

Quis custodiet ipsos custodies in the Internet: self-regulation as a threat and a promise

Jonathan Cave and Christopher Marsden

University of Warwick, University of Essex

28 September 2008

Online at https://mpra.ub.uni-muenchen.de/83193/ MPRA Paper No. 83193, posted 11 December 2017 14:10 UTC

Quis custodiet ipsos custodies in the Internet: self-regulation as a threat and a promise

Jonathan Cave j.a.k.cave@warwick.ac.uk Chris Marsden cmars@essex.ac.uk

Chapter 1 Introduction and Objectives Methods and Description European Regulatory Context Changing Regulatory Agendas Defining Co- and Self-regulation The Place of the European Union in Self- and Co-regulation Approach Taken in the Paper	3 3 4 6 7
Chapter 2 Analysing Existing and Proposed Arrangements Drivers of XRO Formation Theoretical and Empirical Analytic Models of XRO Operation Suggested Framework for Developing Intervention Logic for XRO Analysis General Advantages, Disadvantages and Risks Associated with XROs Conclusions	. 10 . 12 s20 . 22 . 25
Chapter 3 Policy Alternatives and Impact Assessment Strategies Scenarios of European Commission Action/Inaction General Criteria for Choosing Options Risk and Regulation Framework Conditions Favouring or Hindering Self- and Co-regulation General Principles of Regulation European XRO Options Options to Consider in European Union Ex Ante Impact Assessments Policy Scenario Context Issues Arising in Relation to XRO Impact Assessment	. 28 . 29 . 30 . 31 . 33 . 34 . 34 . 35
Chapter 4 Conclusions and recommendations	. 41
Appendix: Case Study Results: Describing Existing XROs Contextual Classification of Case Studies Financing and Budget of XROs Responsiveness and Flexibility of Self-regulation Gap Analysis Conclusion: XRO Case Studies and Impact Assessment Implications	. 42 . 44 . 45 . 52
Bibliography	. 58

Chapter 1 Introduction and Objectives

The ICT domains (IT- and telecom-specific sectors and other areas of activity affected by their development) have always been subject to some degree of technical, economic and/or societal regulation. The traditional basis for these interventions was a 'governance gap' between the economically-motivated activities of key stakeholders and the external consequences for other firms, end-users, public services, etc. Recent changes in market and societal context and policy initiatives such as the Lisbon and 'Better Regulation' agendas have triggered a reconsideration of this basis. Four developments in particular are particularly challenging:

- 1. enterprise convergence and divergence that reshape market and sector boundaries;
- 2. the evolution of 'converged' regulators along sectoral (e.g. UK) or networkindustry (e.g. Netherlands, Germany) lines;
- 3. new regulatory concerns (e.g, Intellectual Property Rights, RFID, net neutrality); and
- 4. changes in the European policy context (the regulatory framework review, the Better Regulation agenda; new directives relating to e.g. online media services, etc.).

These have combined to lay the foundation for crosscutting reviews and rebalancing of regulatory roles and responsibilities which can have profound structural and dynamic implications.

From the policy formulation perspective, this changing landscape is recognised in requirements for both *ex ante* and *ex post* regulatory impact analysis, assessment and evaluation. Detailed and concrete procedures have been developed that support a balanced view of both the sector-specific and competition-related impacts of regulatory (and other) interventions in the ICT domains. But this development has been largely confined to formal or statutory regulation, while much of the governance in these domains is provided by a spectrum of self- and co-regulatory organisations (hereafter referred to as XROs).

It is therefore timely to consider what sorts of self- and co-regulatory arrangements exist, what issues they address, what other impacts they produce and, in general, how their existence affects regulatory 'rethinking' and assessment. At a minimum, regulatory impact analysis needs to take into account:

- The pre-existence, structure and performance of XROs involving key stakeholders and/or addressing the issues addressed by the proposed regulation
- The ongoing role and activities of XROs as part of the context for both 'laissezfaire' and statutory regulation; and
- The advantages and risks for strategies that seek to achieve regulatory objectives through explicit reliance on or support for XROs (e.g. by delegating authority, endorsing XRO-produced standards and Codes of Conduct, or providing monitoring and enforcement support).

The research reported in this paper analyses the roles, functions and impacts of these organisations in various ICT-related domains and considers their implications for developing a regulatory posture that is more supportive of overarching policy objectives, more transparent and accountable, more flexible in response to technological and other

changes, less burdensome to those regulated and less likely to distort market outcomes and evolution.

Methods and Description

The research reported here is based on:

- a review of the literature surrounding self-regulation (in a wide range of contexts, including financial services and professional self-regulation),
- 21 extended case studies of Internet XROs (see Appendix),
- an analytic treatment of the determinants and impacts of XRO formation, agenda-setting, rules, monitoring, enforcement and compliance; and
- a policy analysis of the scope for regulatory engagement with XROs and methods option development and *ex ante* (and to a lesser extent *ex post*) evaluation.

Particular issues concern:

- the degree to which XROs are formed around specific issues, market segments, personalities or types of action (e.g. standardisation);
- whether different types of statutory or XRO governance are likely to adopt more stringent or more cost-effective rules;
- whether different arrangements are more vulnerable to capture or corruption;
- and whether compliance will be higher under specific types of arrangements.

These can be related to a number of topics of current interest. One is the issue of technological neutrality in reallocating market access rights. For instance, new blocks of spectrum are currently being allocated (or considered for allocation) for a range of new uses from active RFID through WiMax and extensions of mobile broadband. Previous experience with e.g. GSM suggested that early standardisation was advantageous (at least in European markets) because it encouraged hardware manufacturers to invest in GSM-compliant handsets, thus assuring rapid attainment of critical mass. But this association of a particular spectral area with a single use also risks crowding out superior (or simply different) technologies, and current plans for spectrum allocation in e.g. the 2.6GHz band are explicitly technology neutral, allowing both a range of initial uses and subsequent trading of licenses if other uses prove more attractive. This creates a tension that must be resolved, and the participation of different players in self-regulation, like their participation in the initial auctions, will play a strong role.

A second example can be seen in recent calls (in the UK and France) for Internet Service Providers (ISPs) to monitor and enforce intellectual property rights. The preferred mode is a form of co-regulation; ISPs are supposed to do this voluntarily, but face fines if they fail to perform this regulatory function. While it *may* be argued that ISPs are best-placed to do this, it is clear that the benefits accrue mainly to content owners. The market solution would be a sharing of the gains between the two sides, but this potentially conflicts with 'net neutrality' proposals to prevent ISPs from discriminating on the basis of content.

European Regulatory Context

The purpose of this study was to:

"support policy design and impact assessments by assessing the efficiency, effectiveness and sustainability of existing co- and self-regulatory regimes in the field of Information Society services and other digital content and applications. The study shall identify the conditions in which co- or self-regulation (initiated or mediated by the EC) could best enable innovation in Europe while upholding safety, security and fundamental rights."

Individual case studies provided the raw material for this cross-cutting and analytical final task. In this report we lay out the intervention logic required to assess the individual case studies (with the caveat that the case studies represent a snapshot of best and most representative practices in larger Member States). It is apparent that the process of establishing self- or co-regulatory organisations (XROs) in this field requires a series of policy trade-offs, which are detailed in Chapters 3 and 4. There is no 'magic bullet' in Internet regulation, and resolving contested policy claims between the moving targets of competitiveness and innovation, and public safety and security concerns, is a continual political judgement. The benefits of 'unregulation' or 'pre-regulation' must be judged against the maturing of markets and the political judgement of intervention logic.

The regulatory playing field in the European Union (EU) is dynamically evolving. This reflects developments in market and societal contexts, as well as a changing political context. Particularly in relation to the information and communication technology (ICT)-enabled sectors, the identities of key stakeholders, the nature of their participation and the spillover impacts onto a broad range of societal and political objectives are changing rapidly. The resulting challenges have created strong impetus for a fresh look at regulatory engagement.

Changing Regulatory Agendas

This dynamic development is reflected in three main agendas.

Redrawing Regulation

The first is concerned with regulation itself, and the extent to which regulatory lines of action and accountability need to be redrawn in response to (or anticipation of) changes arising in the market and society more broadly. Specific examples include the following:

- the increased need to rethink regulatory strategies applying to transnational or global entities and markets;
- the growing overlap of technical, economic and societal regulatory objectives and tools;
- the need to 'join up' regulatory activities arising at different levels of government and within different ministries (policy domains);
- regulation and competitive markets change, but they do not necessarily change at the same pace and in the same fashion, thus allowing a growing space for risk of inconsistency or incompatibility;
- regulatory competition among neighbouring jurisdictions;
- the growth and dynamics of a wide variety of alternatives to formal commandand-control regulation; and
- changing needs for regulation, as old rules cease to be relevant and new ones are required.

In the face of these challenges, three general principles emerge to guide regulatory change:

 regulations and regulatory policy should be adjusted in order to increase efficacy (contributions to overarching policy objectives, including remedies for market failure);

- 2. burdens of rule-making, enforcement and compliance should be reduced or reallocated (changing means – how to regulate the things that are regulated, or how to achieve regulatory objectives by choosing whom to regulate); and
- 3. adaptability and flexibility in the face of changing circumstances should be improved (changing ends - whether to stop regulating something or someone because it is no longer necessary, or because the costs (now) outweigh the benefits, or whether to start regulating some new activity or area).

The main implications are the need to survey the range of regulatory or governance structures arising outside government and to assess their implications for future regulatory strategy as:

- part of the *overall context* within which regulation takes place;
- a potentially more efficient agent of the public interest; and •
- an *active partner* in responding to the challenge of rapid change. •

These needs find concrete expression in a variety of policy initiatives¹ responding to new and emergent challenges, many of which envisage (or at least recognise) both the importance of self- and co-regulatory solutions and the particular advantages and risks posed by reliance on such approaches.

Better Regulation

A second, and closely-related, agenda goes under the general heading of 'Better Regulation'. While it stresses some of the same general principles for good regulation arising from the regulatory change agenda, it lays particular emphasis on the need to assess carefully the impacts of proposed changes in regulations and regulatory arrangements. It finds concrete expression in a range of policy documents relating to regulation in general² and specific guidance relating to evaluation and Impact Assessment (IA). With reference to alternatives to regulation, key aspects are the need to:

- perform holistic *ex ante* assessment of impacts; •
- consider relevant alternatives in such assessment; •
- take into account a range of potential impacts (costs, benefits, distributional • impacts, administrative requirements); and
- measure and, where possible, monetise such impacts on the basis of sound data • and analytic methods.

These general principles are not yet, in general, reflected fully in the state-of-the-art³: alternatives are rarely identified, the range of impacts considered is often narrow and measurement and monetisation remain relatively underdeveloped, especially in relation to self- and co-regulatory initiatives where necessary information may be difficult to obtain or validate. Thus there is a need to develop further the implications of self- and co-regulation for the practice of IA and to identify ways in which clear and consistent principles and practices can be implemented.

It is important to note that, while the focus of the study is on ex ante assessment of alternatives, there are clear implications for both the *ex post* monitoring and evaluation

¹ E.g. Recommendation for Protection of Minors and Human Dignity, Safer Internet Action Plan, Electronic Communications Framework, Content Online policies, eCommerce Directive, Television without Frontiers (now AVMS) Directive, Communication on Computer Crime.

² Examples include the European Commission (2002) Better Regulation Action Plan and the 2003 Inter-institutional Agreement on Better Regulation. ³ European Policy Forum (2006), Jacobs (2005, 2006), Torritti (2007).

of regulatory performance delivered by self- and co-regulatory initiatives (and by regulatory initiatives in a context that includes independent self-regulation), and the progressive development of information sources and analytic tools relating to such assessments.

Lisbon Agenda and i2010

A third, and in many ways overarching, element of context is provided by the EU Lisbon Agenda and associated policy initiatives (e.g. the i2010 Policy Framework). The Lisbon Agenda establishes macroeconomic and societal goals from which the criteria for regulatory strategy and implementation should be derived, and to which the contributions of regulatory alternatives (including self- and co-regulation) should be assessed. One special area of activity concerns the Information Society, of which Europe has devoted an enormous amount of effort and resources to integrated development. The Information Society raises particular concerns in relation to self- and co-regulation; the policy contexts and market structures in ICT sectors differ strongly from those in other contexts, as do the strength and duration of linkages among key participants. Thus, while many sectors have developed strong traditions of self-regulation (including many professions, financial services and environmental management), it is in ICT that self-regulation has developed perhaps the richest variety of forms and tackled perhaps the largest range of policy concerns.

Comparative studies have shown major differences between Europe and, for example, the US⁴, among EU Member States⁵ and between the European Commission (EC) and Member States⁶ in terms of approaches to self-regulation. This not only reinforces the importance of building on the strong lead taken by EU institutions as a way of improving the global business climate for European enterprises, but also – critically – as a way to ensure that the progress made in tackling regulatory problems within Europe is not undone by fragmentation or a regulatory 'race to the bottom' on the world scale.

Defining Co- and Self-regulation

Our approach to co- and self-regulation uses the definitions explained most definitively in the 2003 Inter-institutional Agreement⁷. We also note the 2006 Recommendation⁸ and Audio Visual Media Services (AVMS) Directive 2007/65/EC at Recital 36⁹:

"self-regulation constitutes a type of voluntary initiative, which enables the economic operators, social partners, non-governmental organisations or associations to adopt common guidelines amongst themselves and for themselves ... Co-regulation gives, in its minimal form, a legal link between self-regulation and the national legislator in accordance with the legal traditions of the Member States. Co-regulation should allow for the possibility for State intervention in the event of its objectives not being met."

⁴ Newman and Bach (2004)

⁵ Finger and Varone-(2006), Coen (2005), Wilks (2005).

⁶ Borraz (2007).

⁷ For those actions that require coordinated or joint implementation by the institutions, the European Parliament, the Council and the Commission adopted in 2003 an inter-institutional agreement to provide a stable context for better regulation. Its objective is to improve the quality of Community legislation, its accessibility and its transposition into national law. The agreement entrenches best practices and sets out new objectives and commitments (cf. note 12).

⁸ Recommendation of the European Parliament and of the Council of 20 December 2006 on the protection of minors and human dignity and on the right of reply in relation to the competitiveness of the European audiovisual and on-line information services industry, OJ L378, 27.12.2006, p. 72.

⁹ DIRECTIVE 2007/65/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2007 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 (AVMS Directive) OJ L332, 18.12.2007, at: http://eur-lex.europa.eu/LexUriServ/site/en/oj/2007/1_332/1_33220071218en00270045.pdf.

Definitions from the Inter-institutional Agreement

Co-regulation: "The mechanism whereby a Community legislative act entrusts the attainment of the objectives defined by the legislative authority to parties which are recognised in the field (such as economic operators, the social partners, NGOs [non-governmental organisations] or associations)."

Self-regulation: "The possibility for economic operators, the social partners, NGOs or associations to adopt amongst themselves and for themselves common guidelines at European level (particularly codes of practices or sectoral agreements)."

The rules on the functioning of the social dialogue (Articles 138 and 139 of the Treaty establishing the European Community) and standardisation according to the 'New Approach' are not affected by this agreement.

Co-regulation and self-regulation "will not be applicable where fundamental rights or important political options are at stake or in situations where the rules must be applied in a uniform fashion in all Member States". Under co-regulation, following notification of a draft agreement prepared by interested parties, the Parliament and the Council will have the right to suggest amendments to the agreement, object to its entry into force and, possibly, ask the Commission to submit a proposal for a legislative act. As for self-regulation, the Commission will keep the legislators informed by reporting on the practices it regards as effective and satisfactory in terms of representativeness.

In general, this study has examined most closely the self-regulatory institutions tending towards self-organising¹⁰ types – those in which either the market or the individuals in a network create rules without a pan-sectoral regulator of either self-, co- or government-led type. This has permitted a greater richness in exploring 'emergent' forms of self-regulation in conforming to the terms of reference and in helping to map the issues and gap analysis required.

The project has explored fully the place of self- and co-regulation and the classification of the 21 empirical case studies (see Appendix). For readability, the range of co- and self-regulatory organisations is referred to as XROs in the rest of the report.

The Place of the European Union in Self- and Co-regulation

Four elements reinforce the role of EU institutions in addressing issues arising from the practice and assessment of self- and co-regulation:

- the EU has particular competence in specific policy areas where alternatives to regulation can be of particular importance, deriving from the legal base¹¹;
- the EU has established already a lead role in articulating the Better Regulation Agenda, laying out an implementation framework through the Interinstitutional Agreement on Better Regulation and driving forward progress on integrated impact assessment¹²;

¹⁰ Latzer, et. al. (2006).

¹¹ Many of these derive from Treaty articles relating to the Internal Market (esp. Articles 43 and 49) and are further elaborated in the European Commission Communication "i2010 – A European Information Society for growth and employment" {SEC(2005) 717} at: http://eur-ex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2005:0229:FIN:EN:PDF.

¹² See e.g. the Better Regulation Action Plan (COM(2002)278 final), at: http://eur-lex.europa.eu/LexUriServ/LexUri Serv.do?uri=COM:2002:0278:FIN:EN:PDF. On Impact Assessment, see Communication on Impact Assessment of 5 2002 (COM(2002)276 June final), http://eurat: lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2002:0276:FIN:EN:PDF and the Inter-Institutional Agreement Better Lawmaking, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri= on at: OJ:C:2003:321:0001:0005:EN:PDF and especially the common approach to integrated impact assessment at: http://ec.europa.eu/governance/impact/docs/key_docs/ii_common_approach_to_ia_en.pdf.

- many of the issues raised, in terms of regulatory competence and objectives, and of evidence collection and IA, are inherently cross-border; and
- in recognition of subsidiarity, the most common EU instrument of regulatory policy is the Directive, rather than the European Regulation. The use of this instrument in areas where self- and co-regulatory alternatives are likely to be relevant requires concrete and consistent guidance to implementing Member States, in order to avoid policy fragmentation or even conflict that might imperil the impacts intended by the Directive and broader European economic and social policy goals whose achievement rests on the removal of regulatory and market barriers and fragmentation. Although formal mechanisms exist for harmonising and reconciling formal regulation in different Member States, they may prove to be less effective in relation to self-regulatory institutions.

Particular subjects for assessment include the contribution of activities under the Better Regulation and IA agendas to the efficiency, flexibility, innovativeness and competitiveness of the Single Market (in particular impacts on internal barriers to entry, dominance and collusion), the position of European firms in the global economy and the extension of European perspectives and progress beyond its borders.

Against this background, we note the explosion of varieties of XROs in ICT-related sectors, and the development of both theoretical and applied approaches to understanding their genesis and impacts, including self-organisational forms in social networks (Bebo), virtual worlds (SecondLife), coordination mechanisms (London Action Plan and Internet Governance Forum), and new legal movements (Creative Commons). Progress in this area has tended to be driven by external developments, historical experience and haphazard application of a variety of conceptual frameworks, strategic options and assessment tools. This document is intended to assist the integration of policy approaches to XRO options in the particular contexts of EC-level activity, ICT-related sectors and issues and *ex ante* IA. It does this by means of the approach described in the following chapter.

Approach Taken in the Paper

The following chapter lays out the evidence base and the detailed analytic framework to be followed. In particular, it identifies the various types of case study, the theoretical evidence and the policy-related evidence, and the contributions to be expected from each. This is translated into a taxonomic framework to organise the evidence and to serve as a starting point for the definition, specification and assessment of self- and co-regulatory alternatives to regulation. It also briefly summarises the main issues and methods used in the peer-reviewed and policy-related literatures, concluding with an assessment of how these different evidence bases combine to advance the overall goal.

(The Appendix provides a descriptive summary and analysis of existing arrangements organised along the taxonomic dimensions most relevant for regulatory assessment. These include structural and conduct descriptions, performance indicators and (critically for independent institutions) dynamic forces that shape their origins, participation, agenda, activities and future growth. It concludes by drawing lessons for the sector-specific and other features that should be taken into account in IA.)

Chapter 3 builds on these regularities by drawing out results from the peer-reviewed and policy literature that either confirm the case study observations or suggest limits to their ability to be generalised. The theoretical analysis, which reflects issues arising in many national and sectoral contexts, concentrates on the incentives shaping participation, enforcement and compliance and identifies key contextual and structural parameters. The policy-related literature complements this by identifying particularly favourable or unfavourable areas for XROs, and by providing checklists linking good practice to policy areas and objectives. Together, these evidence bases enrich the taxonomy provided by the case studies by highlighting the 'intervention logic' (channel of impact) associated with specific arrangements, the range and potential severity of associated risks, key assumptions associated with expected results and criteria for use in performance assessment.

Finally, we integrate these findings to assist the development of logical frameworks for IA in relation to self- and co-regulation. It should be noted that the evidence does not automatically provide this basis. First, the evidence clearly demonstrates both the wide variety of forms that such options take and the apparently close connections between these forms and sectoral or national specificities. Second, because XROs arise and/or operate at least partially outside government control, they depart in three ways from the normal context of IA:

- they were not necessarily designed to advance public objectives, which are thus achieved as a 'by-product' of their defining *raison d'être* (e.g. interoperability as a by-product of Internet Engineering Task Force design principles);
- they often need to rely on voluntary self-interested behaviour for participation and compliance, which differentiates their command of resources, scope (who is bound by them) and effectiveness from those of similar formal regulatory initiatives (an example is the voluntary approach of the German FSM in search engine regulation as opposed to the co-regulation of KJM-audited processes);
- they do not have exclusive power within an integrated legal framework, and thus may compete with other self-, co- and formal regulatory bodies or face patchy legal underpinnings across their geographic sphere of activity (e.g. industry-led hotlines for illegal content).

As a result, familiar elements of the logical framework such as design and relevance, efficiency, effectiveness and sustainability may need careful interpretation, especially when comparing self-, co- and formal regulatory alternatives. Thus, this chapter includes an elaboration of basic and expanded options that may be relevant, and provides guidance as to how to specify the options and associated intervention logic, what criteria to apply at each stage, what evidence and indicators to use and what additional risks or external factors most affect the assessment.

As noted above, in many areas such initiatives are already underway. Thus they form part of the context for IA, even of formal regulatory approaches. In addition, the specific approach chosen and implementation details may strongly influence the assessment. Finally, for both evidence-gathering and implementation purposes, wide participation from the full range of affected stakeholders is essential. To assist further the implementation of the framework suggested in the penultimate chapter, the conclusion provides some procedural and conceptual recommendations. These include a road map for conducting such assessments, building a 'self- and co-regulation-aware' regulatory framework, and an expanded discussion of the range and practical implementability of criteria that are:

- common across all options and derived from, for example, the Better Regulation Agenda;
- specific to particular types of organisation or regulatory tool (e.g. codes of conduct, standards, certification, voluntary agreement); and
- reflective of particular sectoral considerations or policy domains (e.g. technical, content or quality-of-service).

Chapter 2 Analysing Existing and Proposed Arrangements

This chapter draws on the peer-reviewed and policy literature in order to draw out some insights into the processes by which XROs are formed, the mechanisms through which their effects are produced and the implications for regulation and Impact Assessment (IA). As a more theoretical chapter than the empirical Appendix, it raises the issues in ideal types of XRO. Together with the Appendix, this chapter leads to a synthesis of theoretical and empirical findings in the final main chapter.

Drivers of XRO Formation

The formation, behaviour and impact of XROs develop in response to a range of outside drivers. This chapter considers the evolution of such arrangements and develops an overview of the implications for EC action in relation to XROs and for IA.

Normally, XROs come into existence in response to *perceptions* of some sort of problem or challenge that is not effectively addressed by other (e.g. market or government) mechanisms. To lead to action, these perceptions must be accompanied by (positive or negative) *incentives*; their focus will significantly affect the development of the XRO. We identify four commonly occurring sources of incentives which should be considered when interpreting the behaviour of actual XROs or anticipating the results of future XRO activity, from:

- customer (downstream) and supplier (upstream) relationships;
- peer/rival (horizontal) relationships;
- relations with formal governance institutions; and
- other XROs.

Often, XRO formation is catalysed by a readily identifiable trigger event (e.g. public outrage at a report concerning child pornography), but this is not always the case: many arise from the slow build-up of pressure to address a minor issue that is expected to get worse unless action is taken (e.g. interoperability and other technical issues). Therefore we distinguish between trigger events; and trigger pressures.

The initial impetus may (and frequently does) come from a single individual or organisation, but if the XRO is not to be 'stillborn', consensus must be achieved at an early stage on the need to act (problem-level consensus) and (at least in outline) what action is needed (solution-level consensus).

This equates to Stock's concept of textual community formation¹³. The solution-level consensus will consolidate into the basic 'text' (or code), which may be highly complex, procedural as much as textual, dynamic and expressed in many formats. Given this very wide understanding of 'text', consensus will be enhanced by further 'buy-in' until a critical mass for implementation is reached. Implementation will (or should) involve the active engagement of the members of the community (beyond passive agreement with the consensual base). Implementation proceeds in parallel with refinement and/or updating of that consensual base, which in due course is likely to highlight additional challenges that supplement or supplant the operation of the XRO and require renewed consensus building.

¹³ Stock (1993). This work relates to mediaeval literature, but has been widely referenced in studies of development of technical bodies e.g. Marvin's (1998) study of electrical textuality as related to e.g. the American and British Institutes of Electrical Engineers, bodies which have quasi-regulatory functions in technical sectors.

In the absence of outside (e.g. EC or government) intervention, this evolutionary process naturally tends to follow participants' perceived best interests rather than the public interest (although altruism should not be totally discounted – much public good derives from voluntary private action). Thus the first point of 'intervention' of (particularly) the EC in this evolution may come very early, in the form of advice on the 'text' base and brokering consensus around a 'text' that reflects the public good. This may take the form of consultation with potential XRO participants during the creation of the text base (e.g. legal framework), advice as to how to discharge (especially self-regulatory) responsibilities, or the provision of an overarching policy framework that makes specific recommendations as to what responsibilities participants are expected to accept and what action may be taken to help or compel this¹⁴.

This simplified evolutionary model of XRO development allows a summary view of its relationship with different type of EC intervention and the implied IA, monitoring or evaluation requirements, as seen in Figure 4.

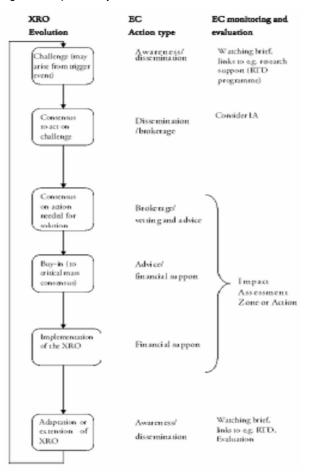


Figure 1: Impact analysis of XROs

¹⁴ A recent example is provided by the UK Department of Culture, Media and Sport consultation document *Creative Britain: New Talents for the New Economy* which, in chapter 5, lays out the expectation that ISPs will cooperate voluntarily in the enforcement of IPR and suggests that statutory penalties may be imposed if such self-regulation fails. See: http://www.culture.gov.uk/NR/rdonlyres/096CB847-5E32-4435-9C52-C4D293CDECFD/0/CEPFeb2008.pdf.

Theoretical and Empirical Analytic Models of XRO Operation

There is an extensive literature on XROs, stemming from experience with specific industries (financial services, environmental regulation and professional self-regulation in accounting, law, etc.) or widely-participatory self-regulation approaches to corporate social responsibility. This literature uses models extensively – models in this sense are abstract descriptions of more complex situations, simplified in order to highlight the impact of particular features or draw general lessons. The models themselves may be conceptual (including verbal descriptions), mathematical (especially those based on optimising or strategic behaviour) or empirical (e.g. econometric models used to test hypotheses derived from conceptual or mathematical models).

The literature differentiates situations where XROs serve:

- general public objectives directly linked to the economic interests of specific industry or stakeholder groups (e.g. environmental standards compliance);
- general public interests not directly linked to industry participants' interests, but which they are best placed to further (e.g. content filtration, privacy); or
- the interests of specific stakeholder groups threatened by informational or strategic market failure (e.g. anti-fraud or quality-of-service).

These distinctions shed light on the alignment of policy objectives with those of XRO participants, and on the likely extent of participation (highest for those participants whose interests are directly affected) and compliance (greatest for participants whose interests are most closely aligned with the XRO's collective preferences and/or those whose activities can be most easily monitored). These analyses also consider different formalisations of self- or co-regulation – especially whether the state initiates, backs or threatens the entity and the 'order of moves'. The analysis generally takes account of two effects which combine to determine how such organisations come into existence and affect market performance and public interest(s):

- selection: who chooses to participate and in what way; and
- *incentives*: how does the existence and activity of the organisation (and other players) affect market behaviour?

Generally these are subjected to *positive* analysis of the likely consequences of particular arrangements or institutional features. *Normative* analysis reverses this, seeking to identify optimal forms and amounts of self- and co-regulation on the basis of identification of the size and incidence of costs and benefits of alternative regimes. Both perspectives are relevant for XRO IA:

- positive analysis provides the expected impacts of both designed and 'native' XROs; and
- *normative* analysis is useful in the specification and design of arrangements.

Specifically, positive analysis is needed to take accurate account of existing XROs and their likely development, while normative analysis is needed for the design and specification of XRO-using options.

Theoretical and econometric models¹⁵ also differ in the assumed economic and legal context and the capabilities, information and objectives of those involved. Both provide relevant evidence and support for policy conclusions, but the nature of this support is

¹⁵ E.g. Ashby et al. (2004), Bauer and Bohlin (2007), Brunekreeft (2004), DeMarzo et al. (2000, 2005a, 2005b), Duncombe and Heeks (2002), Freytag and Winkler (2004), Gehrig and Jost (1995), Joskow and Noll (1999), Lyon and Maxwell (2003), Nunez (2007), Pirrong (2001), Polasky et al. (2006), Posner (1971), Priest (1997), Stefanadis (2003).

different. The construction and application of such models depends on specific structural issues.

- Who is bound by the regime and who has voice? The processes that determine these vary by degree of self-regulation:
 - formal regulation scope and voice are determined by jurisdiction, regulatory relationships (e.g. significant market power) and discretionary choice (on both sides);
 - co-regulation (including regulated self-regulation) scope and voice are determined by negotiation or by default; and
 - self-regulation scope and voice are determined by the nature of the industry, the issue(s) considered and existing regulation. Inclusion may be determined by an individual firm (voluntary compliance) or incumbent members (certification). Different circumstances offer a range of defaults such as all-in, opting-in, opting out or 'equivalent performance'¹⁶.
- What are the organisation's rules, constraints and information strategies?
- What are the organisation's monitoring, reporting and enforcement strategy?
- How if at all does the organisation overlap with others in terms of membership, objectives and instruments?

XRO Stakeholders

For simplicity of exposition, most models limit the range of stakeholders considered and relatively few examine the consequences of excluding or limiting the voice of particular classes – the others are not modelled explicitly¹⁷. The interest groups whose behaviour and interests are considered include:

- individual firms e.g. AOL, Bebo or Yahoo!;
- the industry the constituency of the organisation, the market segment in which its members operate and/or upstream or downstream firms or customers;
- government typically considered as a single entity; and
- society at large often represented by civil society stakeholders.

XRO Objectives

In general it is common for models to assume that XROs strive to advance the economic interests of their members, taking into account any subsequent market competition, government activity, etc. However, there are some exceptions, in which the organisation's objectives include:

- protecting the interests of third parties (not customers);
- the exercise of vertical power e.g. activities such as standardisation which coordinate behaviour with common suppliers;
- the prevention, pre-emption or subversion of formal regulation;
- the accumulation of political or regulatory influence through public-spirited action; and

¹⁶ For instance, if a standard is strengthened by reference in dispute resolution (e.g. court) or procurement specifications, under some circumstances a firm can avoid sanction by demonstrating equivalent performance.

¹⁷ In exactly the same way, industrial models consider the strategic behaviour of firms explicitly, but treat customers as a simple 'demand curve'.

• positive reputation impacts in the market (the 'warm glow' objective).

More generally, XROs have two broad classes of operational objectives:

- the maintenance (and/or increase) of consensus; and
- specific operations in terms of the defined problems or challenges.

These objectives interlink. If the implementation of the proposed solution is inefficient or ineffective (or if it is effective to the extent of closure), then consensus will fade. This necessitates continuing review and modification and possible extension into new areas, and may be influenced by competition or cooperation between XROs.

Information Asymmetry

In the simplest type of theoretical and empirical models, it is assumed that there are no asymmetries of information. In simple terms, this means that both formal regulators and XRO members have the same information about the costs and benefits of different rules. In this case, the key is coordination: the efficient alignment of powers to act with incentives and the minimisation of administrative, operational and compliance costs. In other words, it depends on whether the authorities or the industry players have superior *relevant* information and the degree to which XRO participants' objectives are aligned with public interest(s).

Where industry participants and other XRO members have superior information, the question for the authorities is whether their *incentives* will lead them to create and appropriately enforce the same rules that the public authorities would choose if they had the same information. In this 'principal-agent' situation, the authorities have to trade off the benefits of incorporating participants' superior information against the costs of inducing them to disclose it (or equivalently, the costs of providing suitable incentives to participate in the XRO and follow its rules).

In other cases, the authorities may have superior information – for instance, when regulation in a particular domain has cross-cutting effects on a range of public objectives, or when the scope of regulation may be affected by impending policy changes. Even so, self- or co-regulation may be appropriate if the XRO can avoid the deadweight costs of statutory regulation or can monitor and enforce rules more effectively or efficiently. In such cases, the authorities should consider the ways in which their approach to the XRO (the latitude or resources they provide, or the powers they delegate) convey an adequate *signal* of their superior information.

The possibility of effective self- or co-regulation also depends on the alignment of interests; the degree to which the benefit sought represents a *public good* and whether the pattern of *property rights* assures that those whose actions affect the outcome are affected by the result. In general, more inclusive organisations should be more efficient, but this is limited by the transaction costs of wide membership and the risk that the organisation can be used for selfish (e.g. anti-competitive) purposes – either of these can outweigh the delivered benefit. In such public good situations (where the parties agree on the regulatory framework), formal regulatory approaches can achieve the same results, reducing the comparative impact analysis to two dimensions: the operating cost of the organisation, and the impact of the organisation's composition on its regulatory activity¹⁸.

However, most situations likely to arise involve some degree of information asymmetry and thus raise questions of:

¹⁸ An industry self-regulatory body will give priority to members' interests; a government body presumably will put more weight on customers' and/or citizens' interests (see Gehrig and Jost, 1995). For a comparison between for-profit and non-profit self-regulatory bodies, see Pattberg (2005).

- how the organisation can invite the participation of key stakeholders and get them to share their knowledge;
- how compliance can be monitored by the organisation;
- government supervision;
- customers and others; and
- the degree to which enforcement actions and sanctions can be observed (and acted on) by other stakeholders.

Finally, how can outside observers monitor the degree to which the organisation serves other (e.g. commercial) objectives or facilitates other (e.g. anti-competitive) actions? These issues sharply affect the efficiency and credibility of the organisation's operations. More importantly, they affect stakeholders' confidence and trust in the organisation and thus the extent to which it supports good governance more broadly.

Information asymmetries raise a further set of evaluative questions.

- What are the available trade-offs among regulatory cost, stringency of rules and levels of compliance?
- What is the 'best' outcome when stakeholders disagree?
- Externalities: to what extent are those affected by self- or co-regulatory activities engaged in rule-making or implementation?
- What public goods do the activities provide in terms of:
 - feedback up the value chain to the organisation and thence to government;
 - o reputation effects (of individual firm compliance for industry at large); or
 - voluntary provision by members of public goods and services, especially those not tradable on markets?

Most models focus on only one aspect of the analysis. The balance of this chapter briefly reviews some results in relation to *rule formation* (of quality standards), *entry* (to the organisation) and *competing XROs*. It then develops in more detail some of the analysis and key findings relating to an issue that has been highlighted as a pervasive weak spot in many regulatory IAs, even of formal regulation: *compliance*¹⁹.

Rule formation: quality standards provide both collective incentives (industry reputation effects) and divergent individual incentives (firms wishing to appear better than other firms if customers are well informed about compliance, or wishing to economise on compliance costs if customers are poorly informed). The propensity to form a self-regulatory quality standards body is inversely related to the scale of *ex ante* monitoring costs and the number of potential members. Without informational asymmetries between market participants and government officials, self-regulatory outcomes can always be replicated by statutory regulation²⁰, albeit with:

- possibly higher costs;
- different market distortions and dynamic effects (e.g. for innovation); and
- different (and possibly lower) possibilities of regulatory 'capture' by producers.

¹⁹ Failures of compliance arise directly from the difficulty of observing (and thus controlling) the behaviour of XRO members.

²⁰ Gehrig and Jost (1995: 311).

However, even if firms are better informed than government regulators, self-regulation is only socially optimal if the regulator values firm profits sufficiently highly. These results suggest that self-regulation can be encouraged by public monitoring information, that it is most likely to emerge in concentrated industries where the danger of anti-competitive behaviour is greatest, and that it is more likely to be optimal in less globalised industries (where the competitiveness of domestic firms is reflected in regulatory objectives).

Entry: if decisions to admit new members to an XRO are made by existing members, they will reflect 'downstream' competition. On the one hand, if the new members are likely to change the rules chosen by the organisation or if membership gives privileged market access (e.g. in cases of certification), then entry will be too restricted from a social point of view. On the other hand, if all members are bound by the chosen rules and if their membership does not affect the choice of rules, entry to XRO may be too broad from a social point of view, in effect creating a platform for collusion.

Competition among self-regulatory organisations: in many cases, multiple organisations develop and promulgate standards, provide certification, notify the authorities or the public of incidents and carry out other regulatory functions. The overall impact on the market depends on the degree to which such competition affects the breadth of membership and the stringency of rules²¹. The key evaluative question is: when is there enough competition to induce efficient self-regulation? The analytic approaches resemble those used to model regulatory competition and regulatory entrepreneurialism, but take into account the added 'bonus' of market power. These analyses and associated empirical studies have shown that in general, direct competition among self-regulatory bodies is too weak and leads to potential confusion and conflicting standards. However, the threat of competition by rival self-regulators or government is often beneficial.

Compliance: Most XROs lack statutory enforcement power, which raises the question, why would members comply? In analysing this issue, it is important to recognise that the organisation and its members get different (but nonetheless real) payoffs to passing rules and to enforcing them²². The analysis described here concentrates on compliance and applies to both the 'final stage' of pure self-regulation and co-regulated situations of delegated enforcement.

A simple model can be used²³ to analyse self-regulatory enforcement policy.

- How likely are XROs to investigate?
- What penalties or reporting arrangements will they choose?
- To what extent will the results agree with customers' preferences?

In this setting, an XRO chooses a rule and an enforcement policy (probability of investigation, contingent penalty). Members compete for customers taking this policy as given, and the organisation anticipates this when choosing a rule to maximise its members' collective profit. In this way, the organisation blunts downstream competition by choosing a policy that is too lax from the consumers' perspective. Indeed, if the organisation is risk-neutral it will behave as a monopolist. In particular, compared to the optimum, investigations are 'too rare', although penalties may be adequate (on paper). The mechanism is that compliance can be induced either by the 'carrot' of gainsharing with customers or the 'stick' of investigation. The organisation's members naturally prefer the carrot. The weaker the policy, the more customers will offer in exchange for compliance.

²¹ In principle, such competition also affects levels of compliance, but this has not been analysed extensively to date.

²² Of course, the same can be said of formal regulatory bodies.

²³ For related analysis, see e.g. DeMarzo et al. (2000, 2005a, 2005b) and Krarup (1999).

A reduction in investigation cost (e.g. by public monitoring) can actually make enforcement activity less likely. In an echo of the earlier analysis of competition among self-regulators, the level of enforcement will rise as alternatives to the XRO improve. In some cases, customers can bundle their choice of a self-regulator with their choice of the goods and services offered by its members (as in the case of competing standards or certificates). If the offers mediated by different XROs are not perfect substitutes, both enforcement and customer power increase with the number of XROs.

The basic insight is that competition among firms in the end-user market may need to be complemented by competition in the 'governance market' if the anti-competitive potential of self-regulatory choice of enforcement policy is to be avoided.

Winners and Losers in XROs

In terms of who benefits, lax enforcement obviously enhances the market power (rents) of agents who might gain by non-compliance. Thus firms with market power are less likely to form such organisations unless their dominance already brings regulatory scrutiny. If violations of its rules occur further down the value chain, the organisation may choose to direct enforcement to other layers²⁴. If those layers are competitive, the affected downstream players would not benefit (collectively) from lax enforcement and thus would not try (through their participation in the XRO to loosen the policy. Thus, 'downward' enforcement may be more efficient than 'horizontal'.

Dynamic Implications

The analysis can be extended to draw out its dynamic implications. Firms may comply in order to raise their individual reputations or to realise operating cost, interoperability and efficiency savings. However, compliance also brings *collective benefits* in the form of the reputation of industry as a whole, the possibility to pre-empt or reduce the burdens of formal regulation and the possibility to enact guidelines more appropriate to industry-specific conditions.

This divergence between individual and collective benefits introduces a possibility of 'free-riding': sometimes, firms benefit from others' compliance for some types of issue²⁵; in other cases, they suffer as a result of others' compliance²⁶. Similar considerations apply to the initial choice of rules – compliance costs differ with firm size, prominence, location, etc.

The evaluative question is: is such 'free-riding' a barrier to self-regulation or only to *successful* self-regulation? The answer turns on whether enforcement actions are interpreted by the market as bad news (there was non-compliance) or good news (the rules are being enforced). This, in turn, depends on what customers (and others) already know, for example, from public monitoring or competing self-regulatory organisations. Similarly, when assessing the flexibility and adaptability of self-regulation, it is appropriate to ask whether a change of standards or rules will be seen as good or bad news.

More broadly, if compliance is monitored externally and investigation costs are high, it is optimal for the XRO to carry out no enforcement at all. However, if investigation costs are low and the organisation punishes non-compliance by withdrawing certification (as with effective Trustmark schemes), the policy chosen will be just strong enough to pre-empt outside incentives to monitor compliance. In this case, mandatory membership in an XRO can benefit firms and damage customers' interests. Without such a requirement in a static world, no one would do business with a firm that did not belong to the relevant XRO. In a dynamic setting, non-member firms would get

²⁴ Examples include content controls by ISPs, insurance industry fraud regulation.

 $^{^{25}}$ Or suffer from their non-compliance – see the 'Assurance Game' below.

²⁶ At least in relative terms – see the 'Prisoners' Dilemma' compliance race below.

business on the strength of their reputations. Mandatory membership would eliminate this and thus preserve rents under the XRO 'umbrella'.

An alternative to self-regulatory competition and customer monitoring is for the government to monitor and step in if compliance 'fails'. In the face of this threat, the XRO's enforcement will tighten up by just enough to deter such intervention, to the extent that costs permit. This comforting conclusion may fail in cases where the government regulator is vulnerable to capture, or where differences among the XRO members makes them prefer the government 'stick'.

Compliance Taxonomy

A second analysis of the compliance issues considered in chapter O²⁷ can be used to develop a taxonomy of situations in which different levels of compliance may be reasonably anticipated. It uses a simple game theory model to illustrate the different games that firms and government can play in deciding the role of XROs. The basic game involves the government deciding how 'co-regulatory' the regime is, with members of the XRO choosing independently the extent of their compliance with XRO rules.

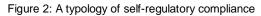
In this model, the government can choose between:

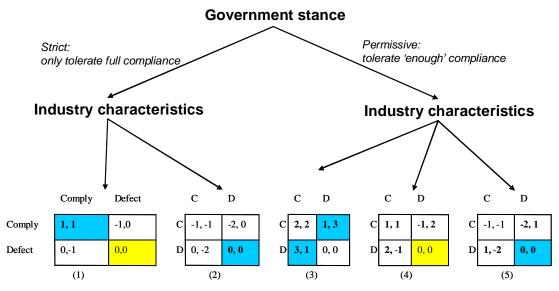
- a strict regime in which the government will step in (either by taking on the enforcement of XRO-derived rules or by replacing the XRO with formal regulation) unless full compliance is achieved); or
- a permissive regime of tolerating a modest level of non-compliance in exchange for the other advantages of self-regulation.

The members of the XRO choose (independently) whether to comply. This gives rise to a range of different possibilities, which depend on the relative benefits and costs of compliance to members. In applying this taxonomy, information about these costs and benefits (derived from economic and policy analysis) can be used to predict the effectiveness of the combined co-regulatory/XRO regime and, on this basis, to assess the benefits and risks associated with looser co-regulation. The alternatives are simplified ('strict' vs. 'permissive' regime, two XRO members, stark choice between compliance and non-compliance) for clarity and simplicity – the basic approach can be applied in more general situations. Note that the analysis as presented in Figure 5 concentrates on the interests of the XRO members, as it is these that determine their level of compliance. To determine the appropriate government stance, it is necessary to analyse (in the specific situation under consideration) the impact of full, partial or noncompliance on the public interest. These 'government payoffs' are omitted in the interests of simplicity.

The main possibilities are illustrated in Figure 2. In this figure, the government's choice is depicted as the first branch, while the second branch identifies (qualitatively distinct) cost and benefit arrangements. The combination of these factors determines the environment within which XRO members make their compliance choices as shown in the matrices in the bottom tier of the figure. In each matrix, each firm chooses whether or not to comply; the combination of these choices determines the payoff (profit level) for each firm. By convention, the firm that chooses the row (column) receives the first (second) payoff of the pair in the given row and column. Equilibrium prevails when neither firm can improve its payoff by unilateral change of strategy, and a *Pareto (or social) optimum* is a situation from which any change (whether unilateral or bilateral) will make at least one firm worse off. In Figure 2, the equilibria are shaded and Pareto optima are shown in bold type – Pareto optimal equilibria are shaded blue.

²⁷ This is based on Ashby et al. (2004).





Under the "Strict regime" above, firms are indifferent between unilateral and multilateral defection, since either will bring the weight of government enforcement; and unilateral compliance is the worst outcome, since the complying firm incurs the costs of compliance without the benefits of self-regulation. There are two possibilities for this 'Assurance Game'²⁸.

- 1. 1. If compliance costs are low relative to benefits, the XRO members prefer *full compliance* (e.g. advertising standards).
- 2. 2. If compliance costs are too high, the government has to introduce *regulation*.

Note that the strict regime gives relatively little scope for differentiated compliance. As mentioned above, whether this is essential will depend on the degree to which vital public interests are threatened by partial (non-)compliance. Under the 'Tolerant regime', partial compliance can be enough to sustain self-regulation. The possibilities are as follows.

- 1. If the reputation benefit of compliance for individual firms (showing leadership) outweighs the benefit to the industry as a whole, the result is the game known as 'Chicken', in which unilateral and multilateral compliance are preferred to complete breakdown, but where only partial compliance is to be expected (e.g. ISP content regulation).
- 2. If the costs of unilateral compliance lie between the benefits of full compliance and those of individual compliance, the result produces a *collective action problem* in which each XRO member is tempted to free-ride on the compliance activities of the others (benefiting from a combination of industry reputation and deterring statutory regulation. This produces a form of 'Prisoners' Dilemma' in which compliance is likely to be very low. However, the fact that this outcome is worse for all firms than full compliance implies that the XRO will seek to extend its powers of enforcement (e.g. via internal *quid pro quo* rewards for past compliance).
- 3. If compliance costs are so high and reputation affects so weak that neither individual nor industry benefits are sufficient to sustain compliance, there will again be very little compliance in this case, the XRO will not seek to extend its powers of

²⁸ Maitland (1985).

compliance or enforcement and will remain a 'hollow' XRO (e.g. Trustmarks and Internet Content Rating Association (ICRA) labelling).

Suggested Framework for Developing Intervention Logic for XRO Analysis

The following framework, derived from the summary of the peer-reviewed literature and the considerations developed in chapter 0 in particular, collects in 'checklist form' some of the basic elements needed to identify the mechanisms through which XROs produce impacts in order to take them into account in IA. It should be seen as supplementary to the consideration of the organisation as 'regulation by other means'. For that reason, the list starts with the typical actions available to an XRO (which generally differ from those available to formal regulators), the effect exerted by the organisation on its environment and a final consideration of the degree to which the division of responsibility (or 'liability') and the possibility of negotiation among XROs or their members may lead to a departure from optimal results.

The strategies available to the XRO deal with all or some of the following areas:

- *membership* whether the scheme is open or restricted, whether its rules are applied only to members, whether competing schemes have overlapping memberships or subject areas;
- *competition* whether XRO schemes face (real or potential) competition from other schemes or regulatory organisations;
- how rules are chosen (voting, comments mechanism, etc.) 'rules for making rules' affect how public, private and organisation interest are balanced. The key point is that public sector regulators represent the public interest and are bound by strict conditions of neutrality and responsibility to specific constituencies that may be difficult to discharge²⁹. The evaluative question is how the balancing of these interests by the XRO differs from, or interacts with, the balancing that would be undertaken by a public regulator;
- relation with government this includes the threat of government pre-emption or intervention, government assistance or delegation, capture of or by government, government supervision and bargaining with government over rules, changes to the institutional set-up or other policies of interest to the members;
- *which rules are chosen* how is the stringency of rules chosen by the XRO likely to differ from that of the regulatory option;
- *flexibility* how easily, how fast and in which direction will the XRO's rules change in response to new developments or past successes;
- costs how will the organisation affect administrative cost, compliance cost, distortion cost (regulatory deadweight loss and other impacts on market efficiency) and rule-making cost, and how will these costs be distributed across stakeholders;
- *compliance* what does the XRO do to ensure compliance and with what effect; what are the policy and economic consequences of non-compliance; and
- *monitoring and enforcement* what information does the XRO collect, how is it used and with whom is it shared.

²⁹ E.g. in globalised markets; where specific non-public information is needed; or where regulatory decisions intermediate between entrenched and opposed interests.

XROs produce impacts through a variety of channels or effects, which may be relevant in assessing their impacts:

- coordinating effect the XRO serves as a platform for exchange of information and coordination of action among participating stakeholders;
- direct effect the XRO designs suitable rules and enforces (more or less) efficient compliance;
- competitive effect the activities of the XRO affect market entry, market shares and overall demand (e.g. through reputation effects), rates of profit, investment and location of economic activity, etc. Note in this connection a potential twoway classification of interests;
- shared interest the interests of participants completely coincide, and the XRO serves as a coordinating device; its deliberations and decisions are (or can be made) largely self-enforcing. This arises where the reputation of the industry (or XRO) as a whole is paramount and/or where public and XRO interest are aligned, e.g. in respect of harmful or illegal content;
- competitive interest the interests of the parties are partially aligned; they have
 a shared interest in maximising the value of the market, but within that frame
 each wants to maximise its own share of the benefits ('Prisoners' Dilemma'); and
- dynamic effect the XRO serves to attract other parties, stakeholders and policy issues³⁰. In a negative sense, this includes 'policy creep' and XRO 'bloat' (if too-wide or too-diverse membership reduces XRO efficiency or effectiveness through slowed or weakened rule-making or through 'free-riding'). In a positive sense, it can internalise policy and other externalities, strengthen joined-up governance and lead to faster and more comprehensive improvement of XROs.

The implications can be seen in relation to a 'societal' XRO charged with defining and implementing a code of conduct that does not directly affect its members' economic interests. If the collective interest (e.g. the reputation of the industry) is paramount³¹, the result will be a shared-interest situation. This does not guarantee an optimal outcome, but once chosen, rules will be self-enforcing. If compliance costs are high (for some parties) relative to expected losses following non-compliance, they can be expected to 'free-ride' on the good behaviour of others. The evaluation question is whether the impact of this level of non-compliance outweighs the savings due to XRO³². On the other hand, if reputation rewards to good behaviour are strong³³ the chosen rules may spark an 'arms race' of over-compliance, which can work against those with high compliance costs and exceed socially optimal levels³⁴.

This is seen simply by applying Coasian³⁵ analysis. On the one hand, if bargaining (rulesetting and compliance enforcement) is costless, any XRO that includes all affected parties will give optimal results. On the other hand, if bargaining costs are too high, the XRO will undersupply the public good of compliance. If compliance costs are too low for some participants, compliance will be oversupplied relative to the collective decision – this may be good if the XRO excludes key classes of beneficiaries, but bad otherwise.

³⁰ Particularly those affecting members or falling within their competence to affect.

³¹ In the sense that weak rules or non-compliance will lower everyone's profits.

³² Several observers having warned against letting administrative costs (quantified via e.g. the Standard Cost Model) dominate integrated IAs to the exclusion of harder-to-quantify policy, compliance and non-compliance costs.

 ³³ Or if some members have particularly low compliance costs due to e.g. pre-existing practice, market location, customer profiles or prior IPR.
 ³⁴ For instance, if content controls or quality of service standards exceed societal willingness to pay or foreclose

³⁴ For instance, if content controls or quality of service standards exceed societal willingness to pay or foreclose customer access to a range of services, the result could be static inefficiency or choking off of signals for change.

³⁵ Coase (1960), Grajzl and Murrell (2007), Krarup (1999), National Consumer Council (2003), Newman and Bach (2004).

Finally, if the total liability of the participants exceeds the total societal cost, XRO bargaining will again lead to over-compliance. For example, this can happen when the XRO attracts public attention or when 'failure' threatens to trigger inefficient or punitive public regulation.

General Advantages, Disadvantages and Risks Associated with XROs

The evidence base identifies a range of general advantages of XRO options compared to formal regulation, as well as disadvantages and potential risks. This chapter briefly recaps these as an aid to option choice (providing issues for a strengths, weaknesses, opportunities and threats (SWOT) analysis).

Advantages

The advantages may be grouped according to the impact mechanism through which they accrue. It can be hoped that such arrangements lead to greater commitment and *buy-in* by stakeholders because:

- self-regulation and membership in such a body can generate a sense of ownership of the regulatory process among the profession or industry and thus is more likely to secure a high level of compliance;
- the possibility that self-regulation by an industry may reinforce feelings of commitment, pride and loyalty within a profession or industry – and thus enhance the ability of the industry to deliver public objectives;
- self-regulation can harness the common interest of participants in maintaining the reputation of those involved in the activity or the reputation of the industry, adding to participation and compliance incentives; and
- the quality of the rules chosen and the balance of responsibilities between different parts in the value chain can be strengthened to the extent that the organisation is able to harness existing close relationships e.g. between the industry/profession and their clients.

Compliance is strengthened in other ways:

- rules promulgated by an XRO may have greater credibility because they are based on better information, involve the most concerned parties and come from a collective body well-suited to internalising externalities through bargaining rather than adversarial methods;
- the greater discretion often available to such bodies allows them to develop and implement innovative inducements for compliance and sanctions for noncompliance;
- a frequent advantage, which is strongly reflected in the Better Regulation Agenda, is the possibility of *reduced cost*. This can be expected in various ways;
- a net reduction in state costs associated with regulation, through the presumed greater efficiency of a well-founded XRO these costs include rule-making, organisational, monitoring and enforcement costs;
- a shift of state costs to other parties via the transfer of functions to the selfregulatory body or through sharing costs with a co-regulatory body;
- a net reduction in business costs through more efficient rule-making and other functions, better designed and targeted rules and shorter (and often less formal)

accountability and compliance mechanisms. These costs include rule-making cost³⁶ and compliance cost; and

• a reduction in the overall regulation cost on the industry or economy, sometimes referred to as 'regulatory deadweight loss'. This reduction is due to the adoption of more efficient and effective rules, and accrues as a result of increased market efficiency and the reduction of external costs associated with the sanctioned behaviour or harm.

A further strength of self- and co-regulatory arrangements results from their *flexibility*. It is generally believed that self-regulation offers enhanced flexibility, responsiveness and speed of implementation and modification. It is usually the case that it is quicker to establish or change such arrangements compared to statutory regulation, although this can diminish with the size and scope of membership and the range of interests represented. In addition, many such arrangements offer faster redress than conventional regulation. These advantages are obviously stronger in rapidly-changing environments and in relation to stakeholders with less ability to bear the consequences of administrative delays – including the need to do business under obsolete or irrelevant regulations. Finally, the very credibility and effectiveness of regulations may be undermined if they do not adapt to changing technological, market and social conditions. This can have spill-over impacts on related regulations as well.

Behind many of these advantages lies one that is valued in its own right: the engagement of specific forms of *expertise and knowledge* in the regulatory process. In general, the knowledge and expertise of all involved parties may be used more effectively – this may be particularly important where the organisation's members know more about the industry than government officials. This can result in rules that are tailored to specific needs and thus are better targeted, more effective and proportionate. In addition, the hoped-for improvement in information flows, using clearer terms, should enhance the sustainability of the contributions made by the self-regulatory regime to broader objectives. In comparison to formal regulation centred on a close and sustained (if often adversarial) relationship between the regulator and a few regulated suppliers, self-regulation – particularly if it involves customer participation – is likely to be more responsive to consumer needs. In some areas it may be disproportionately expensive or difficult for government to acquire the specialist knowledge necessary to regulate effectively.

Finally, attention is often drawn to two more general advantages that can enhance the *impact and sustainability* of sector governance. Where the body is concerned with social (as opposed to technical or economic) regulation, its activities may improve corporate governance and reporting and strengthen the industry's ability to address issues such as corporate social responsibility and ethical trading. In relation to the competitiveness objectives of the Lisbon agenda, it may further be noted that 'Better Regulation' – as achieved, for instance, through XROs – may improve market functioning by overcoming market or conduct failures and preventing harms to, for example, the consumer and the environment. This is more likely to the extent that regulators and market participants have consistent views of the issues arising.

Disadvantages

The disadvantages may be grouped also – although less numerous than the advantages cited, they may be equally serious in some cases. The most frequently-cited disadvantage is the danger to *competition*:

³⁶ While participation may be more costly than interaction with a statutory regulator for firms currently operating under 'light-touch' regulation or in the regulatory slipstream of a regulated dominant firm, this may well be offset by rules that reflect their interests more directly.

- if the organisation controls the right to do business in either a formal sense (through delegated licensing power or registration) or an informal sense (through certification or 'ownership' of dominant standards), it may be able to prevent entry;
- other rules potentially allow organisations to restrict advertising, effectively coordinate prices or foreclose the profits of those entering 'downstream' sectors;
- even open standardisation can inhibit competition, if it limits the scope of consumer choice ('gold-plating'); and
- where entry can be restricted on consumer protection grounds, the same power may be used to prevent competition or discipline industry members.

Another disadvantage is the possible failure of the XRO to ensure *compliance*;

- the body may lack effective sanctions or the information necessary to verify noncompliance;
- 'fringe' or 'rogue' operators may choose not to comply and it may not be costeffective for the organisation to monitor or enforce sanctions against them, particularly when the rules, codes or standards are hard to verify; and
- it may not be worthwhile to enforce the compliance of small operators; conversely, dominant operators may not face a credible threat of enforcement action.

An additional disadvantage is possible *lack of clarity*:

- consumers (and others) may be confused about the level of compliance to expect or the consequences of dealing with non-complying or non-participating firms;
- the possibility of consumer confusion is magnified when the industry is unable to agree on a single code or standard;
- consumers may be unaware of who or what is covered by the rules, or of past enforcement (e.g. suspension) actions by the XRO – in this way, the market discipline backing voluntary self-regulation is weakened; and
- even businesses may become confused about the existence of regulatory requirements and which one(s) to follow.

Finally, there are concerns about the degree to which such bodies are willing and able to *adhere to standard principles of good regulation*, such as: transparency, accountability, targeting, proportionality and consistency:

- the body may lack the resources or capacity to develop and operate a highquality scheme or may be unwilling to be open and transparent about its processes and outcomes;
- waning interest and participation, or the establishment of a scheme to pre-empt formal regulation may have produced a hollow or 'Potemkin' regulator; and
- even without these failures of better regulation, there may be a general lack of public confidence in the ability of, or the incentives for, a self-regulatory body to provide effective protection and to impose appropriate sanctions when rules are broken.

Specific XRO Risks

In addition to these concrete advantages and disadvantages, some policy documents make reference to specific risks attached to self- and co-regulatory arrangements. These include:

- the need for such schemes to meet (and be seen to meet) statutory objectives;
- the need to attain (and demonstrate) effective performance often a very difficult task, given the huge diversity in the form of such schemes;
- the need for effective systems and processes of transparency and public accountability;
- the risk of 'regulatory creep', as government increases its involvement in schemes that start out as self-regulation;
- the risk of 'agenda creep', as the scheme's members begin to use it to address other issues whose resolution may adversely affect the public interest; and
- the possibility that schemes may arise simply in order to shift compliance costs from government to industry, or the converse possibility (for co-regulatory arrangements) that the organisation may co-opt government support in order to restrain competition or impose market discipline.

Conclusions

The analysis in this chapter leads us to a set of policy strategy alternatives, intended to frame better the logic of enquiry in IA into the evaluation of the following questions.

• Under what conditions does XRO seem to work/not work?

The case studies considered have largely been examples of best practice, where either market buy-in was created with active participation, or government stepped in to correct market failure by creating a new organisation which acted as a *de facto* or *de jure* monopoly over market formation.

• What kinds of structure or arrangement have arisen and in what contexts?

This issue of organisational form is a much more difficult issue, as different corporate governance arrangements have been instituted in different XROs, even where their ostensible purpose was similar. Therefore it is not possible to conclude that government or civil society advisory boards, or a separate funding council, are necessary or sufficient for good governance. For instance, in the standards field, directly contradictory models have been used.

• Are there reasons to expect systematic contributions to or departures from 'optimal' self-regulation?

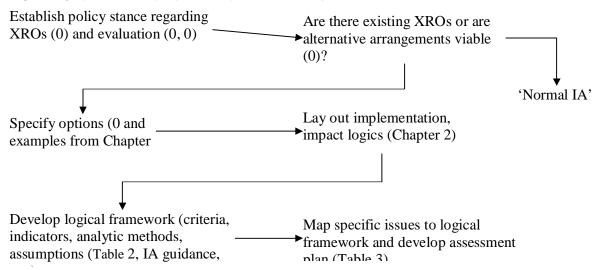
The question of how much variety in regulatory form there can be without jeopardising success is one in which case studies support a literature on diversity of regulatory form. German and British responses to similar crises have produced divergent outcomes, both in rhetorical support for co- or self-regulation, and often in different practical solutions supporting these different regulatory philosophies, as seen in the formation of the KJM as a co-regulatory supervisor in Germany, whereas thus far the UK industry has resisted successfully political pressure to introduce legislative supervision of the XROs studied. The Netherlands and Spanish examples, and evidence from Scandinavian, Italian and French interviewees, support this 'cultures of regulation' approach. However, minimum harmonisation on methods and standards has been seen to be effective in ventures such as W3C, PEGI and INHOPE.

How can we know – and what other information ideally would we need?

It is facile but true that a single country, single sector analysis is incomplete for evaluation purposes. Evidence gathered for the IA of single policies demands a comparative analysis, and in the case of a dynamic interrelated set of policies, such as those for Internet content, services and applications, a far larger survey is needed. In the 1990s, the DG INFSO Legal Advisory Board provided a forum for such examination. More recently, with the expansion in EU members and legislative proposals, contemporary information has been gathered through survey of government members. A combination of such approaches may be the most effective response to the ongoing mapping of regulatory alternatives required.

Chapter 3 Policy Alternatives and Impact Assessment Strategies

In this chapter, we collect guidance for use in preparing the evaluation of self- and coregulatory options. The preparation proceeds in stepwise fashion:



More concretely, the process begins with a consideration of general policy in the area under consideration, reflecting the state of play and methodological maturity of the sector and issue in relation to the Lisbon, Better Regulation and Impact Assessment (IA) Agendas. This is not a static analysis, but should be placed in the context of a broader policy scenario as indicated in chapter 0 (overall EC involvement), chapter 0 (general regulatory principles) and chapter 0 (assessing risks associated with self or coregulatory organisation (XRO) involvement).

The next step is to determine whether XROs are already active in the policy area, and their characteristics according to the general schema laid out in Chapter 3 (especially Table 4). If there are active XROs, they provide the IA starting point for the 'do nothing' and 'formal regulation' options, as well as any XRO alternatives to regulation. Whether or not such arrangements currently exist, it is useful also to consider whether XRO alternatives are likely to provide relevant and credible alternatives, which should be done using the advantages, disadvantages and risks cited in chapter 0 and the framework conditions listed in chapter 0.

The next step (whether considering XROs as part of the context for 'do nothing' and 'formal regulation' options or as alternatives in their own right) is to develop a credible specification. While the evidence base shows that fine details of XRO constitution, context and behaviour can have large impacts. It is neither necessary nor desirable to specify them in detail at this stage; such details are likely to be determined in the course of implementation and cannot be foreseen. However, active consultation and comparison with existing XROs (e.g. using the full case studies produced by this project and other cited sources) can be useful in deciding what should be specified. The objective is to produce a credible *ex ante* assessment of a viable alternative, rather than to detail exhaustively and predict the effects associated with a particular XRO – in most cases, such prediction is neither possible nor appropriate. Note, too, that the *ex ante* assessment of XROs is likely to be less definitive than that of formal regulation, but this inherent uncertainty is a consequence of self-regulation itself, and not necessarily a drawback to IA as a central part of a deliberative policy formulation process. For this

purpose, the 'canonical' options and policy scenarios described in chapter O provide a useful starting point.

Associated with each option are a range of channels through which it is likely to affect policy objectives and a range of costs and benefits are developed and distributed. These can be identified on the basis of the analytic material, and used to develop the relevant intervention logics (process and logic maps). These can be used then to identify the key elements of the logical framework for each option being assessed, in particular the key stages, associated criteria, relevant data sources and methods for constructing and evaluating the indicators associated with each criterion and, critically for XROs, the key assumptions that must hold in order for the logic to work as anticipated. This latter step draws in particular on case study material (where relevant XROs exist) on the risks identified and on the principles of risk assessment (these are described in many places, and specific issues raised in chapter O). The risk/assumption analysis plays three significant roles:

- it provides an indication of the robustness of the IA;
- it identifies key stakeholders whose participation in the XRO may be especially important; and
- it highlights the scope for scenario analysis to explore the consequences, if the assumptions are not met.

The final preparatory stages are to check the completeness of the framework using the more comprehensive list of issues provided and, with their aid, to develop specific evaluation questions.

Scenarios of European Commission Action/Inaction

The overall stance regarding XROs deriving from the challenges of the Lisbon Agenda and the state of progress towards the Better Regulation and IA Agendas can be anticipated through a form of scenario analysis tracing the likely path of evolution. The point here is that, just as XROs are linked across participants and issues, XRO initiatives also help to shape understanding and use of such alternatives in the future. These scenarios have three main dimensions.

The first dimension consists of paradigmatic and systemic attitudes to regulation *per se*: the degree to which government intervention is needed and desirable and the willingness of citizens and business to shoulder the resulting costs, cooperate with regulatory initiatives, etc. The values underlying these attitudes are concerned with such issues as: big vs. small government; the governance and ethical implications of outsourcing regulatory services; and the desirability on general as well as instrumental grounds of 'big tent' consultation or co-opting of a wide range of concerned parties.

The second dimension describes the options and developments specifically concerned with the EC level of action and the role of EC institutions. It takes into account such matters as: the scope for EC action; the relevance and strength of the drivers of EC engagement listed in chapter 0; the specificities of European Regulations as opposed to Directives in relation to XROs; and the possibilities for coordinated action via the Interagency Agreement, Member State multilateral coordination and international platforms.

The third dimension considers the internal 'coordinated regulation' of European institutions. The settings in which XROs are active often include those where a preexisting governance gap has arisen as a result of issues that cross ministerial or Directorate-General (DG) boundaries, or where coordination within government or between government and outside parties is perceived as weak. Therefore, it is appropriate to consider a fourth agenda: that of 'joined-up government'. Such coordination is needed not only among DGs, but also across the instruments at their disposal. This is recognised in the i2010 Policy Framework, which provides a coordinating platform for furthering the Lisbon Agenda objectives via combined regulation, taxation, standardisation, public procurement, etc. These are all in a general sense 'regulation by other means', but they differ in terms of evaluation methods, objectives, etc. Therefore, the specification and assessment of XROs must take developments in this arena into account.

This increasing role for cross-cutting policy coordination is mirrored in the Better Regulation Agenda. Thus it is increasingly necessary to take other types of policy and other policy entities into account when performing IA. This requirement could be met in a variety of ways. These include: a 'parallel' approach in which separate offices maintain 'mirror' models of each others' (including XROs') behaviour; or the development of a single coherent or converged posture (with common data, contractual forms, etc.) at the DG or even EC level. Less favourable alternatives could include the prescription of a least-common-denominator common assessment model or a fragmentation movement away from the integrated IA model. These considerations determine both the scope of the proposed IA and the degree to which it should be coordinated or specified externally.

General Criteria for Choosing Options

A variety of general criteria can be used to classify existing arrangements and to establish conditions for XRO alternatives. In either case, they can be used as evaluative criteria or to define conditions under which the XRO will be allowed to operate autonomously. Chief among these are the following:

- tractability of the XRO from a policy perspective, in particular the extent to which its (or its members') powers and interests are aligned with public interest;
- constitutional framework and actual behaviour in relation to the organisation's legitimacy, inclusiveness, transparency and accountability. While an XRO is not held to the same standards as a government agency, nonetheless as a recipient of delegated power it must act in a manner consistent with those standards;
- efficacy in meeting the regulatory need or filling the governance gap, as determined by the issues that it addresses, the clarity of its operations and their consistency with existing policy stances and, critically, the levels and types of compliance that it is able to deliver;
- in keeping with the Better Regulation Agenda, XROs are expected to offer particular advantages in terms of flexibility and adaptability in response to sectoral and public interest developments perceived by the participants and to changes in official policy;
- the extent to which the XRO is, or is likely to be, 'joined-up' across sectoral and interest domains externally; whether the likely operation of the XRO will cross governmental policy boundaries or lines of accountability; and whether such crossings are appropriate; and
- since almost all XROs include powerful industry players and directly or indirectly affect market conduct (and even market structure and economic performance), it is necessary to anticipate competitive and other spillover and rebound effects.

Risk and Regulation

The importance of risk assessment is well understood. In relation to IA, it is as important to get a sense of the range of possible impacts as it is to generate a 'central' estimate of likely impacts. This can inform the design of compensatory or hedging strategies, coordination with other forms of policy activity and the assignment of liability and responsibility. These considerations arise in general with IA, but are particularly germane to the Better Regulation Agenda³⁷ and XROs, where government control is weaker.

In this respect, it is useful to mention two broad classes of risk assessment. The first is concerned with how XROs are likely to respond to risks and uncertainty and the degree to which this differs from the way formal regulation handles risk. While the general answer is clearly that XROs do better in some respects and worse in others, the balance will vary with the particular impact assessment context. The second concerns risks that are created by policies that accept, sanction, constrain or inhibit XROs.

The areas considered in this study combine complex high-technology social problems with regulation in the public interest. This creates risks around:

- sustainability the possibility that the regulation may outlive its purpose, or that the development and continuation of progress may be imperilled by XRO activities;
- efficiency the possibility that market distortions may arise, or that the transfer of costs from public to private parties may lead to increased overall burdens, even while the burden on public institutions diminishes; and
- participation the possibility that key players will opt out or be excluded, or the inverse risk that wide participation will result in a loss of focus, institutional 'bloat', slowing down, etc.

Further, it should be noted that sectoral differences extend to risks as well as benefits. These differences should be taken into account for both policy formulation and *ex ante* assessment.

For instance, recent failures of accountability, transparency and risk management in the financial sector derive in part from the failure of key assumptions, e.g. that riskspreading provided diversification and thus minimised the extent or damage due to uncertainty. They also highlight the problem of complexity when the mechanisms through which effects are produced become so intricate that they cannot be managed effectively, or the patterns of risk measured and understood. Undoubtedly, another factor has been the ability of key parties to by-pass self-regulatory constraints by delisting (going into private equity control) or 'going dark' (retreating from listed exchanges to the over-the-counter equity market). The key finding for XROs is not that it is possible to evade their control, but that significant volumes of business did so quite suddenly, creating a situation from which it is difficult to return either to effective selfregulation, or even to effective formal regulation. Thus, the risks may have long-term as well as short-term consequences. Finally, even strong action in relation to failures of accountability (such as the Sarbanes-Oxley Act of 2002³⁸) may have perverse consequences, as some businesses suffer extra compliance burdens while others flee the jurisdiction.

³⁷ Recently, the UK government has replaced the Better Regulation Commission (formerly the Better Regulation Task Force) with the Risk and Regulation Advisory Council. See the report "Public Risk – the Next Frontier for Better Regulation", at:

http://archive.cabinetoffice.gov.uk/brc/upload/assets/www.brc.gov.uk/public_risk_report_070108.pdf.

³⁸ The full text may be found at: http://news.findlaw.com/hdocs/docs/gwbush/sarbanesoxley072302.pdf.

In high-technology, high-risk areas such as nuclear power and biotechnology, rapid change and complex potential risks cast doubt on both the power of innovation to produce sustainable progress and the acceptance by the public of XROs as efficacious and effective mechanisms for managing technological or implementation risk. Here, the fundamental issue is one of alignment – whether industry, consumer and broader public interests, understanding and risk tolerance coincide. Indeed, in some cases (e.g. genetically-modified foods) there has been a perceived failure of self-regulation of trade-borne risks, due not only to the misalignment of commercial and other interests, but also to the different weights attached to these interests and objectives by sovereign governments.

In other cases (notably stem cell research, assisted reproduction, etc.) regulation is complicated by the sheer range and difference in objectives spanning religious and ethical concerns, strong economic interests and 'hot' issues relating to child safety, for example.

In some sectors, these challenges have called forth other approaches outside the frame of XROs as considered here, including citizen juries, discourse-orientated civil society involvement, charitable foundations and innovation partnerships, to obviate the need for regulation. There are also a range of other specific structures for 'responsibility sharing' such as non-ministerial departments (executive or advisory), nondepartmental public bodies, quasi-non-governmental organisations, public corporations (including chartered bodies), etc.

Note that while these possibilities are associated with a range of sectors far beyond the Internet, the fundamental challenges they pose have arisen already in relation to the areas covered in the case studies, albeit with different pace, historical context and intensity; thus they remain relevant reference points.

The framework developed here may need to be extended to a much wider variety of risks and institutional arrangements for managing risk. The fundamental principles of risk management in relation to IA are as follows.

- Are all relevant risks identified?
- Are they properly assessed as to the likelihood and severity of, and amenability to, control?
- Do institutional arrangements strike an appropriate balance between placing risk on those best able to bear it and those best able to address it (reduce its likelihood or severity)?

This should guide risk assessment in relation to XRO IA. To the extent that risks are best managed collectively, the question of whether new regulatory innovations can prevent 'free-riding' by engaging all stakeholders is as germane to risk assessment as it is to accountability and compliance analysis.

Framework Conditions Favouring or Hindering Self- and Coregulation

Table 1 is a synthesis of good practice guidelines and policy analyses of existing schemes and identifies general characteristics that make self- or co-regulation alternatives particularly relevant.

Table 1: Framework conditions

Premature	A specific self- or co-regulation option – perhaps an incumbent regime – may seem an obvious
decision	candidate alternative to, or comparator for, formal regulation. However, especially in situations characterised by rapid change, superior (and differentiated) stakeholder information or many kinds of stakeholders, wide consultation may be necessary when choosing options or relevant mechanisms, costs and benefits. This increases the chances of finding a superior alternative, producing a credible IA and avoiding capture by an incumbent XRO with its attendant risk of adverse competition effects.
Market conditions	<i>Fragmented markets</i> (e.g. numerous different enterprises, in complex supply chains) – self-regulation may be especially appropriate where the primary objective is to exert a degree of control over fragmented markets, because XROs can match the pattern of fragmentation via participation.
	<i>Low-concentration markets</i> with many small operators create challenges for traditional enforcement authorities. There may be too many to cover effectively. Self- or co-regulatory arrangements can encourage industry or professional insiders to enforce the rules, leading to greater enforcement than direct state regulation.
	Self- and co-regulation suit 'thin' markets with only participants on at least one side, as it is easier to reach a consensus on requirements and monitor compliance. Indeed, many smaller markets already provide some self-policing. However, care must be taken to involve all interested parties to avoid cartelisation. Also, it is easier to monitor compliance when the majority of goods or services arise within the EU or key operators have a strong European base.
	In <i>markets with extended supply chains</i> , the necessary expertise and practical ability to ensure that XRO rules and resulting compliance further social objectives may be distributed among a number of different stakeholders. This is particularly true for market regulation, where active involvement of producers is essential.
Stakeholder diversity	Self-regulation may be more effective for involving a wide range of stakeholders with differing power and interests.
	The more stakeholders support the use of self- and co-regulation, the greater the chance of success. If sector players oppose the requirements, problems can occur. If they need to be coerced, prescriptive legislation may be preferred, given adequate enforcement.
	Consumer interest and pressure can be key factors supporting or ruling out self- and co- regulation. Increasing the range and quality of information available can influence consumers' buying behaviour, leading to voluntary action without classic regulation ³⁹ .
	Where a broad range of stakeholders hold divergent interests, the state may be unable to fulfil its traditional objective role – where interests overlap <i>and</i> conflict, it may be hard for the state to intervene to balance polarised positions. In such cases, the state and the public have collective interests in addition to (potentially conflicting) interest in specific cases.
	This is complicated further in cases where the state is responsible (as employer or contractor) for providing public services and thus cannot balance the interests of providers and recipient. Here, self- or (more likely) co-regulatory measures will be better placed to draw in those with different interests in order to find workable solutions. Often, arrangements which involve such groups in standards setting, rule-making and enforcement will be more effective than direct state regulation, which can be remote and blunt in its application.
Rapidly-changing environments	Self-regulation is suited to fast-changing environments that may be hindered by static systems of state regulation. Regulations that cannot keep pace with developments will be ineffective – they may have unintended and perverse effects, become irrelevant and thus ignored by those they were intended to regulate, or may simply be ill-equipped to sustain delivery of their original objectives in a changed environment. This same criticism may apply to some statutory XROs. Although adaptability is a commonly-accepted principle of good regulation, those subject to regulation must retain some freedom to decide how to achieve these goals, and self- and co-regulation may be more responsive to changing needs. Also, they may be easier to change than statute-based regulations.
	However, the credibility of policy also depends on the power of commitment. In cases where the objective is to encourage those closest to the issue to monitor the situation and take appropriate action, too much flexibility can undermine credibility and lead to confusion or loss of 'purchase'.
Risk	In cases of serious risk to health and safety, etc. classic regulation usually provides legal certainty and clear means of legal redress. However, intervention must be proportionate to the risk and regulation and carefully targeted. Self-regulation can usefully complement formal rules, and is widespread even in areas such as medicine, where the risks are considerable.

³⁹ See e.g. Bartle and Vass (2007).

Expertise	Self-regulation may be especially appropriate for <i>complex</i> or <i>technical</i> policy areas. Better results (clearer, more appropriate and more enforceable rules) are achieved when requirements are set, at least in part, by experts with greater market or technical understanding. This may need to be done in partnership with other stakeholders in order to ensure that the resulting rules identify the best means of achieving policy objectives. Research suggests that experts usually play more active roles in helping to develop alternatives than in crafting prescriptive legislation.
	Where competent <i>service delivery</i> itself demands a high level of expertise, the state may not have the knowledge needed to regulate effectively – hence the prevalence of self-regulation for skilled professions. Further, experts outside both government and the self- or co-regulated activity or profession may be <i>effective monitors</i> . The development of alternatives or the evaluation of existing XROs should consider how existing expertise is, or can be, harnessed. If such expertise is sidelined, regulation may be effectively blocked or inappropriate from the start.
	Where necessary expertise is spread across a range of different groups, <i>innovative</i> self- and co- regulation approaches may be required to secure their active and public interest-orientated engagement.
Monitoring	Robust and transparent monitoring is vital. Objectives and deadlines must be well defined and realistic and careful monitoring of progress against such objectives is needed to build confidence and trust in the use of self- and co-regulation. Thus, the feasibility of such monitoring – by the XRO, government and the public – is an important consideration.
Incentives	Self- and co-regulation will be more successful if stakeholders are encouraged to support it and feel that compliance is worthwhile. Sometimes, the <i>threat</i> of EU legislation can be enough; more positively, engagement can be enhanced by the <i>promise</i> of good publicity and sales generated if participants act on their own initiative to tackle problems, rather than waiting for outside intervention.
Sanctions	Where non-compliance may cause serious harm and full compliance is critical, <i>criminal sanctions</i> may be needed to deter breaches. They can be provided only by legislation, which may rule out self- or co-regulation except in conjunction with legislative tools. Less serious breaches can be deterred or punished by measures (e.g. expulsion from trade bodies, fines and/or negative publicity) which do not need legal underpinning.
Representative bodies	It is easier to negotiate and monitor self- and co-regulation if there is a strong trade association in place; also, such a group can help to police the market, freeing up resources. At the same time, independence of the XRO may be essential for a range of policy reasons.

General Principles of Regulation

The following principles, adapted from those contained in the European Commission's 2002 Action Plan on Better Regulation, are provided as a starting suggestion (Table 2). The relevance and specifics of these principles will vary in different cases, and greater specificity on such issues as market distortion and burden reduction may be needed.

Table 2: Good self-regulation principles

Transparency	Clear, well-defined and accessible:
	rules that identify intended outcomes;
	guidance for those applying the rules;
	internal channels of communication;
	 guidance for external stakeholders (e.g. consumers) about what the scheme does and does not cover;
	 annual reports, etc. detailing financial performance, complaints (number, handling, outcomes), etc.;
	independent dispute resolution procedures; and
	• delineation of roles within the organisation (e.g. a separate disciplinary committee).
Accountability	appropriate and properly used channels for consulting members;
	well-publicised, quick and simple procedures for dealing with public complaints;
	• well-publicised, fair and efficient appeals procedures for members and external stakeholders;
	access to independent arbitration or an ombudsman;
	 transparent processes for appointing and removing governing bodies;
	• lay representation on decision-making bodies to balance expertise and challenge complacency;
	clear division between XRO and bodies solely representing industry's interests; and
	mechanisms for reporting on activities to the wider public.

Targeting	 clearly defined goals and objectives; performance indicators to measure effectiveness; clear priorities, e.g. greatest risk of harm to consumers; extensive internal and external consultation on rules, codes of practice, etc.; and regular reviews to assess whether rules and other XRO functions remain necessary and effective.
Proportionality	 meaningful sanction mechanisms that do not disadvantage those trying to comply; procedures in place to allow government monitoring; and procedures to guard good practice against risk of disproportionate sanctions for minor offences.
Consistency	 rules that dovetail with other relevant rules and regulations; and procedures to ensure that similar problems are resolved in similar ways.

European XRO Options

To provide a concrete starting point for considering future possibilities, in addition to the obvious option of strengthened European levels of regulation, we identify three XRO options suggested by our analysis that always should be considered for inclusion in IA at EC level, corresponding approximately to: *'laissez-faire'*, self-regulation and coregulation. However, because the case studies and other evidence clearly demonstrate the importance of details of organisation and implementation, we also describe within these options some aspects of the general context (Better Regulation scenario) within which the options can be pursued and to which they will contribute, and consider the level of government at which they should be pursued. These three elements (general options, scenario contexts and levels of implementation) are described in this chapter.

The options relate to the 'Beaufort Scale' developed in Chapter 3, which unpacks the types of XRO that we discovered in examining the case studies. While the 12 ideal types of XRO identified may suggest a microscopic granular approach to classification of XROs, we consider this to be very much a work-in-progress to be tested against real XROs and IAs with a level of detail that will need to be tested in individual IAs.

Options to Consider in European Union Ex Ante Impact Assessments

1. Option Zero:

the 'do nothing' or '*laissez-faire*' option always should be included in regulatory IA. Within the context of this study, usually it will amount to tolerance of existing XRO arrangements, but as these XROs are dynamic, it is not a stable option. The 'trend extrapolation' scenario probably will bring gradual increases in current self-regulation with developing islands of co-regulation (already seen in some countries, e.g. Germany, and sectors, e.g. child pornography).

2. New self-regulation

a more proactive approach is to encourage the establishment or further development of independent self-regulatory arrangements. This can include engagement with various XRO functions, including membership/participation, organisation and procedures, rule-making, monitoring, enforcement, sanctions and evaluation. Support can take the form of (conditional) delegation of powers, financial resources, recognition of the XRO in policy formation or implementation bodies, or recognition of XRO decisions (e.g. by endorsing XRO-generated standards for public procurement, accepting standards compliance as evidence of associated regulatory compliance, allowing evidence of (non-) compliance to be used in court proceedings, etc.), and taking part in policy and/or implementation fora, as with Pan-European Game Information (PEGI) Online.

3. New co-regulation

the greatest degree of engagement with XROs comes via co-regulation. This can take a variety of forms. One is a formal and explicit division of powers along policy area or domain lines, or a separate allocation of roles, e.g. decisionmaking, monitoring, reporting, and/or enforcement. An example of the latter form of differentiated roles is where either the public or the co-regulatory body takes explicit responsibility for enforcing the rules or decisions of the other, based on sovereign power (state enforcement) or informational advantage (XRO enforcement). Such arrangements are 'fixed' in the sense that responsibilities are allocated at the outset. A more flexible and adaptive arrangement is to base co-regulation on an undertaking to support (in one of the ways identified above) proposals arising from XROs under certain *positive* conditions⁴⁰. Conversely, it is possible to combine the development of XROs to address existing or emerging problems with control of other risks by the use of negative conditions, under which proposals or activities would be actively restricted, supplanted or preempted. Such conditions could be derived from competition policy, single market or other treaty obligations, the general regulatory principles described in 2 etc. When flexible co-regulation is implemented by either positive or negative conditions, IA should attempt to gauge whether – and to what extent – the conditions are likely to be met. In addition, it is necessary to assess the legal and policy scope and implications of government activity to support or restrict XROs.

Policy Scenario Context

Because engagement with XROs represents a departure from regulatory 'business as usual', the implications of any particular option go beyond the specific policy area or organisation. Thus it is appropriate to place IA in a more general scenario, describing the evolution of attitudes towards such a 'privatisation of regulation'. This chapter briefly describes four possible scenarios. These need not describe developments exactly or exclusively – the actual evolution of the Better Regulation, IA and Lisbon Agendas will show elements of each. They are included here as an aid to scenario development rather than as complete scenarios, and should be used both to test assumptions (in which capacity they apply to all options whose impacts are assessed) and to draw out likely contributions of XROs to overall governance.

Continued status quo with increased user-generated regulation or 'self-organisation'

The 'direction of travel' in XROs towards more co-regulation may be counteracted by user-generated deregulation or 'self-organisation', in which the ability to report abuse or switch between applications and services (e.g. social networking sites, virtual worlds) is heightened by new technologies and applications. Governments can take more a monitoring or background view on the new developments while maintaining current regimes. In this scenario, the ability of users and other affected parties to take over from or increase the efficacy of existing (formal, self- or co-)regulation is enhanced by new technologies and applications that increase users' ability to report abuse, or switch between applications and services (e.g. social networking sites, virtual worlds). Governments can adopt a 'watching brief', monitoring new developments while maintaining or even 'ramping down'.

Regulation 2.0

⁴⁰ This has been followed by the Dutch government in relation to e.g. construction and environmental standards.

This represents an across-the-board movement towards formally recognised self- and co-regulation, backed by audits to ensure that XROs adequately enforce rules, reform their activities and represent the interests of all stakeholders. For example, movements towards this can be seen in a social networking 'Bill of Rights'. It would involve delegation of powers to XROs, with financial and/or administrative support, as well as supporting XRO membership (e.g. by endorsing XRO-generated standards for public procurement or accepting standards compliance as evidence of associated regulatory compliance). It would be likely to involve inclusion of government officials in policy and/or implementation fora, as with PEGI Online.

Legislation 2.0

Mves towards preventing harm may take a more co-regulatory or even formal regulatory pattern. This scenario represents a different policy decision than Regulation 2.0, with more formal, statute-based approaches to managing or preventing harm.

Without EU harmonisation, there could be potentially diverging national outcomes in such areas as Internet video, suicide sites, social networking, copyright, privacy, personal Internet security, etc. Note here the role of the e-Commerce Directive, constraining national differences by the common EC legal basis in liability of content providers (hosts not Internet Service Providers; ISPs), This might involve:

- explicit division of powers between the XRO and government in some domains, or separation of decision-making, monitoring, reporting, enforcement);
- implicit enforcement support;
- affirmative (Dutch) criteria for supporting exogenous or autonomously arising XRO proposals (with resources, information, regulatory forbearance, delegated or agency enforcement power);
- negative criteria for restricting, supplanting or pre-empting XROs (e.g. on competition policy, single market or other grounds). One key issue is the ability of government to restrict XROs.

Implementation Levels

These options can be implemented in various ways. Where suitably representative, effective and informed XROs exist, new powers can be added to their existing portfolio of activities, with the support or encouragement of the government entity (or entities) best placed to engage them (as in extending the roles of hotlines or classification schemes). This will often be the EU as a whole, where the XROs or their key members have a strong European base or where self- or co-regulation can be 'decentralised' from the global to the European level. In other cases, where the necessary engagement, powers and information are divided among existing XROs – and where the policy issue would be better served by their cooperation than by their competition – government can encourage or facilitate their merger, as with the Netherlands Institute for the Classification of Audiovisual Media (NICAM) or the Kommission für Jugendmedienschutz (KJM). Where a full merger of XROs or their powers is not desirable (e.g. on competition grounds), the appropriate governmental entity can create a suitable framework contract for stakeholders to encourage best practice⁴¹, to combine organisational and legal certainty with flexibility.

However, there may be circumstances where XRO options should not be implemented at European level, even where the issues are of specifically pan-European concern. In

⁴¹ As with the 1997 and 2006 Recommendations (to content hosts) on the protection of minors and human dignity.

situations where EC competence is limited by treaty or practical considerations, it may be more appropriate to push implementation downstream to the Member State or regional level, where implementation can be designed closer to the market, as with the European Framework Agreement on mobile content. In other cases, problems may not be tractable except at the global level, in which case it is appropriate to transfer implementation to global institutions – either through intergovernmental negotiations or through partnership with and/or support for global XROs, as for instance by the London Action Plan (LAP), or Internet Governance Forum (IGF; a perhaps heroic assumption). This may be more effective in the case of pressing international issues such as Internet security rather than culturally divergent issues dealing with content regulation.

Issues Arising in Relation to XRO Impact Assessment

The following issues are derived from the policy analysis literature, policy documents and case studies. Not all issues will be relevant in all cases, but many of them will need to be tackled in most assessments. They have been cross-referenced by topic and citations provided:

- option choice issues affecting the choice of an arrangement to assess;
- relevance, design issues affecting the further specification of an alternative, or the assessment of an existing arrangement in terms of its suitability for pursuit of public objectives;
- efficiency issues affecting the cost and cost-effectiveness of a scheme and (to the extent that it influences outputs) participation;
- effectiveness issues affecting compliance and the ability of the scheme to address the underlying societal problem (also affected by participation);
- impact issues bearing on the wider effects of the arrangement, such as the impact on market competitiveness, the ability to track changes in the sector or situation, etc.;
- sustainability issues affecting the ability of the scheme to deliver good governance and progress towards overarching policy objectives over a sustained period, when structural shifts and responses to self- or co-regulation are taken into account;
- risk assessment issues connected with the realisation and assessment of risks arising from the arrangement, or risks affecting its ability to deliver public service objectives; and
- IA issues concerned with the practice of IA in this area.

To apply the table, these issues can be grouped further in relation to the sector and specific policy issues involved. However, this grouping is context-dependent. Some sectors have extensive existing self-regulatory structures; in other cases, the issues involved show a separation of the interests of the various parties⁴².

⁴² For instance, discussion of recent French and British proposals to make ISPs liable for enforcing property rights has centred on whether ISPs are required to incur costs protecting the economic interests of content-owners, and thus whether rights-owners should participate in the self-regulation, and/or ISPs can recoup costs by 'non-net-neutral' charges to content providers. In this setting, issues of participation and the surrounding economic (and regulatory) context take priority. On the other hand, in relation to harmful content, the cross-subsidisation issue does not arise: while enforcement is undoubtedly costly for ISPs, no other identifiable commercial group directly benefits from the activity.

Table 3: Issues arising in relation to self- and co-regulatory impact assessment

Issue	Option choice	Relevance, design	Efficiency	Effectiveness	Impact	Sustainability	Risk assessment	IA	Reference
Coordination within XRO/policy network			Х						[66]
Effectiveness limited by bypass			Х						[15], [35]
A diversity of approaches to service delivery poses challenge for efficient regulation			Х						[84]
Financial basis, corporate form (impact on level of activity, targeting)			Х	Х					[78]
Simplicity of goals, specificity of means			Х	Х					[52]
Full range of costs, distributional impacts, administrative requirements (not just costs)			Х		х				[67]
Flow, quality and management of information			Х		Х	Х			[52]
Credibility of standards enhanced by expertise				Х					[50]
Credibility of standards enhanced by public/private enforcement				Х					[50]
Transparency of framework (impact on businesses lacking regulatory certainty)				Х					[8]
Do business activities cross jurisdictions?				Х					[8]
Are small and medium-sized enterprises (SMEs) affected (access to regulatory expertise, voice in XRO, regulatory uncertainty)				Х					[8]
Impact of others' compliance on stakeholders				Х					[1]
Compliance cost Public access to XRO (compliance) information				X X	х				[1]
Credibility of rules, actions, public information				X	^ X				[51], [25] [43]
Scope for regulatory innovation by XRO				X	X				[52]
Risk of capture of/by XRO				Х	Х				[15], [59]
Discretion allowed to members (functional standards, 'or- equivalent' compliance, etc.)				х	х				[52]
Scope for 'earned autonomy'				Х	Х	Х			[52]
Sustainability risk of 'free-riding' and opportunism (ease of entry/exit) – examine participation				х		х			[54]
Reputation payoffs to the XRO as a whole compared to those for individual members?				х		х			[72]
Integrated IA vs. specific types (business burdens, competition effects); risk to coherence, quality, consistency in Better Regulation Agenda								х	[48], [75], [1]
Ongoing audit of IAs								Х	[28]
RIA advisory role of EC								Х	[28]
Credibility of data (used as bargaining chip?)									[28]
Include wide range of relevant alternatives								Х	[87]
Active consultation during IA preparation to identify alternatives, sources of evidence, etc.								Х	[87]
Extend quantitative techniques as far as possible using 'hard' and 'soft' data, multiple sources, econometric analysis, etc.								Х	[87], [48]
Centralisation or decentralisation of RIAs								Х	[46]
Use case studies to build understanding, balance internal and external validity; guidelines for use								х	[56]

Issue	Option choice	Relevance, design	Efficiency	Effectiveness	Impact	Sustainability	Risk assessment	IA	Reference
What is the logic of the process for rule-making? (stages: agenda- setting, problem identification, decision, implementation and								Х	[80]
evaluation) Use Standard Cost Methodology to assess administrative burdens			Х					х	[28], [6]
Impact on timing and extent of future developments (e.g. tech solutions)					х	х			[51]
'Culture' of XRO players (business, consumer, high-tech): egalitarian vs. efficiency objectives; alignment of XRO and public objectives					х	Х			[26], [19]
Competition assessment guidelines					Х	Х			[75]
Certification delay, innovation, adoption impacts Voluntary agreements	х				Х	Х			[85] [51], [59]
How large are monitoring costs? (affects incentive to form as well as operation)	х		х						[37]
How many actual/potential members are there?	х		х						[37], [7], [17]
Unbundling of XRO participation, rule-making, monitoring, enforcement, evaluation, etc.	Х	Х							[69]
Better Regulation principles	Х	Х							[7]
Relevant (actual or potential) vertical regulation (at other layers)? Conditions for XROs (checklists)	x x	Х							[16] [9], [67], [68], [82], [11], [7]
Screen: market fragmentation (difference in literature as to pro/con)	х								[9], [25], [17]
Screen: fast-moving environment (flexibility as effectiveness, impact, sustainability criterion)	Х			Х	Х	Х			[25], [7], [17]
Involvement, need for specific expertise	Х				Х	х			[25], [50], [7], [17]
Screen: wide range of stakeholders	Х	Х							[25], [7], [17]
Establish geographic reach of issue, map existing policy network and stakeholders		Х							[66]
Tension between decentralisation and broad participation		Х							[15]
Compared to Directives, global standards more compatible with regulatory autonomy		Х							[50]
Independent advisory/research capability?		Х							[69]
Wide consumer participation		Х	Х	Х	Х				[44]
Use form of existing XRO as indicator of future objectives, performance, impacts		Х	Х	Х	Х				[52]
Need for transnational agreement: are the XROs already transnational in scope?		Х	х	Х	Х				[76]
Bargaining within XRO, with government		х		х					[51], [39], [69], [70]
Placement of liability for outcomes within XRO		Х		Х					[32]

Issue	Option choice	Relevance, design	Efficiency	Effectiveness	Impact	Sustainability	Risk assessment	IA	Reference
Are there strong informational asymmetries between XRO members and regulators?		Х		Х					[37], [7], [17]
Relationship between XRO and concerned authorities (partnership, adversarial, etc.)		Х		Х		Х			[19]
Subsidiarity: applicability across Member State regulatory environments, impact on regulatory autonomy		Х			Х				[19], [45]
Is the XRO intended to pre-empt, weaken or subvert government regulation?		Х			х				[70]
Democratic accountability of standards bodies		Х			Х				[50]
Coverage, governance of multiple XROs	Х	Х	Х		Х				[69]
Use 'sunset clauses' to protect flexibility, minimise capture, etc. (e.g. with statutory XRO)		Х				Х			[34]
Likely future evolution of rules, arrangements		Х				Х			[52]
Use scenarios to test assumptions (due to plasticity of situation); past history shows trends							Х		[33], [58]
Political interest (interference) in outcome							Х		[84]
Include policy and delivery risk in screening XRO options (inconsistency in literature whether risk argues for or against); examine likelihood, incidence, voice of affected parties, power to change							х		[25], [11], [7], [17]
Consider sustainability of XRO in terms of voluntary association, agenda creep						х			[66], [10]
Creative destruction ('sunsets', withdrawal, risk of institutionalisation)						Х			[52]

Chapter 4 Conclusions and recommendations

Public policy and the peer-reviewed literature converge on the recognition that there is *always* a price to be paid for regulation in the form of distortion, cost, institutionalisation, agenda creep and so on. This needs to be offset against the justifying benefit, which may mean extending or shrinking regulation in various areas, rebalancing rule-making and rule-enforcing, delegating or clawing back responsibility, etc. It is necessary to reassess not only *how* to regulate, but also *whether* and even *why* (if some needs become more pressing or cease to be relevant). Generally, this calls for some evolved form of, or alternative to, regulation. The paper presents six specific findings and associated recommendations for policy formulation.

There is no 'magic bullet' in Internet regulation; resolving contested policy claims among competitiveness, innovation, public safety and security concerns involves continual political judgment. However, Impact Assessment provides a tool for clarifying potential costs and benefits even where political judgment necessitates a decision that may impair competitiveness and/or innovation. This may help in the design of regulatory policies to mitigate e.g. the anti-competitive effects of an otherwise necessary increase in regulation. We by no means discount the need for more regulation in policy areas where the benefits of market-based XROs may be outweighed by distortions of competition, free rider problems, lack of compliance incentives, extra costs in selfregulation or other drawback. We do conclude that, given suitable options for assessment and a full understanding of the conditions that lead to XRO success, the Impact Assessment methodology may be expected to yield satisfactory results when applied to XROs in the Internet domain. It should therefore be employed more broadly.

Appendix: Case Study Results: Describing Existing XROs

This short summary and analysis concisely explains the outcomes from the most intensive part of this project, the examination of 21 self- or co-regulatory organisation (XRO) case studies. It is structured as follows: first, it explains the contextual classification of the selected XROs; second, it examines the financing and budgets for XROs which are very different to their co- or regulatory equivalents; third, the dynamics of XRO development as observed in the empirical phase of the project, including the managing structures of each XRO as measured against independence of directors and stakeholder representation; and finally, a gap analysis examines the substantive and emerging features of the Internet environment. These are grouped into six areas:

- taxonomic gaps, including the pressing need to 'unpack' self-regulation and consider more minutely the types of XRO that exist;
- gaps regarding innovation and competitiveness;
- policy gaps including privacy, intellectual property and the increased use of filtering by Internet Service Providers (ISPs);
- institutional gaps, including the use of soft law and alternative policy instruments;
- enforcement and compliance gaps; and
- methodological gaps, including the need for broader stakeholder surveys.

Finally, we contextualise these findings within their implications for Impact Assessment (IA). This leads in the following theoretical chapter into examination of why such features found in the empirical chapter are explained by the literature, in particular game theoretical examination of XRO formation and development.

Contextual Classification of Case Studies

The selection and methodology for investigation of the case studies was laid out in detail in previous reports in the first phases of the project. The European case studies are sited (with US case studies with European subsidiaries or offices) as seen in Figure 3(see below). We note that the case studies tend towards northern European examples, sited in Brussels, Geneva or five of the six largest economies in Europe (with the exception of Italy)⁴³. Several case studies have their headquarters in the USA, but branch offices in Europe⁴⁴.

Note that our approach was not intended to be geographically representative, but to identify interesting practices as well as best practice, including especially those practices that have shown or inculcated the most innovation. As a result, and with our focus on XROs as opposed to coregulatory forms – which were covered in the media content sector by the Hans Bredow report for DG INFSO in 2006⁴⁵ and Oxford University Report for DG INFSO in 2004⁴⁶ – there is a focus on the earliest and most copied forms of XRO. This set up an interesting contrast between British and other European (notably German but also the Netherlands) forms of XRO. As the study intended to examine European institutions from a global perspective, and given the commercial Internet's origins in the USA, we also examine a selection of XROs based there. It is particularly interesting that several pioneering XROs were founded in both the USA and Europe, notably the Internet Content Rating Association (ICRA) and the World Wide Web Consortium - W3C.

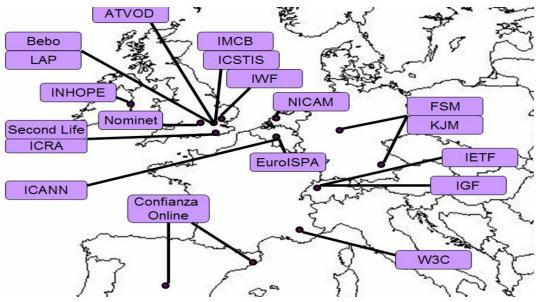
⁴³ Note that INHOPE is based in Dublin and marks the exception.

⁴⁴ SecondLife, Bebo, Creative Commons, IETF, W3C.

⁴⁵ Held and Scheuer (2006).

⁴⁶ Marsden (2005).

Figure 3: Selected XROs in Europe



A particularly fascinating and forward-looking element in case study selection was to examine the new types of social organisational forms, for instance in virtual worlds (SecondLife), social networking (Bebo), and royalty-free copyright (Creative Commons). In all these cases, we examined institutions with significant European market and regulatory exposure. In the interviews, it was stressed that case studies were based on previously observed XRO practice. We can represent this figuratively in Figure 4. We discovered through the case study analysis that the XROs conformed to the categorisation we present in detail below. As shown in Figure 4, the cases were grouped according to substantive and institutional interconnectedness.

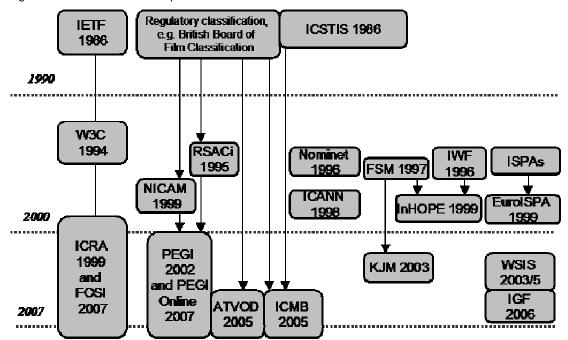


Figure 4: XROs and their development and associations

Financing and Budget of XROs

The focus for evaluation in examining XRO funding is to establish whether the XRO is fully resourced, and the vital question of the extent to which funding dictates form and function. The range of funding of XROs is very broad, with several XROs essentially skeleton activities. Finance is an indication that an XRO has sufficient resource to operate to some effect. Figure 5below illustrates the year of foundation and budget of XROs – in constructing the figure we estimated budgets for those organisations which declared staff numbers but not annual budgets. It reveals that the year of foundation of the XRO is not significant in its later budget, but its relationship to government and the degree to which it could be considered to be performing a vital function in the operation of markets were very important.

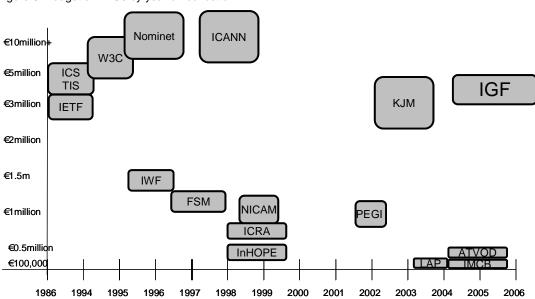


Figure 5: Budget of XROs by year of foundation

Typically, the main source of income is membership fees. These are supplemented by government (including EC) and corporate funders beyond fees as, for example, in hotline funding. In addition, sponsorships of events and other activities of XROs can form a major part of funding as, for example, in Internet Engineering Task Force (IETF) meeting fees. Operational funding is an important item for XROs, including Pan-European Game Information (PEGI), Nominet and Netherlands Institute for the Classification of Audiovisual Media (NICAM), where their classification and other activities are charged on a per-item basis.

It is clear that funding is, in many cases, minimal. Three categories of XROs present an exception to an overall picture of underfunded XROs:

- market makers XROs producing critical resources for markets, or those assumed to deliver a necessary function (historically) for that market to gain consumer acceptance, appeared better resourced. Examples included Nominet, Internet Corporation for Assigned Names and Numbers (ICANN), but also Internet Watch Foundation (IWF), as well as the standards bodies. They are paid for these functions and that income provides a stable resource base;
- co-regulatory schemes these received statutory backing for their resource demands on industry and therefore form a special category, but one might count these as a subcategory of market makers declared essential to market formation by government: NICAM, ICSTIS and Kommission für Jugendmedienschutz (KJM) are examples.
- market-funded those organisations paid for volume of output in growing markets also secured resource based on market growth rather than membership fees, for example, Nominet as above, also ICSTIS, Family Online Safety Initiative (FOSI) and PEGI, and the standards bodies W3C and IETF, where membership increases with market participant increases.

Additionally, a strong theme emerging from interviews and a workshop was that 'hidden resources' play a powerful role in XROs, greater in relation to formal resources than in direct state regulation. These hidden resources came in three forms: direct member resources, self-implementation activities by individual members, and third-party *pro bono* activities. Member resources devoted to the XRO's direct activities were considered substantial in, for example, the work of ATVOD and EuroISPA (the latter not regulatory in function). Member resources devoted to self-implementation under XRO protocols include, for example, British Telecom's Cleanfeed initiative, AOL's hotlines and anti-abuse teams, and Bebo's activities (the latter unregulated). Third-party resources devoted through *pro bono* activities included university and independent funding for IETF, W3C (both initially in any case), and Creative Commons.

Also note that the selection for case studies all represented successful companies, either start-up or established businesses. Therefore, it represents the leading edge of Internet businesses rather than the broad membership of the thousands of companies involved in, for example, EuroISPA or Nominet membership. Interviewees with substantial experience of these environments stressed that many Internet companies have neither the resources nor the incentive to perform compliance functions beyond the bare minimum required. In particular, companies with no interest in avoiding users who are concerned with avoiding harmful content (and especially companies who have incentive to ensure wide viewership of content that may be offensive to some) will have no incentive to contribute to XROs whose mission this is: they may *actively intend to expose* unsuspecting users to challenging content. Therefore, the activities of a social network such as Bebo are not representative of the activities of the class of social networks, any more than is AdultfriendFinder, the first because their regulatory standards are designed for a particularly vulnerable sub-group, and the latter for the inverse, the explicitly adult 'contact' community⁴⁷.

In our examination of corporate governance below, we explore the extent to which the XRO is 'captured' by the design of an independent funding council, or takes measures to widen its corporate governance to include non-executives who are also not corporate members, via advisory boards or government participation in some form.

Responsiveness and Flexibility of Self-regulation

This chapter considers how XROs have responded to their environment and their general characteristics as a basis for that adaptation. The case studies could not investigate the founding of XROs as such, but the methodology was designed to examine the reform process for the light that could be shed on the original design and its fitness for purpose in response to changing circumstances.

Note that many Internet XROs have founding 'myths': stories about the XRO origin that have developed over the period since its formation without empirical investigation or examination. Therefore we noted in the case studies the references to the histories of the XROs and focused in the interviews on what reform could reveal for reconsidering the foundation settlement of the XRO's mission and form. In order to do so, we had to gain access to those who were present at foundation or at the key moments of reform of the organisation. In general we were successful, with interviewees active in the foundation of the institutions and continuing their association⁴⁸.

There appear to be two broad types of regime formation: emergency response and marketforming. However, given the usual incentive problems in the formation of XROs, interviewees were asked why anyone but the incumbent would choose to be 'first-mover', and why would the incumbent run the risk of accusations of anti-competitive regime formation? Despite the risks of being considered anti-competitive (as expressed particularly in the Independent Mobile

⁴⁷ Note that AdultfriendFinder was the subject of a regulatory enforcement action by the US Federal Trade Commission on 7 December 2007 related to its intrusive advertising activities.

⁴⁸ Weitzner (W3C), Clark (IETF), Boyle (Nominet and ICANN), Benhamou (ICANN and IGF), Swetenham and Hoff (ICRA and INHOPE), Clayton, Hutty and Carr (IWF and EuroISPA), Callanan (INHOPE), Christiensen (KJM, FSM), Borthwick and Whiteing (IMCB), van Dijk and Bekkers (NICAM), Bekkers and Chazerand (PEGI), Millwood-Hargrave (ATVOD), Ondrejka (SecondLife), Sahel (London Action Plan against Spam) and Kummer and Banks (IGF). We also interviewed those associated with Trustmark and social network site formation. The notable exception is ICSTIS as a 21-year-old co-regulator, but which published an 'official' history to mark its anniversary (ICSTIS 2006).

Classification Board (IMCB) and EuroISPA case studies), the latter motive tends to dominate. This is considered further in theoretical terms in the main paper, but it is clear from the empirical evidence that such considerations are real, and the market actors are fully aware of the competition law consequences of their actions.

How and why is reform undertaken? Substantial reform was observed in the XROs under examination, with method ranging over the very public (PEGI, Nominet, FOSI and European mobiles); to the very political (ICSTIS, ICANN, IWF, INHOPE); and the private (Association of Television on Demand – ATVOD, SecondLife, Bebo).

The choice of approach was selected very deliberately by the XRO executive and membership, with regard to exogenous forces where these were felt to be particularly relevant – as in the public or political arenas chosen for reform discussion. The extent to which reform was undertaken with publicity of various kinds reflects the responsiveness of XROs to their wider policy environment: in general, the more the publicity, the greater a policy impact intended (note that this relates to the reform process, not the public unveiling of its results).

The following chapters consider in turn the reasons for change, the type of change of scope of activities observed, changes in stakeholder involvement and the governance structure, in enforcement and compliance, and in less regulatory activities – reporting, media literacy and government relations. A further chapter then considers whether the XROs submitted to external evaluation, and measurement of public awareness of XROs, as a particular concern is the visibility of XROs to consumers.

Internal Evaluation and Reforms Undertaken

The case study XROs themselves identified via internal consultations and self-evaluation many requirements for reform during the study period. Some XROs saw no pressing need for structural reform, notably the standards organisations W3C and IETF. Others are of such recent vintage that reform could be seen as presumptuous without an opportunity for governance arrangements to 'bed in' – notably IMCB, London Action Plan (LAP), Internet Governance Forum (IGF) and Verein Freiwillige Selbstkontrolle Multimedia-Dienstanbieter e.V. (FSM) search engine regulation. In these cases, the pressing requirement appears to be increased legitimacy and stakeholder acceptance through activity.

Where reform was taking place during the survey months of June to September 2007, we identify types of reform relating to scope, stakeholders, governance structure, reporting, media literacy, government relations and external evaluations. These relate to the evaluation framework used for the individual case studies and the summary notes of those items which the XROs themselves considered important factors in their reform. To reiterate our methodology in the response to the terms of reference, the examination of reform during the survey period was intended to revisit the issue of regime formation, in that reform begs the question of prior and original institutional design.

Scope of Activities

Expansion of the scope of XROs included those of PEGI, IWF and Creative Commons, with change respectively to create PEGI Online, the IWF reforms to the Child Abuse Images and Content (CAIC) list use to block sites by ISPs, and new licences and activities for Creative Commons. Where reform took place, the scope extension was largely undertaken through existing resources or on the basis of projected resource increases associated with the new activities (membership increases, etc.). Expansion of scale (i.e. internationalisation) was seen in the PEGI and LAP examples, both with greater membership and activities outside Europe.

Stakeholders

Reform to encompass better third sector (charity, consumer, volunteer, user) input was seen in the new formal arrangements undertaken by FOSI in its reinvigorated advisory board, Nominet through its Best Practice Challenge, UK IGF through dynamic coalitions and IWF through outreach, but was explicitly rejected by the PEGI process in which end-users' input was assumed to be included in member companies' activities. For LAP and the standards bodies, such activities remained a matter of activity-based inclusion. In general, multi-stakeholderism was a matter of *ad hoc* consultation and web-based input rather than formal management structures. Where XROs decided on board structures with a majority of non-industry members, such as ICSTIS and IMCB, multi-stakeholderism could be considered to be institutionalised in the method of governance chosen. However, given the 'chameleon' nature of many individuals in this area, with commercial, voluntary, academic and even government roles in their portfolio of interests, we caution that even the apparent exclusion or alternately the 'hardwired' multistakeholder governance models may conceal a range of practices that are much more inclusive or exclusive respectively⁴⁹. We note in particular the use of the XROs' websites, listservs and other discussion lists to encourage a pluralistic response to consultations and ongoing activities as well as the use of instant reporting tools (hotlines, abuse buttons, etc.).

Governance Structure

Membership structures often affected the pace and direction of reforms. Telling examples are the 'veto' on IWF reform posed by its funding council, and the need for a poll of the entire membership for fundamental Nominet reforms that affect any change to its original mission, both of which significantly balance any reformist executive proposal. By contrast, W3C features a particularly direct form of leadership which favours rapid reform. We note the particular cases of various types of 'government advisory committees' for PEGI, IGF and ICANN, and the difficulty in understanding how this formal role translates into the true influence of such committees. Typically, the government members interviewed believe that their real influence is overblown by non-members while civil society observers believe that it is greater than theirs – a case of mutual mistrust.

The now long-established standards (IETF, W3C) and technical infrastructure (ICANN) bodies are accused by critics of being captured by their industry supporters, but can claim significant mandates from industry, government and users, acclaim for their technical expertise and widespread market adoption of their interoperable standards. Labelling (Trustmark) and rating (ICRA) schemes continue to show innovation, but are not well-known by the public or widely adopted by by

⁴⁹ Consider Tim Berners-Lee, an academic and director of W3C, with various other advisory board interests. The same may be said of many Internet Society (ISOC) directors and others. The multifaceted nature of many Internet advocate-experts is a great strength of the community, but such multi-tasking makes analysis more complex.

Table 4 shows the board composition and governance for the XROs – note that this cannot capture the complexity of ICANN, while several of the firm-level XROs are simply directors of private companies, and there is no requirement to grant independent directorships or any level of representation for user–civil society groups. Boards should exercise good corporate citizenship, and responsiveness to corporate social responsibility can exercise a level of governance and environmental (social and sustainable) consideration, absent even any acknowledgement of the regulatory agenda.

	pes of managing ins				
XRO	Number of board directors	Non-executives	Independent funding board	Advisory board	Executives on board
ICANN	15 plus 6 non- voting	Appointed by nominating committee	No	Yes	President/CEO ex- officio
Nominet	2 executives and 4	2 non-executives; 2	Executive set	Policy and	CEO
	non-executives	others representing: 8 nominated organisations; 8 Nominet members	budget; presented to board	advisory body	
IETF	Administrative oversight committee	IETF chair appointed by Internet Architecture Board (also sits on administrative oversight committee)		Internet architecture board selected by nominated committee; approved by ISOC trustees	Administrative Director appointed by administrative oversight committee
W3C			No	Advisory board elected by members	Director
FOSI/ICR A	16	Majority	No	Advisory council: 9 members	CEO
IWF	10	Yes	Funding council	Board of trustees	CEO: executive committee of chair and 2 members
INHOPE	4, including president and vice	Board is executive	No	General assembly 30 members	No
EuroISPA	Governing council	1 per governing council member	Treasurer		President
KJM	12 delegated by state federal authority for	media authorities; 4 by s protection of minors	state youth authori	ties; 2 by supreme	Chair
FSM	7	By FSM membership			Chair, managing director
ICSTIS	10		Budget approve Ofcom	15 on industry liaison panel	Chair, chief executive
ICMB	4	3	No	Board co-opted from ICSTIS	Chair, director
NICAM	10 general and executive board		No	Advisory committee 27 members	Independent chair
PEGI	15			Advisory board	Yes
ATVOD	8	1 plus 2 special advisors	No	Board; 2 independent advisors	Run by chair
SecondLife	LindenLabs board: 5			No	CEO
CC	Board of founders			No	CEO
Bebo	Board of directors			No	CEO
TRUSTe	17			No	CEO
Confianza	Board members come associations	e from member		Board	Director
LAP	Ad hoc	Not relevant	Ad hoc	No	No
IGF	Chair appointed by U no members	N Secretary-General:	No	47 member advisory group	Secretariat to chair

Table 4: Types of managing instrument in each XRO

Enforcement and Compliance

The enforcement of the rules of XROs appears to be an area demanding continued scrutiny, and reform focuses on broader concerns than traditional command-and-control methods of enforcement. This makes it particularly difficult to assess the success of XROs and the effectiveness of their reform processes. Given the subtlety and flexibility of norms regarding to these organisations, enforcement amounts more often to compliance incentives:

- moral censure;
- expulsion or suspension of membership; or
- market refusal to adopt the standard, filter, technique or Trustmark.

None of these techniques should be underestimated: a reputation of bad faith attracted to a researcher or organisation in a standards body can undermine entirely their effectiveness, as much work relies on building alliances and persuading others of one's cause. Equally, membership termination can be of great importance, ranging from expelling a member or removing a Trustmark from an organisation to suspending or terminating an individual's membership of a social network or virtual world, as much 'reputation capital' may have been developed in friendship networks, recommendations and so on.

Markets that do not adopt standards, distributors who ignore kitemarks and filtering guidelines, and consumers who do not trust the regulatory technique, make such XROs entirely redundant, a danger admitted by Trustmark organisations, standards bodies and filtering organisations alike. Indeed, their reforms often amount to trying to give teeth to previously created processes. A test of XRO effectiveness must be whether it has 'shown its teeth' to a member through some type of sanction broadly defined above: withdrawal of membership, censure for non-compliance, or an increased market use of and adherence to the standards of the technique used. The case studies and previous empirical research guide these findings. More extensive quantitative and qualitative research is needed into the methods and techniques used by Information Society XROs to maximise market and consumer knowledge and adoption of the proposed XRO solution.

Reporting

Reporting by XROs appears to be gaining greater importance in their reform agendas, as their importance is growing, and in general they are increasingly aware of the need for communication to the broader public. In addition to the ICANN example above (the exemplar with the IGF of international participation), many organisations held public meetings, including webcast meetings, to report on their work and discuss and receive views from the interested constituency, often including the general public⁵⁰. It is clear that Internet XROs are good examples of reporting and public engagement, unsurprisingly using the Internet as a major source of distant communication without excluding the need for 'live' personal meeting opportunities. Where criticisms were made, they often related more to the overload of information available than the lack thereof. In particular, civil society stakeholders often claimed that simply keeping up with the volume of work produced by an XRO was a full-time job, and that it was impossible for both this group and many developing country and smaller country experts to stay informed of the vital activities of, for example, LAP, ICANN, IGF and other international regulatory mechanisms. This is an obvious resource gap that some XROs are attempting to cover by use of summaries, monthly bulletins and annual activities reports, recognising that many interested parties cannot keep up-to-date with the entirety of several XRO activities.

Media Literacy

Media literacy is an element of XRO activity which was continually stressed by the interviewees, including those not directly responsible for the XRO. Thus, notable efforts to engage with the public were stressed by XROs varying from standards-based (W3C) to

⁵⁰ Members of the RAND project team attended public meetings held by ICSTIS, Nominet, ISPA UK, PEGI, ICANN, IGF, IETF, LAP and FOSI in person during or immediately before the project, and invitation-only expert meetings with SecondLife, Creative Commons, W3C, ICSTIS, IMCB, TRUSTe, ATVOD, FSM, KJM and NICAM (the final four all at the German Presidency media self-regulation meeting in Leipzig, May 2007).

labelling (PEGI, FOSI, NICAM), and from hotline (INHOPE, KJM) to self-organising (Bebo, SecondLife, Creative Commons). These activities are dedicated resourced activities in addition to those of their members and the reporting-type expert or stakeholder meetings referred to above. However, we note that public knowledge of any of these bodies is extremely poor, and knowledge of the overall framework itself is weak. The Eurobarometer surveys commissioned by DG INFSO in 2003, 2004, 2005 and 2007 are an essential evidential contribution to public perceptions and knowledge of XROs⁵¹.

Government Relations

With regard to XRO engagement with government, we note the formal review of ICSTIS, NICAM and KJM, and requirements to appear before their Parliaments, as well as deliberate and extensive outreach by various bodies (e.g. Nominet, EuroISPA, IWF and PEGI) to both politician and government audiences. Many XROs in case studies were funded partially by the Safer Internet Action Plan (SIAP) and formal reviews (as well as financial and project reporting and continued informal engagement) took place during 2006/07. Therefore, there is significant government involvement in establishing and established XROs, which forms the basis for the 'Beaufort Scale' of XRO type which we constructed and is explained in chapter 3.4 and Table 6 below.

External Evaluations

Evaluations of XROs were limited to those that we class as co-regulatory, notably the entire German system for Internet co-regulation evaluated by Hans Bredow Institut and partners, NICAM's ongoing evaluation⁵², the UK system for media self-regulation by Latzer, Price and Verhulst for Ofcom⁵³, and the OneWorldTrust evaluation of ICANN. We also note the continued reflection on video co-regulation undertaken in connection with the future implementation of the Audio-Visual Media Services Directive, although this was only considered directly relevant to ATVOD. Several UK reform proposals referred to the UK Better Regulation framework (Nominet, ICSTIS) and the Cadbury corporate governance reform proposals (IWF, Nominet). ICANN continued its experiment with an ombudsman and appointed a public participation manager to encourage outreach to its constituency.

The lack of individual resource per case study means that results are of necessity partial and only cautious conclusions can be drawn. However, the XROs themselves and stakeholders actively participated in the study and showed great willingness to engage with government in assessing more fully their individual and collective impact on trust and efficiency, among other goals, in the Information Society.

A programme of such impacts has been carried out via independent research in several countries⁵⁴, in addition to the independent evaluations carried out on behalf of SIAP and other DG INFSO activities (including for privacy and standard-setting policy). Several institutions have carried out evaluations of their processes or commissioned research to evaluate processes (notably ICANN and ICSTIS in our survey), as shown in Table 5 below. To end-2007, we found no independent evaluation of the emerging XROs: ATVOD, SecondLife, Bebo, Creative Commons, Trustmarks, LAP and IGF.

XRO	Independent evaluation	Organisation	Government evaluation involvement	Comments
ICANN	Yes	College d'Europe Bruges (2003)	College study funded by DG INFSO (Note: US Commerce Department formal	Internal evaluations include OneWorldTrust (2007) on corporate governance and London School of Economics

Table 5: Independent evaluations carried out of case studies

⁵¹ See Safer Internet For Children: Qualitative Study In 29 European Countries – Summary Report (2007), at: http://europa.eu/rapid/pressReleasesAction.do?reference=IP/07/1227&format=HTML&aged=0&language=EN&g uiLanguage=en

 $^{^{52}}$ See van der Stoel et al. (2005).

⁵³ Latzer et al. (2007)

⁵⁴ For example, Austria by Latzer et al. (2006), Germany by Hans Bredow (2007), UK by Latzer et al. for Ofcom (2007), and France by the Forum des Droits sur l'Internet on ongoing basis.

XRO	Independent evaluation	Organisation	Government evaluation involvement	Comments
			supervision of ICANN)	(LSE 2005) on GNSO
Nominet	No		None formal	Membership consultations on internal reforms of governance 2007
IETF	No		None formal	Internal governance mechanisms reformed with ISOC secretariat role
W3C	Yes	DG INFSO	Funding for European office	Since 1996
ICRA	Yes	SIAP	DG INFSO	Independent evaluators
IWF	Yes	SIAP	SIAP funding oversight	DG INFSO – also independent governance reforms
INHOPE	Yes	SIAP	DG INFSO	Independent evaluators
EuroISPA	No		Informal	Lobby group
KJM	Yes	Hans Bredow and partners	Funded	Independent evaluators
FSM	Yes	Hans Bredow and partners	Funded	Independent evaluators
ICSTIS	Yes	Ofcom	Funded	Ongoing
IMCB	No			
NICAM	Yes	Periodic scheduled	Parliament commissioned	Independent evaluators
PEGI		SIAP	CONTINUESTONEO	Independent evaluators

Source: compilation from published sources

It is clear that the necessity for evaluation of XROs in the Information Society must include the interaction between national, European and global initiatives, and interviewees welcomed the ambitious multi-sectoral and interdisciplinary approach taken in this survey which revealed, for instance, the connections in labelling between ICRA, NICAM, IMCB and PEGI on the one hand, and ICRA with ICANN (through FOSI's interaction with the ".xxx" domain proposal), W3C and ultimately IETF and IGF, on the other hand.

The interconnectedness of the various XROs was very much a feature that emerged from the elite interviews conducted. In part, this was due to the intermingling of personnel and the self-regulatory entrepreneurship of the founders of such XROs. It was claimed also to have resulted from the very powerful interconnectedness of the networking technologies used by these founders. In addition, there is a 'small world' phenomenon that particularly applied in the period before mass Internet adoption in the late 1990s. In the critical period of 1994–8 when institutions such as W3C, ICRA, ICANN, INHOPE, IWF and FSM were discussed and/or founded, the personnel involved were often well known to each other. This 'small world' phenomenon has been less familiar since then, with reasons ranging from the departure of several founders into commercial companies in the late 1990s Internet and telecoms boom, the increasing specialisation and diversification of many key individuals in the early 2000s, and the collapse of Internet markets in the first half of the current decade.

Anthropological examination of the networks of founders and the development of the XROs could produce useful further empirical conclusions.

Public Awareness of XROs

Significant gaps appear to exist in public knowledge of even the best-resourced and most wellknown examples of Information Society self-regulation, and many case studies illustrate attempts at outreach and media literacy (notably ICSTIS, NICAM, IWF and KJM). Most members of the public appear to continue to believe that content should be reported to the police, government regulator or ISPs, for instance, rather than the various XROs.

Gap Analysis

The gap analysis purpose (of the mapping exercise and detailed examination of a representative and strategically chosen universe of case studies) is to identify the emerging environment for new topics and/or sectoral areas of regulatory and/or legislative interest. There are three potential outcomes:

- that no gaps in regulation exist, with XROs and state regulation adequately providing rules in all areas;
- that gaps exist which are claimed to be filled by XROs, but where there is insufficient evidence to demonstrate effective institutions to demonstrate effective regulation, either in institutional endowment or enforcement effectiveness; and
- that there is significant uncertainty that gaps that do exist are filled by XROs or it is demonstrably the case that such gaps are unregulated except by general law, individual market actors and market actor or user behaviour (self-organisation rather than self-regulation).

The first is clearly not the case in Internet regulation. The case studies indicate the second applied in relation to Internet content, classification, ratings, personal internet security and ecommerce. The rise of Web2.0 content in the period since 2003 points to a further area where institutions do exist with potentially effective regulatory mechanisms, but which do not fit the classical model of a pan-industry XRO. In particular, the evidence demonstrated gaps in areas where emerging social, technical or economic trends create new 'regulatory spaces' to examine. The case studies demonstrated and evaluated the response of existing XROs to these evolving spaces. We identify areas in which there were gaps in either research, or more concretely formal XROs, and that means of enforcement for XROs in Internet-related topics are varied and often minimal.

Taxonomy Gaps: A Classification of Situations and Levels of XRO organisation

The IA strategy is not one-size-fits-all, and there are good reasons to build into it a degree of adaptability. For example, according to Table 5, an important part is the degree of self-regulation. This helps us to understand better the types of XRO activities and government involvement therein which have proved effective or have been exemplified in the case studies. Note that only options 9, 10 and 11 represent co-regulation and therefore government legislative force to the regulatory forum, but the eight levels below provide a richness to the taxonomy that opens and exposes the techniques used in the 'black box' for some legislators of the XRO.

Note that these approximate classifications do not relate to degree of government funding – the relationship between direct or indirect government funding is not consistent with policy involvement. For instance, government may choose to support a self-regulatory standard-setting activity as a genuinely deregulatory policy, as in scales 5 and 6 above. That may include government financial support or co-funding, a policy approached vigorously by the SIAP since 1998. One can investigate whether such approaches are consistent with policy support via the failure of proposed policy interventions which sought to extend the role of such bodies.

This extended classification, building on earlier work⁵⁵, is necessary to finesse the distinctions between different self-regulatory bodies' establishment and development. For instance, the

⁵⁵ E.g. Latzer et al. (2006), Schulz and Held (2004), PCMLP (2004).

insistence of PEGI that its establishment was "co-regulatory" demonstrates that it was different in approach to other types of self-regulatory forum.

We recognise that both options 0 and 11 amount to exemplars that are found infrequently in practice – pure self-regulation with no prior or later approval amounts to a self-regulatory body that is close to invisible in practice, and it is certainly the case that only the very 'early stage' hybrid of self-regulation can be viewed in this space. Its doubtful and contested policy outcomes and process often reflect a highly politically uncertain environment, and thus it is perhaps unsurprising that politicians and bureaucrats do not intervene or even publicly comment on such manoeuvres. Nonetheless, these types are recognisable.

Scale	Regulatory scheme	Self–Co	Government involvement
0	'Pure' unenforced self- regulation	Creative Commons SecondLife	Informal interchange only – evolving partial industry forum building on players' own terms
1	Acknowledged self- regulation	ATVOD	Discussion, but no formal recognition/approval
2	<i>Post-facto</i> standardised self-regulation	W3C#	Later approval of standards
3	Standardised self- regulation	IETF	Formal approval of standards
4	Discussed self- regulation	IMCB	Prior principled informal discussion, but no sanction/approval/process audit
5	Recognised self- regulation	ISPA	Recognition of body – informal policy role
6	Co-founded self- regulation	FOSI#	Prior negotiation of body – no outcome role
7	Sanctioned self- regulation	PEGI# Euro mobile	Recognition of body – formal policy role (contact committee/process)
8	Approved self- regulation	Hotline#	Prior principled less formal discussion with government —with recognition/approval
9	co-regulation	KJM# ICANN	Prior principled discussion with government – with sanction/approval/process audit
10	Scrutinised co- regulation	NICAM#	As 9, with annual budget/process approval
11	Independent body (with stakeholder forum)	ICSTIS#	Government imposed and co-regulated with taxation/compulsory levy

Table 6: A 'Beaufort Scale' of self-regulation

Note: # denotes 'soft power' of government/EC funding.

Policy Gaps: Innovation and Competitiveness

The analysis of the case studies has shown that the lack of compulsion or state involvement has led to significant private or non-profit innovation in several sectors: Trustmarks; Social Networking Sites (SNS); virtual worlds; copyright. Sharing of global best practice between governments and other stakeholders has been seen from both top-down (IGF) and more heterarchical (LAP) initiatives. The problems of illegal and inappropriate content have led to significant private sector initiatives on individual company (i.e. BT Cleanfeed) and more sectoral levels (IMCB in mobiles, ATVOD in video on demand, FSM in search engine self-regulation). Whereas network owners are active in building self-regulatory organisations, such as ATVOD, IMCB, IWF, KJM and others, content providers from a more 'start-up' culture continue to reply on their distinctive use-based and mediated self-organisation forms:

this is true of SecondLife, Bebo, Creative Commons and others. (We consider the general conclusion on 'Regulation 2.0' in concluding the main paper)

The regulation of content in next-generation networks has been highlighted recently by several leading authoritative analysts of Internet regulation⁵⁶. Although 'net neutrality' and the contractual relations between content providers and network owners are outside the scope of this study⁵⁷, it is evident that significant tensions based on divergent business models and regulatory inheritances exist. The relationship between control via hardware and software of the end-user's experience and that user's ability to influence and control their own environment is not new but runs throughout the substantive issue areas described above. Zittrain (2006b: 254) states:

"Control over software – and the ability of PC users to run it – rather than control over the network, will be a future battleground for Internet regulation, a battleground primed by an independently-motivated movement by consumers away from open, generative PCs and toward more highly regulable endpoint platforms."

These platforms are games consoles, mobile handsets and other 'closed' walled garden networks, where content access depends on network rules (both technical and economic). Whereas arguably the personal computer (PC) environment is becoming more open (with open source⁵⁸ and free programmes and applications, peer-to-peer distribution⁵⁹, and royalty-free licensing⁶⁰), the mobile and games environment remains largely subject to vertically integrated network operators.

Policy Gaps: Intellectual Property, Privacy, Freedom and Filtering

The primary substantive concerns that arise from the regulation perspective remain those of balancing interests, a primarily political economic equation. These include the rights of intellectual property holders and the interest in innovation, and the right balance to strike for copyright and other rights in an evolving and more user-centred and generated innovative environment. Benhamou offers a considered analysis of these problems:

- there is a need for transparency at technical interfaces;
- anti-competitive dominance is a real concern, especially over scarce resources such as spectrum, numbering space and Application Programme Interfaces for dominant search engines. Search engine regulation must be transparent⁶¹. To him, a particular problem is the vertical integration of mobile devices with networks (e.g. lack of Wifi or third-generation (3G) functionality in the 2007 iPhone);
- another concern is for "the need for a citizen-centric approach, which does not exist as there is no global view of the rights of the citizen online"⁶².

The second such trade-off is between public interests in unfettered freedom of expression for Internet users, versus various public safety concerns including inappropriate and harmful content and 'malware' (spam, viruses, etc.) as well as criminal content or that promoting criminal activity.

Further concerns arise in regards to entrepreneurial attempts to adapt their services to new commercial opportunities versus the interests of many users in maintaining a privacy opt-out from exposure of their personal information to either strangers or commercial presence. Intellectual property rights (IPR), freedom of expression, crime fighting and privacy are all policy fields in which government has substantial interest in maintaining sound policies for

⁵⁶ Bauer and Bohlin (2007), Faratin et al. (2007), Frieden (2007).

⁵⁷ See Marsden (2007).

⁵⁸ MacCormack et al. (2005)

⁵⁹ Mayer-Schönberger (2003).

⁶⁰ But also firewalls, the dominance of the Microsoft Windows family of operating systems and proprietary forms of digital rights management.

⁶¹ He considers National Science Foundation (2004) to be important in this regard.

 $^{^{62}}$ Benhamou (2007: interview with Marsden 4 September). An example is privacy and control of information. He takes Spock.com is an example of new metasearch people sites – using LinkedIn public information. He considers that Open ID – a new form of federated identity – creates possibilities for interoperability to create 'Big Brothers' on a federated data level.

public benefit, and none of these fields can be left to self-regulation without continually refreshed IA and review of the public interest.

Comparisons with non-Information Society XROs may prove useful in analysing this type of risk-based regulation. The balancing of costs and benefits in technologically sophisticated regulatory environments with strong public interests is highly politically-charged, and the case studies considered are the regular subject of mass media interest in censorship and the Internet. Innovation in XROs in areas of both complex technology and profound citizen ethical interest has been undertaken in biotechnology (e.g. in the case of genetically modified crops), biomedicine (human embryology), environmental protection and nuclear safety. The idea of engaging experts with citizens directly in such cases, with the immediate emotive mass media reporting of these topics, has been broadly evaluated. The 'technocratic' tendency for such regulation to be dominated by experts has been severely criticised in the Internet context and clearly cannot operate outside the normative political framework⁶³. Furthermore, absent some level of government supervision, self-regulation is coming under serious challenge. National government control over the Internet was never a feasible option⁶⁴ without international negotiation and compromise⁶⁵. Regional and global regulation begs questions of trade⁶⁶ as well as competition and human rights obligations. The future of Internet selfregulation at the international level has been widely considered⁶⁷.

There are substantial analytical gaps in our assessment and evaluation of Internet XROs in comparison with other sectoral regulation, and with emerging opportunities and threats from technologies within the Internet environment itself.

Institutional Gaps

Institutionally, we identify significant innovations, but also increasing resource constraints on XROs. Adoption of the multi-stakeholder paradigm and the inclusion of user interests are increasing from a low base, encouraged by the minimal co-regulation involved in government monitoring and supervision of such multi-stakeholder discussions, as well as more formal policy tools including funding and support for such activities. The introduction of formal appeal mechanisms, ombudsmen and formal opportunities for dialogue, as well as open consultations, is also increasing. As expected, the use of online discussion fora is well-developed and public participation via this means (short of e-voting) is flourishing. Both government and civil society have a role here in ensuring maximum transparency and effectiveness of decision-making, while maintaining high standards of efficiency in implementation of the XRO goals.

Budgets for XROs are often very low by government regulatory standards, which may prove either: the greater efficiency of the private sector; resource gaps to ensure maximum transparency and good governance; or that the true costs of XROs lie in the individual and combined members' activities, both in serving the XRO directly and in the policies adopted at the individual company/service level.

Differences in trans-Atlantic approaches towards self-regulation are a strong feature of Internet self-regulation⁶⁸. Newman and Bach identify the mid-way between US-style 'market regulation' and European 'carrot-and-stick' public involvement in self-regulation⁶⁹. We

⁶³ As explained by Dommering (2006) and Greenstein (2006).

⁶⁴ Odlyzko (2000).

⁶⁵ Mayer-Schonberger and Ziewitz (2007).

⁶⁶ Wu (2006).

⁶⁷ E.g. Börzel (2000), Goldsmith and Wu (2006), Wu (2006).

⁶⁸ Newman and Bach (2004: 388) state that: "In the U.S., the government induces self-regulation largely through the threat of stringent formal rules and costly litigation should industry fail to deliver socially desired outcomes. Industry thus views self-regulation as a pre-emptive effort to avoid government involvement. The relationship between the public and private sector is spotty, formal and frequently adversarial. We label the ideal-typical U.S. model legalistic self-regulation." By contrast, they claim that the European Union makes wider use of 'soft powers' (Duina 1999) of funding, recommendation, best practice sharing and coordination: "In Europe, public sector representatives meet with industry and agree on a joint course of action. Here, private and public sectors view each other as partners in an often-informal self-regulatory process. Co-ordinated self-regulation is the term we use to describe the European ideal-typical model."

⁶⁹ Newman and Bach (2004: 392). They state: "The public sector has greater carrot capacity if it can offer financial and logistical incentives to bring about sustained participation of organized private interests in the regulatory process. Toward the high end of a scale is its ability to formally delegate regulatory authority to organized private

recognise from the case studies these differing uses of carrots and sticks, and the coordinated self-regulation approach as particularly applied by the European Commission. These approaches are worthy of further analysis and development, which we undertake in Chapters 4–5.

Enforcement and Compliance Gaps

We identified several classes of XRO for which enforcement of rules is either unproven or of a type which is non-binding, and which conform to the upper levels (0–4) in the 'Beaufort Scale'. The following categories lack effective enforcement:

- XROs of recent standing that have no record, or a very limited record, of taking enforcement action against parties that breach rules which includes, for instance, new Internet Protocol Television (IPTV) XRO ATVOD, as well as ICANN in its enforcements against rogue registrars;
- standards bodies for whom enforcement is via patent, and is voluntary in that it is market actors' decision whether to apply for permission to use the standard;
- norm-setting international or national organisations whose advice consists of opinions or codes of conduct whose implementation is considered to be 'best practice', but which is entirely voluntary: for instance, Internet exchanges such as the London Internet Exchange (LINX) and ISP associations; and
- bodies with no formal membership and/or only individuals with standing, and therefore not even the limited sanction of expulsion of members, whose enforcement is at best a matter of moral suasion and a refusal to sanction participation: for instance, IGF or IETF. Here, the sanction is future non-cooperation and publicity which is unflattering to the individual or organisation.

The potential challenges to effective functioning of markets, and therefore competition law issues in self-regulation, are well known⁷⁰. On a narrow reading of regulation in terms of enforcement, the XROs above may be considered to have no regulatory power, or as merely talking shops or lobbies, and therefore pose no such competition issues. However, as Lessig⁷¹ famously illustrated, a narrow legalistic view of regulation draws a clear line in enforcement, but fails entirely to acknowledge the less formal yet more influential and pervasive influence of decisions made in other fora, which are habitually followed or noted by the Internet community affected. Continued research into the potential for such adoption has been further identified by, for instance, ENISA⁷² in its examination of social networks, and the Office of Fair Trading (2007a)⁷³ in the case of trust in e-commerce, and more is urgently required.

Methodological Gaps in the Study

The Internet survey has provided very valuable information. However, a significant number of correspondents failed to complete all questions in each area, which reduces the possibility for comparison and cross referencing of findings. As a demanding survey in terms of accuracy of detailed knowledge required of participants, this was anticipated. To illustrate this: interviewees who were asked to examine (or where possible complete) the survey prior to the interview, in several cases explained during the interview that they could not complete several categories of questions in the survey. This may illustrate both the survey's demanding nature and the lack of intimate knowledge of self-regulatory organisations – even by their participants. In fact, particularly in the case of budgets, respondees exhibited very little knowledge, with only two of 19 respondees answering regarding the W3C (an 11% rate); they gave separate answers of either \$200,000 or \$5,000,000 per annum budget. Therefore, this type of response was not especially illuminating, except inasmuch as it revealed the expected

interests and/or to make industry rules enforceable in the courts, an arrangement... aptly called "private interest government."

⁷⁰ Joskow and Noll (1999: 1252) state: "[R]egulation must accord rights of participation and policy review to anyone substantially affected by its policies, which invites strategies and tactics that, at best, retard the competitive process and, with depressing frequency, invite cartelization."

⁷¹ Lessig (1999).

⁷² ENISA (2007).

⁷³ Office of Fair Trading (2007a).

lack of detailed knowledge of XROs⁷⁴. That suggests that only detailed researched and audited examination of such institutions can explain the functioning of the institution.

The more informal surveys of participant behaviour evidenced in chat fora run by, for instance, the standards organisations (as well as best practice in ICANN, IGF, Creative Commons, SecondLife, SNS and so on) can give a better indication of activist opinion on present issues. However, for a truly representative user sample, one would need the resources of Eurobarometer, World Internet Project or an equivalent commercial market research organisation. Such a user survey is an urgent research requirement in view of the evidence examined during this project.

Conclusion: XRO Case Studies and Impact Assessment Implications

In regards to impact assessment, we can state – subject to our further analysis of cross-cutting issues and relevance to i2010 and competitiveness agendas – that the model used produces an essential dilemma which will be familiar to Internet regulatory policy experts. The questions asked of XROs and experts reveal significant and often constructive tensions in the role and reform of the XROs, and the proper role for both XRO and government intervention. Unsurprisingly, there are no easy answers or 'magic bullets'.

This short summary and analysis concisely explained the outcomes from the most intensive part of this project: the examination of 21 XRO case studies. It explained the contextual classification of the selected XROs, the financing and budgets for XROs, the dynamics of XRO development as observed in the empirical phase of the project, and a gap analysis to examine the substantive and emerging features of the Internet environment. Finally, it contextualised these findings within their implications for IA. Finally, we recall the need for aggregated analysis to produce meaningful evaluation of Information Society XROs. The main paper analyses the cross-cutting theoretical lessons from the case studies against the features identified in this summary descriptive chapter.

⁷⁴ For instance, of 19 respondees on W3C, only three believed that they knew the identity of the chief executive.

Bibliography

- [1] Armstrong, H. (2006) "Update on the Implementation of 'Less is More'", letter dated 13 July 2006 by UK Minister for Trade and Industry documenting progress in implementing the Better Regulation agenda, at: http://archive.cabinetoffice.gov.uk/brc/upload/assets/www.brc.gov.uk/ha_letter.pdf on 29 February 2008.
- [2] Ashby, S., S. Chuah and R. Hoffmann (2004) "Industry Self-regulation: A Gametheoretic Typology of Strategic Voluntary Compliance" *International Journal of the Economics of Business* **11**(1): 91–106.
- [3] Bartle, I. and P. Vass (2007) "Self-regulation within the Regulatory State: Towards a New Regulatory Paradigm?" *Public Administration* **85**(4): 885–905.
- [4] Bauer, J. and E. Bohlin (2007) "Dynamic Regulation: Conceptual Foundations, Implementation, Effects", paper presented to the 35th Telecommunications Policy Research Conference Arlington, VA, 28-30 September, 2007.
- [5] Benhamou, B. (2006) "Organiser l'architecture de l'internet" *Esprit* (May) at: http://www.esprit.presse.fr/review/article.php?code=13244 on 29 February 2008
- [6] Better Regulation Commissioners (2007) "Position Paper on EC Better Regulation Agenda", position paper by German, British and Dutch Better Regulation Commissioners, mimeo (no longer available, obtained from Better Regulation Task Force (BRTF) website on November 11 2007).
- [7] Better Regulation Task Force (1999) "Self–Regulation Interim Report", at: http://archive.cabinetoffice.gov.uk/brc/upload/assets/www.brc.gov.uk/self_regulation. pdf on 29 Feb. 2008.
- [8] Better Regulation Task Force (2000a) "Alternatives to State Regulation", at: http://www.brc.gov.uk/upload/assets/www.brc.gov.uk/stateregulation.pdf on 29 Feb. 2008.
- [9] Better Regulation Task Force (2003) "Imaginative Thinking about Regulation", at: http://www.brc.gov.uk/upload/assets/www.brc.gov.uk/imaginativeregulation.pdf/ on 29 Feb. 2008.
- [10] Better Regulation Task Force (2004) "Hidden Menace Regulatory Creep", at: http://archive.cabinetoffice.gov.uk/brc/upload/assets/www.brc.gov.uk/hiddenmenace. pdf on 29 Feb. 2008.
- [11] Better Regulation Task Force (2005a) "Routes to Better Regulation a guide to alternatives to classic regulation", at: http://www.brc.gov.uk/upload/assets/www.brc.gov.uk/routes.pdf on 29 Feb. 2008.
- [12] Better Regulation Task Force (2005b) "Less is More. Reducing Burdens, Improving Outcomes", at: http://www.brc.gov.uk/upload/assets/www.brc.gov.uk/lessismore.pdf on 29 Feb. 2008.
- [13] Borraz, O. (2007) "Governing Standards: The Rise of Standardization Processes in France and in the EU" *Governance: An International Journal of Policy, Administration, and Institutions* **20**(1): 57–84.
- [14] Börzel, T. (2000) "Private Actors on the Rise? The Role of Non-state Actors in Compliance with International Institutions" Max-Planck-Projektgruppe Recht der Gemeinschaftsgüter, at: http://www.mpp-rdg.mpg.de on 29 Feb. 2008.
- [15] Brousseau, E. (2002) "Internet Regulation: Does Self-regulation Require an Institutional Framework?" DRUID Summer Conference on "Industrial Dynamics of

the New and Old Economy - who is embracing whom?" Copenhagen/Elsinore 6-8 June 2002.

- [16] Brunekreeft, G. (2004) "Regulatory Threat in Vertically Related Markets: The Case of German Electricity" *European Journal of Law and Economics* **17**: 285–305.
- [17] Cabinet Office (UK) (2006) "Impact Assessment Guidance", at http://bre.berr.gov.uk/regulation/ria/guidance/ on 29 Feb. 2008.
- [18] Coase, R. (1960) "The Problem of Social Cost" Journal of Law and Economics 3: 1–44.
- [19] Coen, D. (2005) "Business-Regulatory Relations: Learning to Play Regulatory Games in European Utility Markets" *Governance: An International Journal of Policy, Administration, and Institutions* **18**(3): 375–398.
- [20] DeMarzo, P., M. Fishman, M. and K. Hagerty (2000) "The Enforcement Policy of a Self-regulatory Organization"," mimeo, Stanford University Business School mimeo.
- [21] DeMarzo, P., M. Fishman, M. and K. Hagerty (2005a) "Self-regulation and Government Oversight" *Review of Economic Studies* **72**(3): 687–706.
- [22] DeMarzo, P., M. Fishman, M. and K. Hagerty (2005b) "Contracting and Enforcement with a Self-regulatory Organization"," at: http://www.kellogg.northwestern.edu/finance/faculty/workingpapers/DeMarzo_Fish man_Hagerty.pdf on 29 Feb. 2008.
- [23] Dommering, E. (2006) "Regulating Technology: Code Is Not Law", in E. Dommering and L.F. Asscher (eds) Coding Regulation: Essays on the Normative Role of Information Technology, The Hague: T.M.C. Asser Press, pp. 6–17.
- [24] Duina, F. (1999) *Harmonizing Europe: Nation-states within the Common Market*, New York: State University of New York Press.
- [25] Duncombe, R. and R. Heeks (2002) "Information, ICTs and Ethical Trade: Implications for Self-regulation", University of Manchester Centre on Regulation and Competition Working Paper 41.
- [26] Engel, C. (2005) "Governing the Egalitarian Core of the Internet" *International Journal of Communications Law & Policy* 10: 1–25.
- [27] European Commission (2002) "Action Plan on Better Regulation" at: http://europa.eu.int/eur-lex/en/com/cnc/2002/com2002_0278en01.pdf on 29 Feb. 2008.
- [28] European Commission (2003) "Inter-institutional Agreement on Better Regulation" relevant material cited in "The activities of the European Union for small and medium-sized enterprises (SMEs): SME Envoy Report" a Commission Staff Working paper SEC(2005) 170 dated 08/02/2005 and available at: http://ec.europa.eu/enterprise/entrepreneurship/promoting_entrepreneurship/doc/sec_ 2005_170_en.pdf on 29 February, 2008.
- [29] European Network Information Security Agency (2007) ENISA Position Paper No.1: Security Issues and Recommendations for Online Social Networks, at http://www.enisa.europa.eu/doc/pdf/deliverables/enisa_pp_social_networks.pdf last on 29 February 2008.
- [30] European Policy Forum (2006) "Evaluating Better Regulation: Building the System", City Research Series 9 London: City of London, at: http://www.cityoflondon.gov.uk/nr/rdonlyres/9af7248c-71a9-4434-8c9cdc935b9f33d6/0/bc_rs_evaluating_execsummary.pdf on 29 February, 2008.

- [31] Faratin, P., D. Clark, P. Gilmore, S. Bauer, A. Berger and W. Lehr (2007) "Complexity of Internet Interconnections: Technology, Incentives and Implications for Policy", paper presented to the 35th Telecommunications Policy Research Conference Arlington, VA, 28-30 September, 2007.
- [32] Fenn, P. and A. Macguire (1994) "The Assessment: The Economics of Legal Reform" *Oxford Review of Economic Policy* **10**(1): 1–17.
- [33] Finger, M. and F. Varone (2006) "Governance of Network Industries: Towards European Regulators, Differentiated Regulations, or Self-regulation?" paper presented to the European Consortium for Political Research Standing Group on Regulatory Governance Conference, University of Bath, Bath, 7–8 September.
- [34] Freytag, A. and K. Winkler (2004) "The Economics of Self-regulation in Telecommunications under Sunset Legislation", Friedrich-Schiller-Universität Jena, Wirtschaftswissenschaftliche Fakultät Working Paper.
- [35] Fried, E. (2006) "Assessing the Effectiveness of Self-regulation: A Case Study of the Children's Advertising Unit" 39 Loyola Law Review 1: 93-138.
- [36] Frieden, R. (2007) "Neither Fish Nor Fowl: New Strategies for Selective Regulation of Information Services", paper presented to the 35th Telecommunications Policy Research Conference Arlington, VA, 28-29 September, 2007.
- [37] Gehrig, T. and P.-J. Jost (1995) "Quacks, Lemons, and Self-regulation: A Welfare Analysis" *Journal of Regulatory Economics* **7**: 309–325.
- [38] Goldsmith, J. and T. Wu (2006) *Who Controls the Internet? Illusions of a Borderless World*, Oxford: Oxford University Press.
- [39] Grajzl, P. and M. Murrell (2007) "Allocating Lawmaking Powers: Self-regulation vs. Government Regulation" *Journal of Comparative Economics* **35**: 520–545.
- [40] Greenstein, S. (2006) "Letters 'Re: Open Standards, Open Source and Open Innovation' by Elliot Maxwell" *Innovations* 1(4): 3–4.
- [41] Hans Bredow Institut (2007) Analyse des Jugendmedienschutzsystems: Jugendschutzgesetz und Jugendmedienschutz-Staatsvertrag, Hans Bredow Institut, Hamburg, at http://www.hans-bredowinstitut.de/forschung/recht/071030Jugendschutz-Endbericht.pdf last accessed 29 February 2008 and http://www.hans-bredowinstitut.de/forschung/recht/jugendmedienschutz-games.htm last accessed 29 February 2008
- [42] Held, T. and A. Scheuer (2006) "Final Report: Study on Co-Regulation Measures in the Media Sector" Study for the European Commission, Directorate Information Society and Media Unit A1 Audiovisual and Media Policies, Hans Bredow Institute at: http://www.hans-bredow-institut.de/forschung/recht/co-reg/Co-Reg-Draft_Final_Report.pdf on 29 Feb. 2008.
- [43] Hilary, G. and C. Lenox (2005) "The Credibility of Self-regulation: Evidence from the Accounting Profession's Peer Review Program" *Journal of Accounting and Economics* **40**: 211–229.
- [44] Hira, A., D. Huxtable and A. Leger (2005) "Deregulation and Participation: An International Survey of Participation in Electricity Regulation" *Governance: An International Journal of Policy, Administration, and Institutions* 18(1): 53–88.
- [45] Humphreys, P. and S. Padgett (2006) "Globalization, the European Union, and Domestic Governance in Telecoms and Electricity" *Governance: An International Journal of Policy, Administration, and Institutions* 19(3): 383–406.
- [46] ICSTIS (2006) ICSTIS 1986-2006, A celebration, ICSTIS: London.

- [47] Jacobs, C. (2005) "Improving the Quality of Regulatory Impact Assessments in the UK" Centre on Regulation and Competition Working Paper 102.
- [48] Jacobs, C. (2006) "Current Trends in Regulatory Impact Analysis: The Challenges of Mainstreaming RIA into Policy-making", mimeo, Jacobs & Associates.
- [49] Joskow, P. and R. Noll (1999) "The Bell Doctrine: Applications in Telecommunications, Electricity, and Other Network Industries" *Stanford Law Review* 21: 1249 - 1315
- [50] Kerwer, D. (2005) "Rules that Many Use: Standards and Global Regulation" *Governance: An International Journal of Policy, Administration, and Institutions* **18**(4): 611–632.
- [51] Krarup, S. (1999) "The Efficiency of Voluntary Approaches: A CAVA Literature Survey" CAVA Working Paper 99/08/2.
- [52] Latzer, M., N. Just, F. Sauerwein and P. Slowinski (2006) "Institutional Variety in Communications Regulation. Classification Scheme and Empirical Evidence from Austria" *Telecommunications Policy* **30**: 152–170.
- [53] Latzer, M., M. Price, F. Saurwein, S. Verhulst, K. Hollnbuchner and L. Ranca (2007) Comparative Analysis of International Co- and Self-regulation in Communications Markets, Vienna: Austrian Academy of Sciences.
- [54] Lenox, M. (2006) "The Role of Private Decentralized Institutions in Sustaining Industry Self-regulation" *Organization Science* **17**(6): 677–690.
- [55] Lessig, L. (1999) Code and Other Laws of Cyberspace, New York: Basic Books.
- [56] Levi-Faur, D. (2006a) "Varieties of Regulatory Capitalism: Getting the Most Out of the Comparative Method" *Governance: An International Journal of Policy, Administration, and Institutions* **19**(3): 367–382.
- [57] Levi-Faur, D. (2006b) "Varieties of Regulatory Capitalism: Sectors and Nations in the Making of a New Global Order" *Governance: An International Journal of Policy, Administration, and Institutions* **19**(3): 363–366.
- [58] Ling, T. (2003) "Planning Approach *Ex Ante* Evaluation and the Changing Public Audit Function: The Scenario" *Evaluation* **9**(4): 437–452.
- [59] Lyon, T. and J. Maxwell (2003) "Self-regulation, Taxation and Public Voluntary Environmental Agreements" *Journal of Public Economics* **87**: 1453–1486.
- [60] MacCormack, A., J. Rusnack and C. Baldwin (2005) "Exploring the Structure of Complex Software Designs" Harvard Business School, unpublished Draft Working Paper 05-016, June.
- [61] Maitland, I. (1985) "The Limits of Business Self-regulation" *California Management Review* 7(3): 132–147.
- [62] Marsden, C. (2007) "Net Neutrality and Access to Content" *Script-ed* **4**(4): 406–457 at: http://www.law.ed.ac.uk/ahrc/script-ed/ on 29 Feb. 2008.
- [63] Marvin, C. (1998) When Old Technologies Were New, Cambridge, MA: MIT Press.
- [64] Mayer-Schönberger, V. (2003) "Crouching Tiger, Hidden Dragon: Proxy Battles over P2P Movie Sharing", mimeo.
- [65] Mayer-Schonberger, V. and M. Ziewitz (2007) "Jefferson Rebuffed: The United States and the Future of Internet Governance" 8 Columbia Science and Technology Law Review 8: 188–228.
- [66] Meyer, W. and K. Baltes (2004) "Network Failures How Realistic Is Durable Cooperation in Global Governance?" in J. Klaus, M. Binder and A. Wieczorek (eds)

Governance for Industrial Transformation. Proceedings of the 2003 Berlin Conference on the Human Dimensions of Global Environmental Change, Berlin: Environmental Policy Research Centre, pp. 31-51

- [67] National Audit Office (2002) "Alternatives to State-imposed Regulation" report to the 9th Meeting of INTOSAI Working Group on the Audit of Privatisation, Oslo, June 2002 at: http://www.nao.org.uk/intosai/wgap/9thmeeting/9thpuk.pdf on 29 February 2008
- [68] National Consumer Council (2003) "Three Steps to Credible Self-regulation", at: http://www.ncc.org on 29 Feb. 2008.
- [69] National Consumer Council (2004) "Future Regulation of Broadcast Advertising", at: http://www.ncc.org on 29 Feb. 2008.
- [70] National Science Foundation (2004) *Signposts in Cyberspace*, Washington DC: National Science Foundation.
- [71] Newman, A. and D. Bach (2004) "Self-regulatory Trajectories in the Shadow of Public Power: Resolving Digital Dilemmas in Europe and the United States" *Governance: An International Journal of Policy, Administration, and Institutions* 17(3): 387–413.
- [72] Nunez, J. (2007) "Can Self-regulation Work? A Story of Corruption, Impunity and Cover-up" *Journal of Regulatory Economics* **31**: 209–233.
- [73] Odlyzko, A. (2000) "The History of Communications and its Implications for the Internet", preliminary version, unpublished manuscript, 16 June.
- [74] Office of Fair Trading (2007a) "Review of Impact on Business of the Consumer Codes Approval Scheme", at: http://www.oft.gov.uk on 29 Feb. 2008.
- [75] Office of Fair Trading (2007b) "Completing Competition Assessments in Impact Assessments", at: http://www.oft.gov.uk on 29 Feb. 2008.
- [76] Pattberg, P. (2005) "The Institutionalization of Private Governance: How Business and Nonprofit Organizations Agree on Transnational Rules" *Governance: An International Journal of Policy, Administration, and Institutions* **18**(4): 589–610.
- [77] PCMLP (2004) "Self-Regulation of Digital Media Converging on the Internet: Industry Codes of Conduct in Sectoral Analysis" Report by the Programme in Comparative Media Law and Policy at the centre for Socio-Legal Studies at Oxford University for the European Commission, at: http://pcmlp.socleg.ox.ac.uk/selfregulation/iapcoda/0405-iapcode-final.pdf on 29 Feb. 2008.
- [78] Pirrong, C. (2001) "Technological Change, For-profit Exchanges, and the Selfregulation of Financial Markets", Washington University Working Paper.
- [79] Polasky, S., N. Tarui, G. Ellis and C. Mason (2006) "Cooperation in the Commons" *Economic Theory* **29**: 71–88.
- [80] Porter, T. and K. Ronit (2006) "Self-regulation as Policy Process: The Multiple and Criss-crossing Stages of Private Rule-making" *Policy Sciences* **39**: 41–72.
- [81] Posner, R. (1971) "Taxation by Regulation" Bell Journal of Economics 2: 22–50.
- [82] Priest, M. (1997) "The Privatisation of Regulation: Five Models of Self-regulation" 233 Ottawa Law Review 29: 233-301.
- [83] Schulz, W. and T. Held (2004) *Regulated Self-Regulation as a Form of Modern Government: A Comparative Analysis with Case Studies from Media and Telecommunications Law*, Luton: University Of Luton Press.

- [84] Sickert, D. and T. Lookabaugh (2005) "A Model for Emergency Service of VoIP Through Certification and Labelling", mimeo, NET Institute.
- [85] Stefanadis, C. (2003) "Self-regulation, Innovation and the Financial Industry" *Journal of Regulatory Economics* **23**(1): 5–25.
- [86] Stock, B. (1993) The Uses of Literacy, Princeton, NJ: Princeton University Press.
- [87] Torriti, J. (2007) "Impact Assessment in the EU A Tool for Better Regulation, Less Regulation or Less Bad Regulation" *Journal of Risk Research* **10**(2): 239–276.
- [88] van der Stoel, A., N. van Eijk, D. Hoogland, E. van Noorduyn and M. Wermuth (2005) "Self-regulation in Audiovisual Products" final report commissioned by the Youth Policy Directorate, the Ministry of Health, Welfare and Sport (in Dutch), at: http://www.ivir.nl/publicaties/vaneijk/Wijzerkijken.pdf on 29 Feb. 2008.
- [89] Wilks, S. (2005) "Agency Escape: Decentralization or Dominance of the European Commission in the Modernization of Competition Policy?" *Governance: An International Journal of Policy, Administration, and Institutions* **18**(3): 431-452.
- [90] World Trade Organization (2005) WT/DS285/AB/R Gambling Services WTO Appellate Panel Decision.
- [91] Wu, T. (2006) "The World Trade Law of Internet Filtering" Available at SSRN: http://ssrn.com/abstract=882459 on 29 February 2008.
- [92] Zittrain, J. (2006a) "The Generative Internet" *Harvard Law Review* 119: 1974–2040.
- [93] Zittrain, J. (2006b) "A History of Online Gatekeeping" 19 Harvard Journal of Law & *Technology* 2: 254–298.