Past, future and change: Contemporary analysis of evolving media scapes



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The Challenges of Convergence for European Media and Communication Regulation: A Model for Analysis

Hannu Nieminen

1. INTRODUCTION

In the debates concerning media and communications policy in the 1990s and early 2000s, one of the most commonly discussed concepts was deregulation. It was used as a synonym for concepts such as liberalisation and privatisation, meaning that the media and communications industries – specifically electronic media and telecommunications – were freed from the yoke of the state and its heavy-handed statutory regulation. Instead of serving politically defined normative ends with strict restrictions about competition and material gains, these industries were now supposedly liberated to follow free market ends and rules.

Or so it was thought then. It was soon discovered, however, that in order to be effective and to provide the expected material benefits, the market still had to be regulated, and that, instead of unbridled free competition, some clear rules and restrictions were necessary. On the other hand, at the same time it was realised that the media and communications differ from other industries in that their markets operate in the area of norms and ideas, and that some normative rules are needed after all. In stepped re-regulation.

Accordingly, media and communication policy over the last ten years or so has wrestled with the problem of how to balance these two different regulatory interests: the private interests of the industry, served by competition law, and the public interest, represented by the normative type of regulation. In this article, I develop tools for studying attempts to strike this balance by the use of different regulatory means.

2. Background

In the last 10-15 years, European regulation of media and communications has faced increasing challenges: the processes of globalisation and digitalisation have profoundly changed the media environment; consumer behaviour and media use are rapidly changing, punishing the print media and rewarding the mobile media; and European financial instability has rendered the future insecure.

The regulatory mechanism may be adapted to meet these challenges in a variety of ways. (See e.g. the discussion in Meier, 2011; also Black, 2002.) The traditional way of understanding regulation is government-centred, as a definition from the OECD makes clear:

Regulation is broadly defined as imposition of rules by government, backed by the use of penalties that are intended specifically to modify the economic behaviour of individuals and firms in the private sector. Various regulatory instruments or targets exist. Prices, output, rate of return (in the form of profits, margins or commissions), disclosure of information, standards and ownership ceilings are among those frequently used. (OECD, 2002).

Lately, however, new regulatory needs and new actors have emerged, leaving this economy- and government-centred view wanting. The drive towards softer means of regulation in particular has brought new forms of self- and co-regulation to the fore. Summarising these changes, Julia Black has provided a critical definition of regulation:

[*R*]egulation is the sustained and focused attempt to alter the behaviour of others according to defined standards or purposes with the intention of producing a broadly identified outcome or outcomes, which may involve mechanisms of standard-setting, information-gathering and behaviour-modification. (Black, 2002: 26).

Black calls this a "decentred" concept of regulation: regulation is not restricted to the activity of government, nor is it based solely on legislation. Other sources may be used to justify it; it can be asserted by different actors; and regulators can apply different means for their own purposes. In what follows, I will discuss this decentred concept.

The division between concepts of regulation is reflected in differing notions concerning the societal goals of regulation. For what purposes is regulation needed? What are its goals and means? (Black, 2002: 9-10.) Many researchers make a fundamental distinction between two regulatory ideologies, applied with different emphasis in recent decades: regulation for 'economic efficiency' and regulation for 'social and distributive concerns' (Prosser, 2010: 4 and passim; see also Christensen, 2010.) According to Prosser, the first coincides with the concept of regulation as an intrusion on private autonomy; the second sees regulation as a collaborative enterprise (Prosser, 2010: 4-5).

Traditionally, regulation of the media (the press, electronic media) has followed the second ideology, serving the public interest as defined in terms such as freedom of speech, public service broadcasting, pluralism of opinions and cultural diversity (Napoli, 2001; Harrison and Woods, 2007; Freedman, 2008; Meier, 2011; Lunt and Livingstone, 2012). In contrast, the regulation of (tele)communications (including the Internet and mobile telephony) has mainly been based on the logic of economic efficiency (following the blueprints of competition policy). (See for example Bourreau et al., 2011; EU, 2004.)

The aim of this paper is to critically explore recent conditions for the democratic regulation of media and communications. It is assumed here that, for both technological and political reasons, the formerly distinct branches of the media and communications industries today intersect to the point where they are converging. It is assumed further that, whereas these branches used to be governed under different regulatory regimes (following the industry-specific approach), it now appears necessary to negotiate a new "converged" regulatory regime, balancing the diverging logics (towards a sectoral or multi-sectoral approach) (see Duijm, 2004).

3. CHANGES IN THE FIELD

As mentioned above, media regulation has traditionally been guided by public interest principles that respect social and cultural aims. However, the regulatory landscape has changed almost beyond recognition in the last 25 years. In the late 1980s, the branches of the media and communications were subject to industry-based regulation.

 Print media: Regulation is traditionally based on the freedom of the press principle (including goals such as pluralism and objectivity). There has been little statutory regulation, except for the ex-post¹ con-

¹ Ex-ante means are "before the event" measures, which, in media and communications policy, include state subsidies and operating licences. Ex-post means are "after the event" measures, sanctioned, for example, in criminal and competition law.

trol of content based on criminal law and, in many countries, restrictions on ownership (Iosifidis, 2010).

- Audiovisual media: Most broadcasting in Europe used to be based on the principle of public service and state monopoly and couched in terms of specific legislation. In some countries (for example the UK and Finland), the commercial sector was regulated ex-ante by operating licences with content obligations, decreed by law.
- Telecommunications: In most European countries, telecommunications used to be a state monopoly operating under a Universal Service Obligation, guaranteeing basic telephony services to all households, supported by specific legislation.
- Recorded media: Regulation has been based mostly on copyright law (ex-post means), and implemented primarily by co- and self-regulatory means (through collecting societies).

Since then, the following fundamental changes have taken place (see Michalis, 2007; Harcourt, 2005; Charles, 2009; Hardy, 2008; Palez and Jakubowicz, 2003; Papathanassopoulos, 2002; Iosifidis et al., 2005; Terzis, 2008; Terzis, 2007; Levy, 2001):

- Public monopolies (public service broadcasters, telecoms operators) have all but lost their status. Instead, the media landscape is increasingly characterised by the expansion of private companies and market fragmentation.
- Despite globalisation, there is no unified global regulatory framework for the media and communications market; the regulatory actors own conflicting competences (global, regional, national regulators; government agencies, co- and self-regulatory bodies, civil society watchdogs).
- As a result of technological convergence and digitalisation, content can be easily formatted for different markets. This has greatly challenged the basic legitimacy of traditional copyright regulation (controlling piracy and distribution of illegal content) and emphasising ex-ante regulation.

All these trends – globalisation, market fragmentation and technological convergence – have created a situation where traditional industry-based

regulation has lost much if not all of its validity. The old regulatory framework struggles to balance the different interests represented in the field. This predicament is not, however, unique to media and communications regulation, but is shared within the wider field of regulation (see Prosser, 2010; Black et al., 2005).

4. The regulator's viewpoint

In recent years, legislators have exerted great efforts to create an integrated regulatory framework for all media and communications. Some of the recent regulatory applications include:

- An attempt to attain technology neutrality in statutory regulation (Reed, 2007; MinTC, 2011);
- A drive for more concentration on regulatory surveillance and control (the establishment of independent regulatory authorities with a multi-sectoral approach) (EPRA, 2012);
- Soft law and co- and self-regulatory solutions, aiming for 'light touch' regulation;
- Emphasis on economic criteria as the main measure of regulatory efficiency (from ex-ante regulation to ex-post regulation).

This attempt to streamline media and communications regulation seems to distance it irrevocably from its earlier social and cultural commitments, and brings it closer to competition policy aims, measured solely by the criterion of economic efficiency. A major process is under way to renegotiate the concept of public interest the media and communications are assumed to serve. If economic efficiency is seen as the goal, public interest is redefined in terms of unrestricted competition and "fair trade", which allegedly benefit both private firms, by equalising the terms of entry to the market, and the consumer, by lowering prices and offering better choice. As the OECD puts it:

Different rationales for economic regulation have been put forward. One is to curb potential market power and increase efficiency or avoid duplication of facilities in cases of natural monopoly. Another is to protect consumers and maintain quality and other standards including ethical standards in the case of professional services provided by doctors, lawyers, etc. Regulations may also be enacted to prevent excessive competition and protect suppliers from unstab*le output and low price conditions, to promote employment and more equitable distribution of income. (OECD, 2002).*²

In practice, this emphasis on economics is experienced in the way public service broadcasting has been dealt with in the EU. In the Amsterdam protocol (1997), the duality of values concerning the media was clearly expressed: public funding of broadcasting was allowed only on the basis that it did "not affect trading conditions and competition in the Community to an extent which would be contrary to the common interest" (Amsterdam Treaty, 1997). This approach was further operationalised later in the 2000s in the form of Public Value Tests (see Communication 2009/C.), in some cases opening the way for private media companies to intervene directly in the operational conditions of public service broadcasters (Donders and Moe, 2011; Lowe and Steemers, 2012).

5. AN IDEAL-NORMATIVE VIEWPOINT

From a normative viewpoint, several researchers have claimed that the balance in media and communications regulation has tipped too much in favour of (private) economic interests (van Cuilenburg and McQuail, 2003; Meier, 2011). What should be done to correct this bias, and on what basis should a new balance be established? The following expresses one way to clarify the normative standpoint, from which a more qualified concept of public interest could be derived:³

In a democratic society, the media and communications system should serve citizens with all relevant information and orientation necessary for independent opinion-forming and decision-making. This includes the stipulation that citizens are guaranteed, by statutory means if necessary, open access to all relevant information channels as well as equal availability of all relevant content. Additionally, in order to promote public culture and to give citizens a voice, the media and communications system should offer citizens equal means for creative self-expression.

Using this definition as our normative guideline, we are left with the questions proposed above.

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² Obviously, the two last aims – "to promote employment and more equitable distribution of income" – seem to sit rather uneasily with other rationales, as they cannot be measured by economic indices only.

³ The following formulation is by the author.

Regulation of what?

The regulation of the media and communications industries has traditionally differed from one sector to another. Can we assume that, because of technological and economic convergence, the increasingly intersecting sectors of media and communications can be governed and regulated as one entity? Or would a sector-based approach serve citizens' democratic needs better – and how can we define these sectors today?

Regulation for what?

In media and communications policy, the concept of public interest has traditionally been based on a balance between democratic societal needs and economic interests. In recent decades, this balance has shifted in favour of economic interests. The question is whether we should still aim to establish a "one-size-fits-all" definition of public interest in the new converged regulatory environment, the result of which might be that public interest is increasingly defined in terms of competition policy. Or would citizens' democratic needs be better served by the recent "hybrid" or multi-dimensional definition?

Regulation by whom?

In global media and communications policy, a five- to six-level regulatory system seems to be developing. This can be seen, for example, in the realm of copyright regulation: the global level (WIPO, 2012; TRIPS, 2012); the EU level (EU Copyright Directive, 2001); national level (Finnish copyright act, 1961); co-regulatory level (Collecting Societies, 2012); industry self-regulatory level (e.g. attempts for DRM standardisation); and neo-corporatist (or joint-regulatory) level (Finnish Copyright Council, 2012). There is a problem of coordination, in that it is difficult or impossible to apply traditional concepts and modes of regulation to the new environment. This inevitably leads to confusion of competences and authority, even on the national level, as can be seen in the realm of Internet regulation.⁴ How democratic is this system? How is it coordinated? From the citizens' viewpoint, does it produce just and fair negotiating positions?

⁴ There are several agencies in the field of Internet regulation with overlapping competences:

[•] Finnish Communications Regulatory Authority FICORE (network security),

[•] Consumer ombudsman (online services subscriptions),

[•] Competition ombudsman (pricing of services, etc.),

[•] Data protection ombudsman (privacy protection, etc.),

[•] Police (protection of minors, etc.),

[•] Save the Children (safer Internet),

[•] Federation of the Brewing and Soft Drinks Industry (alcohol advertising),

[•] The Copyright Information and Anti-Piracy Centre (CIAPC).

Regulation by what means?

Traditionally, the media have been regulated by a mix of ex-ante and expost means⁵, applied variably in different sectors of media and communications regulation, from state subsidies and television operating licences (ex-ante) to the control of advertising content and libel litigations (ex-post). Now, with the drive towards competition policy, ex-post means appear to be favoured exclusively. What would constitute the right combination? How should the indicators of economic efficiency be best reconciled with social and cultural aims?

6. An attempt to devise a model for monitoring regulatory development

How are we to pursue a critical analysis of the present regulatory regime? One way could be to assess how different regulatory means and instruments have affected public interest as defined above, by listing and analysing the different instruments applied in European media and communications regulation. This would offer a tool for long-term monitoring of European regulatory development.

Initially, we can identify several types of regulatory instruments, based on the following distinctions:

- 1. the distinction between
 - 1.1 ex-ante and
 - 1.2 post-ante regulation
- 2. the distinction between
 - 2.1 positive
 - 2.2 negative and
 - 2.3 neutral (if applicable) regulation
- 3. regulation by
 - 3.1 government
 - 3.2 co-regulatory bodies
 - 3.3 self-regulatory bodies
 - 3.4 a watchdog.

Below, I present an outline analytical table. In order to classify measures (positive ex-ante, positive post-ante, etc.), explicit criteria need to be created.

⁵ See the footnote 1.

By way of example, the classification could be conducted as follows:

- Positive ex-ante regulatory instruments include PSB stipulations as well as operating licences for commercial television channels in which conditions for content are stipulated.
- Negative ex-ante instruments include, for instance, public value tests, as they aim to limit the range of public service programming.
- Positive ex-post regulatory instruments include, for example, public rewards and prizes, granted to content providers for high quality.
- Negative ex-post instruments include penalty payments for operators violating licence conditions.

Table 1: Categories of instruments applied in media and communications regulation

	Ex-ante measures	Post-ante measures
Positive means	 PSB stipulations Broadcasting operating licences Press subsidies The MEDIA Programme Market analysis & universal service obligation (USO) 	Public rewards
Negative means	 Public value tests (public service broadcasting) Audiovisual Media Services Directive (AVMSD) Watershed stipulations (self-/co- regulation) Alcohol advertising (statutory/ self-regulation) Ethical codes (self-regulation) Ownership restrictions 	 Criminal law Competition law Ombudsman (statutory/self-regulation)
Neutral means	 Radio frequency auctions Copyright law (statutory/co-/self-regulation) 	Copyright enforcement (statu- tory/co-regulation)

7. CONCLUDING REMARKS

The basic assumption in this paper is that a shift has taken place in the regulation of the media and communications industries, favouring regulatory means formerly used mainly in the area of competition policy. By the same token, regulatory means based on democratic societal values have lost out. Simultaneously, however, there is growing awareness that, because of the wider societal and cultural value of the media and communications, regulation can no longer be based exclusively on economic goals. A new balance between democratic societal interest and economic need must be negotiated that does not disproportionately favour either side.

The continuing multilevel process of convergence makes it difficult to determine how best to coordinate the traditionally quite different regulatory systems of the media and communication industries. Not only do the sectors differ from one another, but also a wide array of regulatory instruments has been applied – sometimes for wholly dissimilar purposes. In this paper, an approach based on the distinction between ex-ante and post-ante regulatory means is discussed. It appears, at first sight, that democratic societal values have in the past been mostly served by positive ex-ante regulatory instruments, whereas economic interests have been promoted mainly by negative post-ante means.

Further analysis is needed to establish whether the proposed approach is fruitful in exploring the means for democratic regulation of the media and communications.

References

- Amsterdam Treaty (1997) 11997D/PRO/09: 'Treaty of Amsterdam amending the
- Treaty on European Union, the Treaties establishing the European Communities and certain related acts – Protocol annexed to the Treaty of the European Community – Protocol on the system of public broadcasting in the Member States'. Official Journal C 340, 10/11/1997, p. 0109. Downloaded on 15 October 2012 from http://eur-lex. europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:11997D/ PRO/09:EN:HTML.
- Black, J. (2002) 'Critical reflections on regulation', Australian Journal of Legal Philosophy, 1(27), 1-35.

- Black, J., Lodge, M., Thatcher, M. (Eds.) (2005) *Regulatory innovation: A comparative analysis*. Cheltenham: Edward Elgar.
- Bourreau, M., Cambini, C., Hoerning, S. (2012) 'Ex ante regulation and coinvestment in the transition to next generation access', *Telecommunications Policy* 26: 399-406. Downloaded on 15 October 2012 from doi:10.1016/j.telpol.2011.11.024.
- Charles, A. (2009) *Media in the enlarged Europe: Politics, policy and industry.* Bristol: Intellect.
- Christensen, J. G. (2010) 'Public interest regulation reconsidered: from capture to credible commitment'. Paper presented at "Regulation in the Age of Crisis", ECPR Regulatory Governance Standing Group, 3rd Biennial Conference, University College, Dublin, June 17-19, 2010.
- Collecting Societies (2012) 'Copyright organisations in Finland'. Downloaded on 15 October 2012 from http://www.minedu.fi/OPM/Tekijaenoikeus/oikeuksien_hallinnointi_ja_hankinta/?lang=en.
- Communication (2009) 'Communication from the Commission on the application of State aid rules to public service broadcasting'. (Text with EEA relevance) (2009/C 257/01.) Information from European Union Institutions and Bodies, Commission. 27.10.2009. Official Journal of the European Union C 257, 1-14. Downloaded on 15 October 2012 from http://eur-lex.europa.eu/LexUriServ/LexUriServ. do?uri=CELEX:52009XC0930(02):EN:NOT.
- Donders, K., Moe, H. (Eds.) (2011) *Exporting the public value test: The regulation of public broadcasters' new media services across Europe*. Gothenburg: Nordicom.
- Duijm, B. (2004) 'On the institutional setting of ex-post regulation in regulated industries'. Downloaded on 15 October 2012 from http://www. garsonline.de/Downloads/Regulation%20of%20Airports/021108-Duijm.pdf.
- EPRA (2012) 'European Platform of Regulatory Authorities'. Downloaded on 15 October 2012 from http://www.epra.org/.
- EU Copyright Directive (2001) 'Copyright directive and related rights in the information society'. Downloaded on 15 October 2012 from http://europa.eu/legislation_summaries/information_society/ data_protection/l26053_en.htm.
- EU (2004) 'EU competition policy and the consumer'. Luxembourg: Office for Official Publications of the European Communities. Downloaded on 15 October 2012 from http://ec.europa.eu/competition/ publications/consumer_en.pdf.
- Finland Copyright Act (1961) 'Finland Copyright Legislation 2010. Unofficial Translations in English.' Ministry of Education and Culture.

Downloaded on 15 October 2012 from http://www.finlex.fi/en/laki/kaannokset/1961/en19610404.pdf.

- Finnish Copyright Council (2012) 'Copyright Council.' Downloaded on 15 October 2012 from http://www.minedu.fi/OPM/Tekijaenoikeus/ tekijaenoikeusneuvosto/?lang=en.
- Freedman, D. (2008) The politics of media policy. Cambridge: Polity.
- Harcourt, A. (2006) *European Union institutions and the regulation of media markets.* Manchester: Manchester University Press.
- Hardy, J. (2008) Western media systems. London: Routledge.
- Harrison, J., Woods, L. (2007) *European broadcasting law and policy*. Cambridge: Cambridge University Press.
- Iosifidis, P. (2010) 'Pluralism and concentration of media ownership: measurement issues', *Javnost–The Public*, 17(3): 5-21.
- Iosifidis, P., Steemers, J., Wheeler, M. (2005) *European television industries*. London: BFI.
- Levy, D. (2001) *Europe's digital revolution: Broadcasting regulation, the EU and the nation state.* London: Routledge.
- Lowe, G. F., Steemers, J. (Eds.) (2012) *Regaining the initiative for public service media: RIPE 2011.* Gothenburg: Nordicom.
- Lunt, P., Livingstone, S. (2012) *Media regulation: Governance and the interests of citizens and consumers*. London: Sage.
- Meier, W. A. (2011) 'From media regulation to democratic media governance', pp. 153-166 in J. Trappel, W. A. Meier, L. D'Haenens, J. Steemers and B. Tomass (Eds.) *Media in Europe today*. Bristol: Intellect.
- Michalis, M. (2007) *Governing European communications: From unification to coordination*. Lanham, MD: Lexington.
- MinTC (2011). 'Regulations for electronic communications to be gathered in one location'. Press release 06.09.2011. Ministry of Transport and Communications, Finland. Downloaded on 15 October 2012 from http://www.lvm.fi/web/en/pressreleases/-/view/1268461.
- Napoli, P. M. (2001) Foundations of communications policy: Principles and process in the regulation of electronic media. Cresskill, NJ: Hampton Press.
- Nielsen, R. K. (2011). 'Public support for the media: A six-country overview of direct and indirect subsidies'. With Geert Linnebank. A Report. Oxford: Reuters Institute for the Study of Journalism. Downloaded on 15 October 2012 from http://reutersinstitute.politics. ox.ac.uk/fileadmin/documents/Publications/ Working_Papers/ Public_support_for_Media.pdf.
- OECD (2002). 'Regulation' in *Glossary of statistical terms*. Downloaded on 15 October 2012 from http://stats.oecd.org/glossary/detail. asp?ID=3295.

- Palez, D. L., and Jakubowicz, K. (Eds.) (2003) *Business as usual: Continuity and change in central and eastern Europe*. Cresskill, NJ: Hampton Press.
- Papathanassopoulos, S. (2002) European television in the digital age. Cambridge: Polity.
- Prosser, T. (2010) *The regulatory enterprise: Government, regulation and legitimacy*. Oxford: Oxford University Press.
- Reed, C. (2007). 'Taking sides on technology neutrality'. *Script-ed.* 4(3), September. Downloaded on 15 October 2012 from http://www. law.ed.ac.uk/ahrc/script-ed/vol4-3/reed.pdf.
- Springer, M. (2006). 'Considerations on DRM standards'. Downloaded on 15 October 2012 from http://camorra.org/drm_standards/.
- van Cuilenburg, J., and McQuail, D. (2003) 'Media policy paradigm shifts: Towards a new communications policy paradigm', *European Journal* of Communication, 18(2): 181-207.
- Terzis, G. (Ed.) (2008) European media governance: The Brussels dimension. Bristol: Intellect.
- Terzis, G. (Ed.) (2007) European media governance: National and regional dimensions. Bristol: Intellect.
- TRIPS (2012) 'Trade-related Aspects of Intellectual Property Rights'. Downloaded on 15 October 2012 from http://www.wto.org/english/tratop_e/TRIPS_e/TRIPS_e.htm.
- WIPO (2012) 'World Intellectual Property Organisation'. Downloaded on 15 October 2012 from http://www.wipo.int/portal/index.html.en.