net’ users and cowboy site operators will create. Commercial adult content on the Internet is driven by the free referral site model: free porn in small doses leads to paid porn on ‘official’ sites.

Illegal and harmful content can be entirely user-generated and distributed. Legitimate 3G content owners make no money from off-net P2P adult content; because the receiver pays (unlike in fixed telephony and ISP access) and networks do profit per bit, mobile operators are perceived by consumers to have a higher duty of care. I am not suggesting that peer-to-peer should be regulated by networks on behalf of governments driven by moral outrage at well-publicised child porn cases. However, evidence from Japan suggests that the mobile Internet has played a part in paedophilia and child prostitution and worse. Given the personalisation of Internet technology amongst children, that is to be expected.

Protecting children from profitable adult content in walled gardens is the first, and very least, that networks can do. They have learnt from the fixed Internet in taking such action early. But more will have to be done, especially with Communication: educating consumers and introducing effective filters early. The opt-in filtering of mobile networks will help (though bango.net reports that 1% of its 5 million credit-carding users have opted to avoid adult content).

Content: Networks still have the dilemma of acting on the distribution of P2P illegal and harmful content, the distribution of pirated and adult content. Networks have engaged in the debate early to make sure that regulatory action is reasoned, not tabloid-generated.

6.5. Conclusions for the Mobile Networks and Content Providers

There may be still be significant hurdles for workable Codes of Conduct to overcome: it remains to be seen whether there is any preferable alternative. Certainly it is hard to imagine the mobile or content industries welcoming a more directly regulatory solution. Self or co-regulation is also likely to be the most appropriate response in the context of rapid technological advance; it will almost inevitably be easier for industry groups to assess the implications of such change and to revise their Codes of Practice accordingly. Self-regulation would have the benefit of being a more moderate response to the problem, but co-regulation would provide more transparency, accountability and room for public and governmental engagement. At the governmental level, the EU Commissioner Viviane Reding has again made clear her commitment to co-regulation in the mobile communications market¹³⁷, although this is not necessarily supported at the level of all European states: Spain, for example, has so far shown little appetite for controlling children's access via mobile phones to inappropriate material on the Internet. The latter point is important to note. There will inevitably be disagreement between states as to the extent of the risk posed to under-18s by mobile phones and Internet access. What is deemed to be inappropriate or even harmful in one country may be regarded as completely unproblematic in other European states. To this extent, the co-regulatory approach is an appropriate one, allowing public and governmental input to ensure a degree of variation between the Codes applied in different countries.

¹³⁷ V. Reding 'Mobile Communications : a key driver to make Lisbon succeed' delivered to the 3GSM World Congress, Cannes, 14th February 2005.

To be workable, Codes must first and foremost be the result of genuine dialogue between government and industry with room for meaningful (rather than merely trivial) periods of consultation with non-governmental groups such as child protection or civil rights groups and the general public. Secondly, the establishment of such Codes must be clearly understood both by those who are limited by its principles and those who seek its protection. Finally, it is essential that such Codes be backed up by the creation of clear lines of accountability and monitoring. Given the importance of the rights and privileges that are protected and limited by these principles, it is essential that these are treated with respect.

7. Broadband Internet: Liability Increasing?

The creation of the Mosaic browser in April 1993 made consumer home use of the Internet feasible for non-specialists¹³⁸. In the following eleven years, more than a billion people have used the Internet. Almost 100 million households now have broadband access to the Internet, of some form, with many more accessing broadband at school, college or work. These two step changes to the Internet, from a research and business tool to a consumer activity, and from narrowband to broadband¹³⁹, have transformed the community on the Internet. By March 2004, the announcements that BSPs such as Tiscali were increasingly challenging incumbents' voice revenues by selling VOIP substantially increased the entry costs for ISPs wishing to offer equivalent sophisticated BSP service. AOL, formerly the world's largest ISP, announced its withdrawal from the U.S. broadband market. The marketing costs and potential revenue gains of entering a combined data-voice-content market immediately, permanently and significantly raised the costs of providing Internet connectivity. From a universe of thousands of European ISPs in 2000, no more than 20 large BSPs can be expected to dominate the European market by end-2006. The regulatory implications are profound.

Comparing ‘cyberspace’ to Outer Space (i.e. extra-terrestrial) activity when the majority of EU citizens have accessed the Internet negates the democratic importance of preventing harm occurring on the Internet. The preface to the ‘Internet Commons Treaty’ recognises this, even

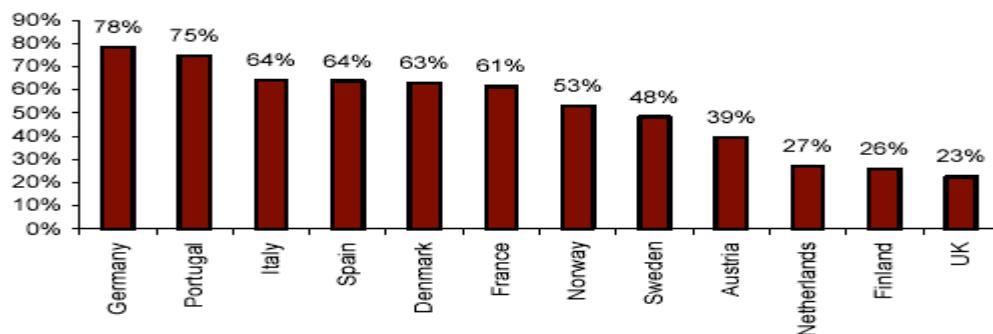
¹³⁸ Mosaic was launched in April 1993. See <http://www.ncsa.uiuc.edu/Divisions/PublicAffairs/MosaicHistory/impact.html>

¹³⁹ From 150Kb/s in some Western European entry levels to 20Mb/s where VDSL has been deployed.

while continuing to proclaim the non-governmental libertarian ideal¹⁴⁰: “The Internet seems to have lost the special status that led most governments (sic) to “hands off” policies during the 90’s.” Throughout the 1990s self-regulation was heavily advocated by the European Commission, most notably under the Safer Internet Action Plan, but this approach seems to have fallen out of favour with recent measures promoting a more “co-regulatory” approach. Whereas “self”-regulation implies a degree of independence from direct state regulation, “co”-regulation implies that the state is involved in jointly developing rules and regulations. This might be thought more desirable to the extent that research on self-regulation has shown that many self-regulatory models in the Internet industry lack proper procedures for oversight and enforcement, and to amount to little more than declarations of good will.

Governments’ belief that their regulatory goals could be met by ISP activities in self-regulation were exposed in a series of court cases in the period from 2001, especially the Yahoo! Vs. France saga¹⁴¹. As ISP incomes from narrowband Internet access, which used the national public telecoms network as ‘free riders’, were replaced by less favourable broadband access charges, ISPs increasingly find their financial resources for self-regulation eroded. The ‘triple whammy’ of broadband access charges, advertising revenue falls, and the absence of profitable content services on either narrow- or broadband, meant that the period 2001-3 was one of enormous economic failure for ISPs.

Table: Incumbent Share of European Broadband Retail Markets December 2002¹⁴²



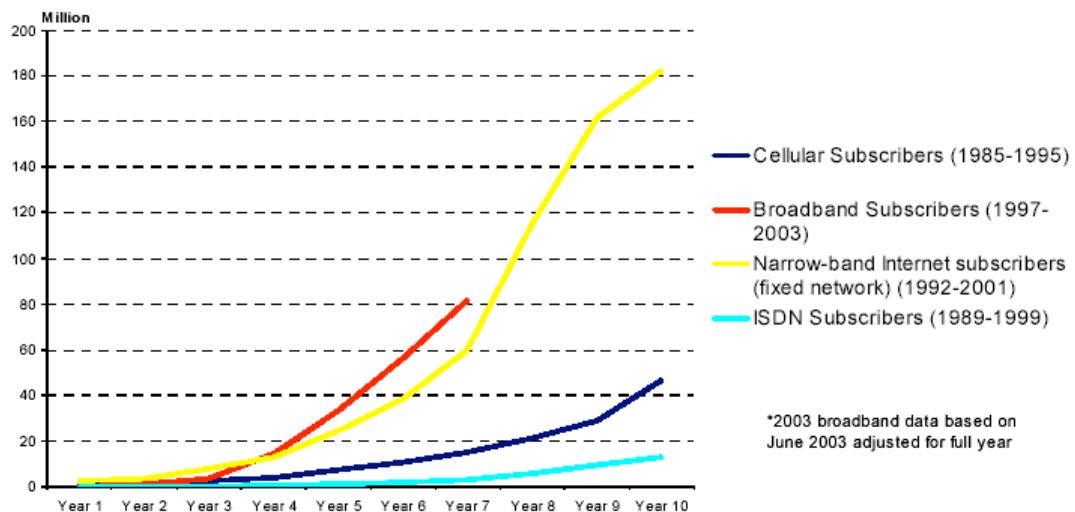
140 See Treaty on Principles Governing the Activities of States in the Exploration, Development and Use of The Internet Commons at <http://www.internationalunity.org/> accessed 28 February 2004. This is the 2004 version of John Perry Barlow and the Electronic Freedom Foundation’s 1996 Declaration of the Independence of Cyberspace, <http://www.eff.org/~barlow/Declaration-Final.html> accessed 28 February 2004.

141 See Reidenberg *supra*.

142 Source: IDATE Digiworld (2003) The World Internet Access Market, at Figure 41.

In the years 2001-3, users of the Internet reached a majority of citizens in most OECD countries. For the Internet Society's INET2000, the ITU reported that Internet use in Europe in 1999 varied from 7.2% in Spain to 21% in the UK (Scandinavian figures were much higher)¹⁴³. By 2002, these figures have risen to 64% Spain and 74% UK¹⁴⁴. Broadband take-up appears to be the fastest growing communications service ever adopted, according to OECD analysis for June 2003¹⁴⁵.

Table: OECD Broadband, Mobile, Narrow-band, ISDN Subscriber Growth



Though broadband via wired telecom (DSL or cable modem) service is not available to all, coverage is growing, reducing the Digital Divide in access.

7.1. ISP Actors: Self-Regulatory Resources and Internet Policy

The broadband Internet is a more powerful and more pervasive medium than its narrowband predecessor. It offers new 'regulability' in the form of the BSPs, more profitable and well-resourced actors than their narrowband forebears. It also requires well-funded BSPs, given the range of access and content control costs, notably increased by peer-to-peer file sharing and copyright enforcement.

These large or even dominant, well-resourced and carrier-backed BSPs are in a position to provide the effective self-regulation that narrowband ISPs are increasingly unable to effectively resource¹⁴⁶. BSPs

143 See http://www.isoc.org/isoc/conferences/inet/00/cdproceedings/8e/8e_1.htm accessed 28 February 2004.

144 See <http://www.unece.org/stats/documents/ces/sem.52/11.e.pdf> at p16 accessed 28 February 2004.

145 See OECD ICCP Broadband Update October 2003, accessed 28 February 2004 at <http://www.oecd.org/dataoecd/18/9/18464850.pdf>

146 Table from Executive Summary, ITU (2003) Birth of Broadband, accessed 28 February 2004 at

<http://www.itu.int/osg/spu/publications/sales/birthofbroadband/BoBexecsumm.pdf> Note independent cable operators, retail broadband ISPs as well as third

face major legal challenges. The copyright bottleneck caused by record/movie companies and their contractors (typically collecting societies for publishers/authors, musicians/actors) failure to release material online has been overcome by illegal file-sharing between users: peer-to-peer networks. Whereas governments, conscious of exposing the convenient fiction of ISP liability online, have not prosecuted breaches, copyright owners are pursuing BSP customer records vigorously, the Recording Industry Association of America leading¹⁴⁷. In January and February 2004, the RIAA brought actions against over 1000 file-sharers known only by their IP addresses, in ‘John Doe’ litigation¹⁴⁸. The broad issues of ISP response to copyright infringement is considered in other works, notably ‘Losing Liberty’ (Ahler and Marsden 2004) and the chillingeffects.org website and programme¹⁴⁹.

Economies of scale in Internet industries do not only apply to provision of services: they also apply to self-regulatory capacity. A company with operations in six sectors is able to use lawyers and policy-makers across the different sectors because the basic skills needed to identify copyright and privacy policies, interconnection and competition law issues, child protection and content filtering, are closely related. Further a company with international subsidiaries can not only deploy its browser software across international markets but also its privacy policy. Policies and regulatory strategies are information goods just like browser software: once created (at high fixed cost) they can be redeployed according to national market characteristics (at low variable cost). Companies such as AOL, Microsoft, WorldCom and Yahoo! have a decade of experience in Internet regulatory policy, which they have redeployed in several dozen territories internationally. It is not unreasonable in the absence of strong government rejection of U.S. self-regulatory policy towards the Internet to expect that the policies espoused by these ‘first movers’ in Internet regulation to achieve a regulatory convergence between the various markets in which they operate: a convergence of Internet policy to accompany market convergence.

party broadband providers erode market share: thus KPN in Netherlands has strong retail competition on its own network, some local loop unbundling competition and strong cable network competition. In Germany, competition is far more limited.

147 See <http://www.riaa.com/news/newsletter/021304.asp> accessed 28 February for the broad alliance International Intellectual Property Alliance.

148 See <http://www.riaa.com/news/newsletter/pdf/sampleJohnDoeLawsuit.pdf> for an example of the RIAA proceedings.

149 Cites

Regulatory compliance can form part of a marketing strategy, in content as in carriage. Quality of service is defined in ISP service largely by reliable speed of connection, but companies such as AOL, Yahoo! and Microsoft Network also market their superior spam filtering and parental control filters. Where an industry self-regulates, it can set standards at levels that make compliance relatively low or high cost – depending on the participants' views of best commercial outcome. In a rapidly growing market with little or no government social regulatory intervention, low costs might guarantee expansion, but in a mature market with active social regulation, higher costs might protect actors from new competition. Regulatory initiatives such as Rightswatch¹⁵⁰, the copyright regulatory body, are expensive and voluntary participation by smaller ISPs was prohibitively expensive. In a more consolidated market with higher compliance and other regulatory costs, ISPs can free more regulatory resource because they are guaranteed that other ISPs also take their regulatory responsibilities seriously.

7.2. Medium Law and Its Regulatory Cost-Benefits

We saw in Section 6 how mobile Internet access providers have eliminated many of the end-to-end options in Internet design by closing off a walled garden for public safety and their private profit. In the discussions in the new ACSD, the large well-resourced telecoms companies saw the opportunity to make common cause with mobile operators, public service broadcasters and commercial television companies in an unholy alliance to prevent the open Internet video model emerging. The regulation of the Internet that is rapidly taking place is being driven – unquestionably – in Europe by politicians for public safety reasons. They are erecting entry barriers with the connivance of the incumbent players, with potentially enormous consequences for free speech, for free competition and for individual expression. This may be the correct policy option: claims by the European Commissioner that regulating the Internet is not the intention

¹⁵⁰ Stated to be “a research project aimed at developing consensus and promoting awareness of self-regulatory notice and takedown (NTD) procedures for Europe, as a tool to achieve prompt removal of copyright-infringing material from the Internet. The impetus behind the project specification was provided within the text of the EU’s E-Commerce Directive which encourages a self-regulatory approach through voluntary agreements for ‘development of rapid and reliable procedures for removing and disabling access to illegal information.’ Activities and research taking place throughout the two year duration of the project (2000 – 2002) have been funded under the European Commission’s Information Society Technology (“IST”) programme.” See <http://www.rightswatch.com/>

do not flatter the intelligence of the audience. That may be the intention of the paternalistic and oligopolistic interests represented in the new regulated Internet.

A final word should be given to the competitive service providers whose industries would face an increase in barriers to entry and whose involvement in this revision of a broadcasting law was limited:

“It would be a catastrophe for EU industry if DG Information Society and Media was to encourage delocalisation of web-creation and hosting. With all due respect, ECTA cannot understand how the views of tax-funded public service broadcasters can be relevant to the system of self-regulation for the commercial online sector.”¹⁵¹

Do Internet actors not appreciate that convergence works both ways? They clearly have not absorbed the implications of medium law.

¹⁵¹ Supra n.10 at p6.

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