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A REGULATORY FRAMEWORK FOR DEALING WITH ONLINE COPYRIGHT INFRINGEMENT (OCI)

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ABSTRACT. This paper proposes a regulatory system for dealing with online copyright infringement ("OCI"). The system consists in both a cost-benefit analysis ("CBA") for evaluating measures taken by Internet intermediaries to limit OCI, and an institutional framework for applying the CBA. Although I limit the analysis here to OCI, the system could potentially be extended to other instances of illegal content on the Internet.

Part one of this paper presents the existing literature dealing with the liability of Internet intermediaries and the optimal design of regulatory regimes, drawing in particular on literature dealing with cost benefit analyses and better regulation. Part two presents the existing legislative measures in the US and Europe to limit OCI, outlining their strengths and weaknesses. Part three analyzes case law. The paper argues that the proportionality test applied by courts in Europe to evaluate measures taken by Internet intermediaries to limit OCI can be translated into a cost benefit analysis that could be applied by a regulatory authority on a forward-looking basis. Part four presents the institutional approaches that are currently used to deal with OCI, their strengths and weaknesses. Part five recommends an optimal institutional approach for applying the CBA.

1. INTRODUCTION

The last fifteen years have witnessed numerous attempts to strike the right balance between protection of intellectual property rights and Internet freedom. The US Digital Millenium Copyright Act ("DMCA")[1] and the European E-Commerce Directive[2] established the principle of "notice and takedown," which provides that hosting providers and other Internet intermediaries have no duty to monitor their service to detect infringing content, but that once informed of the presence of infringing content, Internet intermediaries must promptly remove it. In addition, courts in the US and Europe have been able to order Internet access providers to block access to certain online content in narrow circumstances, such as when the publisher of the infringing content and the hosting provider are beyond the reach of national courts. To deal with large scale file sharing, France enacted a graduated response regime, pursuant to which a regulatory authority called the "HADOPI" sends warning notices to individual uploaders, and has the power, with a judge's approval, temporarily to cut off Internet access of repeat offenders.[3] The UK Digital Economy Act[4] entrusts the telecommunications and media regulator OFCOM with the job of developing rules pursuant to which UK ISPs would send warning notices to suspected infringers. In Ireland and the US, ISPs and right holders have agreed to implement a voluntary graduated response regime.

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1 Pub. Law 105-304, Oct. 28, 1998.

2 Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular on electronic commerce, in the Internal Market (Directive on electronic commerce), O.J. 17 July 2000, L718/1.

3 French Law n° 2009-669 of June 12, 2009.

4 Digital Economy Act 2010, Chapter 24.

The search for the right model to treat OCI has not stopped. Each of the existing systems has its flaws. Right holders claim that notice and takedown regimes provide too much immunity to Internet intermediaries, some of whom could easily take preventive steps to limit OCI on their platforms. Defenders of Internet freedom claim that the graduated response regime needlessly invades individual rights, that it is expensive and ineffective. The UK's Digital Economy Act has been challenged in court,[5] as has the Irish graduated response system and certain individual initiatives to impose ISP filtering.[6] The SOPA and PIPA proposals in the United States were withdrawn amid controversy, and the proposed ACTA treaty met with severe criticism in Europe.[7] The new French government is considering a revision to France's graduated response regime. Meanwhile, the European Commission is looking to revise the Intellectual Property Enforcement Directive[8] and underlined in a preparatory communication the need for Internet intermediaries to participate in the fight against intellectual property infringement.[9] In parallel to this debate on copyright enforcement, policy makers are engaged in a broader debate on the right institutional framework for Internet regulation. In this broader debate, OCI is only one of the many potential harms that governments may attempt to curtail through regulation. The options for regulation go from purely voluntary contractual terms imposed by Internet intermediaries, to binding multistakeholder codes of conduct, to court-enforced liability rules, to detailed regulatory obligations supervised by an independent regulatory authority.

Fifteen years after the enactment of the DMCA, the controversy continues. And protagonists often use the same arguments as they did in the 1990s. Have we learned nothing over the last 15 years? In fact, we have learned a great deal, as this paper intends to demonstrate. First, fifteen years of court decisions, from *Reno v. ACLU*[10] to the recent *SABAM* decision,[11] permit us to describe a methodology for balancing rights and applying the proportionality test that, in theory at least, should lead to the ideal regime for fighting OCI. Second, we have been able to observe ten years of functioning of the European framework for regulating electronic communications, a framework created in 2000 that provides for the balancing of competing rights and interests by an independent regulatory authority in the context of fast-moving technological change. This framework, together with other regulatory examples, can be used as a reference for designing a new institutional framework for dealing with OCI.

This paper proposes a regulatory framework in which an independent regulatory authority would be entrusted with applying a CBA methodology that has emerged from case law in the field of OCI. I argue that entrusting the application of the methodology to an independent regulatory authority is better than leaving the matter solely to the courts for *ex post* adjudication, because a regulatory authority will have a forward-looking approach and provide guidance and predictability to the market, thereby improving innovation and investment. The use of an independent regulatory authority will also permit the elaboration of more flexible rules that can evolve over time to adapt to technological and market changes. Detailed rules crafted by lawmakers cannot do this. The creation of a comprehensive and transparent methodology for evaluating OCI

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5 *BT, TalkTalk v. Secretary of State*, [2011] EWHC 1021, 20 April 2011.

6 *Scarlet v. SABAM*, CJEU, Case C-70/10 24 November 2011.

7 European Parliament, Opinion of the Committee of Civil Liberties, Justice and Home Affairs of 4 June 2012, 2011/0167 (NLE).

8 Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights, O.J. L157, 30 April 2004, p. 16.

9 Report from the Commission to the European Parliament, the Council, the Europeans Economic and Social Committee and the Committee of the Regions on Application of Directive 2004/48/EC of the European Parliament and Council of 29 April 2004 on the enforcement of intellectual property rights, 22 October 2010, COM (2010) 779 final.

10 *Reno v. American Civil Liberties Union*, 521 US 844 (1997).

11 *Scarlet v. SABAM*, *supra* note 6.

measures should improve the perceived legitimacy of decisions adopted by the independent regulatory authority. Each regulatory decision would have to be tested against a full range of criteria, to ensure that the decision satisfies as many of the regulatory objectives as possible, and that the measure's potentially harmful effects are mitigated. We also argue that the use of a regulatory authority to develop measures in cooperation with stakeholders, and to supervise their application, is superior to reliance on voluntary self-regulatory initiatives. The regulatory regime proposed in this paper would incorporate principles of good regulation used in the European framework for electronic communications, including public consultations, the requirement of regulatory impact assessments and cost benefit analyses, and procedural safeguards such as swift judicial review.

This paper is divided into five parts: Part one will review existing literature on fighting OCI and the role of Internet intermediaries in limiting access to illegal content. The review of existing literature will also examine articles dealing "better regulation" and cost benefit analyses. Part two of this paper will conduct an overview of existing mechanisms to deal with OCI, including the US DMCA, the EU's E-Commerce Directive, and French and UK national laws designed to limit OCI. Part two will permit us to identify weaknesses in the current approaches to dealing with OCI, including their perceived lack of legitimacy, and their relative rigidity and lack of effectiveness in the face of rapid technological change.

Part three of the paper will extract from case law a list of criteria and regulatory objectives that should be balanced before the adoption of any measure designed to limit OCI. Critically, part three will analyze the proportionality test applied by courts, and argue that the proportionality test translates into a cost benefit analysis (CBA). The CBA requires an evaluation of the costs and benefits of various measures to limit OCI, and these costs and benefits may vary over time, particularly in an environment as fast-moving as the Internet. Consequently an accurate application of the proportionality test must necessarily be done in a dynamic and forward-looking manner. I argue that a regulatory authority is more fitted to do this. Finally, the proportionality test requires that a regulatory authority have a broad range of regulatory tools at its disposal, and that the regulatory authority be able to reach a broad range of Internet intermediaries. Otherwise, the regulatory authority will be unable to achieve the most proportionate OCI measure in a given situation.

Part four of the paper will review several institutional choices, including purely voluntary contractual measures, sole reliance on court-enforced liability rules, as well as more elaborate institutional structures, such as the regulatory framework for electronic communications in Europe, the regulatory structure used for anti-circumvention measures in the US, and the regulatory roles of OFCOM and the HADOPI in connection with OCI measures. While these existing regulatory structures provide valuable lessons, I will argue that none is well adapted to OCI. In part five, I will suggest an ideal institutional structure, and provide three bodies of rules that should form the basis for a new regulatory framework designed to limit OCI.

2. PART ONE: REVIEW OF EXISTING LITERATURE

The existing literature can be divided into four main categories.

- articles dealing with the liability of Internet intermediaries for OCI and other forms of illegal content on the Internet. This literature, which draws on Shavell's work on optimal levels of law enforcement, attempts to define an optimal level of enforcement of copyright, and the appropriate roles of government and Internet intermediaries.

- articles on better regulation, and cost benefit analyses.
- articles on Internet governance, and in particular regulation through multistakeholder processes.
- articles about balancing of fundamental rights. Several articles in this category explore the European concept of "proportionality" and how it is used to balance competing rights such as freedom of expression and privacy.

MacCarthy (2010) is the only author to my knowledge to have proposed both a substantive approach to determining what level of action by Internet intermediary is optimal to fight illegal content, *and* discuss the institutional structures available for applying the substantive test. MacCarthy's analysis brings together literature on the role of Internet intermediaries (category one), discussion of cost-benefit analysis (category two), and Internet governance questions (category three). My paper builds on MacCarthy's analysis in several respects. First, I explore the link between cost benefit analyses and the European principle of proportionality. Second, unlike MacCarthy, who proposes an "equity" test in addition to the CBA, I attempt to include human rights, equity considerations and other qualitative considerations within the CBA itself, drawing on literature describing how CBAs can incorporate non-quantifiable elements such as the value of human life. Last, my paper differs from MacCarthy's because I draw extensively on the European regulatory framework for electronic communications as an example of an institutional approach that could be adapted for OCI and other cases of illegal content on the Internet.

On the question of better regulation, Breyer (1982) and Sunstein have written extensively about CBAs, regulatory impact assessments (RIA) and regulatory principles in the field of health, safety and environmental regulations. Their work (which itself draws on Coase) has defined principles of good regulation that should apply to any governmental intervention. Importantly, their methodology warns of the harmful side-effects of well-meaning government regulation. With the potential exception of MacCarthy (2010), no author has attempted to my knowledge to apply Breyer's and Sunstein's better regulation principles to measures designed to limit illegal content on the Internet. This is partly because the idea of direct government regulation of the Internet has until recently been taboo. Most authors have assumed that Internet governance should remain outside the hands of government. My paper attempts to apply the Breyer and Sunstein good regulation principles to measures taken to limit access to illegal content.

Considerable literature on Internet governance focuses on multistakeholder processes. Marsden (2011) presents a remarkable analysis of the institutional approaches to regulating the Internet, presenting a "Beaufort Scale" of institutional structures based on the level of government input to self regulatory organizations.[12] With the maturity of the Internet, Marsden predicts increased government intervention into content-related issues, and points out that self-regulatory initiatives will need some form of government input because of the conflicting fundamental rights that must be balanced. Marsden stops short, however, of considering a full-fledged regulatory regime for Internet content. Weiser (2009) suggests a co-regulatory scheme involving the FCC, similar to the one

[12] "Institutional design classification schemes in self-regulation are needed just as they have been undertaken in government regulation, and the Beaufort Scale is my contribution. The scale relates to the 'wind' blowing from government to influence the SRO [self regulatory organization], from flat calm (0) to strong gale verging on hurricane (11), though the extremes amount to paradigms that are infrequently found in practice…." Marsden (2011)

implemented for defining "reasonable network management" under the FCC's net neutrality order. But Weiser's work does not attempt to develop a cost-benefit methodology that might be used to unravel the complicated issues linked to limiting access to unlawful content on the Internet. Noam (2006) also predicts that broadcasting and other content policy objectives will be applied in the future using telecom-style regulation. My paper attempts to take Marsden's, Weiser's and Noam's work one step further, by proposing a regulatory framework for dealing with illegal content on the Internet that is based on the EU model for regulating electronic communications, including a cost benefit methodology that would permit the regulatory authority to grapple with the complex balancing of fundamental rights.

On the subject of fundamental rights, Monaghan (1970) has examined so-called "First Amendment Due Process," which defines the procedural safeguards that must be observed before any action is taken to limit access to content. His analysis is critically important to measures that might result in certain content being blocked on the Internet. Hickman (2008) and _____ have attempted to explain the European concept of proportionality. Their work, as well as my own study of European case law applicable to Internet content, show that the proportionality principle under European law is in fact a form of CBA, and that this CBA can be applied to the balancing of fundamental rights.

Finally, this paper draws on the personal experience of the author in working with regulators, the European Commission and operators in the context of the 2002 regulatory framework for electronic communications. The framework provides a flexible regulatory tool kit, a balancing methodology and procedural safeguards that could potentially be applied to issues relating to illegal content on the Internet.

3. PART TWO: OVERVIEW OF EXISTING INITIATIVES TO DEAL WITH OCI

The United States and Europe have developed similar "notice and takedown" regimes to limit OCI. France and the United Kingdom have enacted legislation mandating graduated response, entrusting a regulatory authority with its application. Finally, contract-based graduated response regimes have emerged in the United States and Ireland. All existing measures have been subject to significant controversy and litigation.

3.1 Current measures to fight OCI in the United States.

(a) The Communications Decency Act.

Lawmakers in the United States first addressed the problem of illegal content on the Internet through Section 230 of the Communications Decency Act (CDA).[13] Adopted in 1996, Section 230 states that Internet intermediaries shall not be deemed publishers of the content that they host or transmit,[14] and that Internet intermediaries shall not be held liable by reason of voluntary actions they take to limit access to illegal content.[15] The Act's name came from a provision designed to protect young people from access to pornographic material on the web.[16] This provision was found unconstitutional by the US Supreme Court in *Reno v ACLU*.[17] *Reno v ACLU* found that the CDA standard was vague and overbroad, and established that content on the Internet is entitled to the highest level of First Amendment protection. The Supreme Court found that web pages are more akin

13 The Telecommunications Act of 1996, Pub. L. 104-104, 110 Stat. 56

14 47 USC §230(c)(1)

15 47 USC §230(c)(2)

16 47 USC §223(a)

17 *Reno v ACLU*, *supra* note 10.

to newspapers than to television or radio broadcasts. Television and radio are more invasive than newspapers, reasoned the Court, because they invite themselves into the user's own home and the viewer does not choose the programming he or she receives. Moreover, regulation of broadcasting was historically justified because of the scarcity of frequencies.[18] For these reasons, government can adopt content-based regulations designed to protect viewers against harmful content broadcast by television or radio. By contrast, the Court found that the Internet is like the proverbial soap-box in a town square, where anyone can freely express his or her opinion. The Supreme Court applied the same standard to the Internet as that applicable to newspapers and books, prohibiting any prior control of content that could lead to the blocking of legitimate expression.

Subsequent efforts to reduce the vagueness and over breadth of the CDA also failed in a series of pro-speech cases decided by the Supreme Court.[19] While the direct efforts to bar indecency on the Internet have subsided in the US Congress, the CDA's Section 230 is as strong as ever, protecting Internet intermediaries against liability for abusive, defamatory, and indecent posts so long as they are not posted by the online platform itself.

As we will see below, the US Supreme Court's protection of Internet speech has also been applied in Europe, with the result that courts in the United States and Europe currently show little or no tolerance for any government or court-imposed measure to fight OCI that carries a risk of being overbroad and blocking access to legitimate content.

(b) **The Digital Millenium Copyright Act**

Enacted two years after the CDA, the Digital Millennium Copyright Act (DMCA)[20] creates an immunity from liability for Internet intermediaries provided that they comply with a series of procedures including promptly removing content once they have been informed that the content is infringing.[21] This is the now well-known "notice and takedown" mechanism. The DMCA provides that the publisher of the content may object to the removal, in which case the Internet intermediary must put the content back on the site until the matter has been resolved by a court. Note that the law does not require takedown – it only establishes a safe harbor from liability if notice and takedown rules are complied with. The DMCA also has an interesting provision that has received little attention outside the United States, which requires ISPs, if they want to benefit from the liability safe harbor, to apply a policy prohibiting users of their service from using the service for the purpose of copyright infringement, and to terminate the service of "repeat infringers." The DMCA requires that service providers accommodate standard technical measures developed by copyright owners to prevent unauthorized copying. This last provision has not been implemented in practice because no consensus has emerged regarding the technical measures that should be used.

(i) The DMCA's anticircumvention rules.

The DMCA makes it illegal to circumvent technical measures that copyright owners have implemented to protect their works against copying. Examples of such measures include software code that blocks any attempt to copy a DVD or Blu-ray disc. The anticircumvention rule contained in the DMCA comes with a number of exceptions,

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18 Ronald H. Coase, *The Federal Communications Commission*, 2 J. L. & Econ. 1 at 13 (1959).

19 *See, eg., Ashcroft v. ACLU*, 542 US 656 (2004). *Ashcroft v. Free Speech Coalition*, 535 US 234 (2002); *Brown v. Entertainment Merchants Ass'n*, 131 5.Ct 2729 (2011).

20 Digital Millenium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998).

21 17 USC § 512.

designed to ensure that technical anti-copying measures do not frustrate freedom of expression and other forms of copying that fall under the fair use exception. The DMCA sets out a number of factors that should be taken into consideration when determining whether a given use of the protected work is legitimate or not, and entrusts the balancing to a regulatory authority, the Library of Congress, through its Copyright Office.

The Library of Congress conducts a regulatory proceeding every three years, including extensive public consultations. Based on those public consultations the Library of Congress develops rules defining certain kinds of works and certain circumstances in which it is permissible for a user to crack open the technical protection measures and have access to a copyrighted work without the permission of the copyright holder. The balancing test applied by the Library of Congress is an example of the kind of regulatory methodology that could be used for OCI, and will be examined in part xxxx of this paper.

(c) The PRO-IP Act

Enacted in 2008, the PRO-IP Act[22] facilitates US government enforcement actions against OCI. The most important provision permits the US government to seize property that is used to facilitate infringement.[23] These provisions in the PRO-IP act permit the US government to seize and thereby lock up the content of domain names belonging to sites that promote large scale infringement, such as MegaUpload. US law enforcement authorities consider that domain names whose registrar is located in the United States constitute property located in the United States that can be subject to forfeiture procedures. Consequently, US prosecutors can apply to a grand jury to obtain a criminal indictment resulting in the seizure of property such as bank accounts and domain names located in the United States.

The domain name forfeiture measures that are permitted by the PRO-IP Act have been criticized as likely violating the First Amendment of the US Constitution.[24] The reason why the current procedures arguably violate the First Amendment is that the forfeiture is ordered without the owner of the website having been given a prior opportunity to be heard. Under the Supreme Court decision *Freedman v. Maryland*,[25] the Supreme Court held that measures that have the effect of removing content from circulation (eg. blocking release of a movie or removing books from bookstores) should only be ordered in circumstances where the publisher of the content has had a chance to argue his case before a court either before, or very shortly after, the order taking effect. Monaghan (1970) refers to this as "First Amendment Due Process." It is a principle that will be important in constructing a balancing test for measures to limit OCI.

(d) The Center for Copyright Information

Another noteworthy development in the United States is the creation of the Center for Copyright Information (CCI).[26] The CCI results from a Memorandum of Agreement signed in July 2011 between the principal ISPs in the US and the principal right holder organizations. The Memorandum of Agreement puts into place a graduated response

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22 H.R. 4279 PRO-IP Act of 2008.

23 18 USC §2323.

24 Andy Sellars, *The In-Rem Forfeiture of Copyright-Infringing Domain Names* (May 8, 2011). Available at SSRN abstract N°1835604.

25 *Freedman v. Maryland*, 380 US 51 (1965).

26 www.copyrightinformation.org

regime similar to the French HADOPI regime.[27] Right holders will patrol peer-to-peer networks to collect IP addresses of suspected infringers. The right holders will then communicate the IP addresses to the CCI, who in turn will communicate the IP addresses to the relevant ISPs. The ISPs will then match the IP addresses with their relevant customers, and send warning notices to their customers.

After five warnings, the ISPs will apply so-called "mitigation measures" vis-à-vis the assumed infringer. The mitigation measures may include limiting download speeds, blocking access to certain sites or applications, and/or requiring that the relevant customer complete an online copyright education course before getting back his or her privileges for full Internet access. The mitigation measures do not include termination of Internet access. The signatories to the Memorandum of Agreement have created a neutral, non-governmental body, called the CCI, whose role is essentially to protect the rights of Internet users. The CCI has many of the attributes of a traditional regulatory authority. Internet users who feel that they have been mistakenly identified as an infringer can ask that their situation be reviewed by an independent expert appointed by the CCI. The CCI ensures that the mechanisms used by right holders to collect IP addresses protect the privacy rights of individual Internet users. The CCI also ensures that right holders can never learn which customer is associated with a given IP address. A clear separation exists between the collection of IP addresses by the right holders and the measures taken by the ISPs vis-à-vis their customers. The right holders will never know to whom ISPs have sent notices. Should right holders wish to take action against an individual user, they may have to go to court to seek an order requiring that the ISP surrender the name of its customer, using traditional enforcement tools that predate the CCI.

The CCI was created purely through voluntary agreement. There exists no law in the United States calling for the creation of the CCI. The Obama administration applauded the initiative and said that the administration generally favors stakeholder-led initiatives as opposed to government-imposed solutions.[28]

3.2 European Directives affecting measures to limit OCI

(a) The European Union's E-Commerce Directive

Two years after the adoption of the DMCA in the United States, the European Union adopted the E-Commerce Directive, which creates a liability safe harbor for Internet intermediaries. The E-Commerce Directive distinguishes between three kinds of Internet intermediaries: hosting providers, caching providers and "mere conduits." Each of these kinds of Internet intermediaries benefits from immunity with regard to liability for infringing content posted or transmitted by third parties. The E-Commerce Directive states that Internet intermediaries have no obligation actively to monitor content on their service, although they may be ordered to implement monitoring in a specific case.[29] In a provision similar to the DMCA's "notice and takedown" rule, the E-Commerce Directive states that hosting providers have an obligation promptly to remove content once they have received notice that it is infringing.[30] The E-Commerce Directive states that it is

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27 Section 2.3, *infra*.

28 *Working Together to Stop Internet Piracy*, White House Blog, July 7, 2011.

29 Directive 2000/31/EC, of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce'), article 15 and recital 47.

30 *Id.*, article 14.

without prejudice to injunctions that may be ordered by a court or administrative authority to prevent access to certain content.[31] The E-Commerce Directive also states that its provisions should not be read as preventing service providers from implementing voluntary measures that limit access to illicit content and that Member States may specify in their national law certain duties of care that hosting providers must apply to detect and prevent certain types of illegal activity.[32] Thus while generalized monitoring is forbidden, ISPs may take more targeted measures to limit OCI.

(b) The European Union's Copyright in the Information Society Directive and Intellectual Property Enforcement Directive

One year after the adoption of the E-Commerce Directive, the European Union adopted the Copyright in the Information Society Directive,[33] which provides among other things that national courts shall have the ability to take measures against Internet intermediaries whose services are used by a third party to infringe a copyright or related right, including measures to prevent infringement.[34] This provision was repeated three years later in the Intellectual Property Enforcement Directive, which further mentions that any measures imposed on Internet intermediaries should not be unnecessarily complicated or costly.[35]

(c) National measures to implement the directives

These directives are not self-enforcing and had to be implemented through national legislation adopted at the level of each European Member State. This national transposition process led to inconsistencies in the national legislation of different Member States. Some of these ambiguities have been clarified through case law of the European Court of Justice. The European Commission is also examining a possible revision to the Intellectual Property Enforcement Directive and has recently launched a public consultation to clarify the notice and takedown rules appearing in the E-Commerce Directive.[36] None of these directives calls for the creation of an independent regulatory authority in connection with OCI. As we will see below, however, France and the UK have entrusted to an independent regulatory authority certain tasks in connection with OCI. In addition, the European Union recently created a European Observatory for Infringement, which has as its mission the collection of data from Member States pertaining to the level of OCI as well as best practices applied to deal with OCI.[37] The observatory is also supposed to promote the availability of legal online content offers. As we will see below, the function of gathering market data and industry best practices is similar to one of the functions of the French HADOPI, the independent regulatory authority created in France to deal with OCI.

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31 *Id.*, recital 45.

32 *Id.*, recital 48.

33 Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonization of certain aspects of copyright and related rights in the information society.

34 *Id.,* art. 8(3) and recital 59, which states that right holders should have the possibility of applying for an injunction against an intermediary who carries a third party's infringement of a protected work in a network.

35 Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights, article 11.

36 European Commission, *Action and open Internet: Public consultation on procedures for notifying and acting on illegal content hosted by online intermediaries*, June 4, 2012.

37 Regulation (EU) N° 386/2012 of the European Parliament and of the Council of 19 April 2012 on entrusting the Office for Harmonization in the Internal Market (Trade Marks and Designs) with tasks related to the enforcement of intellectual property rights, including the assembling of public and private-sector representatives as a European Observatory on Infringements of Intellectual Property Rights, O.J.E.U. L129/1, 16 May 2012.

3.3 French graduated response regime

(a) French DADVSI

In 2006, France transposed into national law the European Directive on Copyright in the Information Society. The French law, called the "DADVSI" in French,[38] crystallized debates regarding the appropriate measures that should be taken to limit OCI. A number of French parliamentarians argued that the individual downloading of copyrighted content for private purposes should be covered by a compulsory licence for private copying and not considered as infringement. In France, copyright owners already receive remuneration from blank tape levies, and those levies have been extended to apply to blank CDs and other forms of computer memory. Consequently some argued that individual file sharing should be considered a form of private copying, covered by an exception to copyright and remunerated *via* the private copy levy. Individual lawsuits against Internet users for file sharing in France were in some cases unsuccessful because judges balked at applying harsh infringement sanctions to teenagers who download music for personal usage. It became clear that French copyright law was ill-adapted to the problem of OCI, in part because France's penalties for copyright infringement were so severe.[39]

Ultimately, the DADVSI did not create compulsory licence for private downloading. Instead, the law contained a provision stating that individual peer-to-peer downloads would no longer be considered a crime under French copyright law, but would be considered the equivalent of a minor traffic violation. France's Constitutional Court held that this lightened sanction regime was unconstitutional because it created two different kinds of punishment for an act of copyright infringement depending solely of the technology used to commit the violation.[40] The court found that this difference in sanctions violated the constitutional principle of equality of punishment for the same offence. The DADVSI also created a new duty of care for Internet subscribers to take reasonable measures to ensure that their Internet access is not used for infringement. But this duty of care was not accompanied by any sanction and remained a dead letter. Finally, the DADVSI permitted courts to prohibit the distribution of software that is principally used for infringement.

The DADVSI created a new regulatory authority, then called the "ARMT,"[41] to regulate questions linked to the interoperability of technical protection measures. Much like the Library of Congress, the ARMT was supposed to strike a balance between copyright, freedom of expression, consumer protection and innovation by ensuring that technical protection measures do not frustrate legitimate uses of the protected work, or prevent interoperability. Unlike the Library of Congress, however, the ARMT was not given any rulemaking authority. The ARMT was to intervene solely in individual cases, either as a mediator or as an arbitrator to order access to interoperability information in appropriate cases. The ARMT was inactive, in part because music labels did not end up making extensive use of anti-copy measures on CDs. The ARMT survived, however, and ultimately became the French regulatory authority today known as the "HADOPI."

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38 French Law N° 2006-961 of August 1, 2006.

39 Report of the French National Assembly No. 2349, June 1, 2005 at 26.

40 French Constitutional Court, Decision No. 2006-540 DC, July 27, 2006.

41 *Autorité de Régulation de Mesures Techniques.*

(b) The French HADOPI

(i) The Elysée Agreement

Following adoption of the DADVSI, the French President urged right holders, ISPs and several large hosting platforms to sign a charter pursuant to which right holders undertook to make more content available for legal online offers. ISPs and other Internet platforms agreed to implement graduated response and to experiment with filtering, and the government agreed to put into place a legal framework that would support both the development of legal offers and the implementation of a graduated response regime. After signature of the Elysée Agreement,[42] neither right holders nor ISPs took action, and waited for the government to take the first step by putting into place the promised new legal framework for graduated response. The government then proposed the controversial HADOPI law, which would introduce the graduated response regime in France, a regime that could ultimately lead to the temporary suspension of Internet access for repeat infringers.

(ii) Annulment of the first HADOPI law

The first version of the HADOPI law was adopted by both houses of French Parliament, but invalidated in part by the French Constitutional Court.[43] The first version of the law had given the HADOPI administrative agency the power to order the suspension of Internet access for certain repeat infringers after a procedure in which the suspected infringer could present his or her defense. The Constitutional Court found that the suspension of Internet access constituted a serious restriction on freedom of expression and that such a serious measure should only be ordered by a judicial authority, and not by an administrative agency. After invalidation of this portion of the HADOPI law, the government introduced an amended version that provided for an expedited procedure pursuant to which a court would make the ultimate decision as to whether to suspend Internet access for repeat infringers. It is this version of the law that is in effect today.

(iii) The graduated response regime as operating today

Under the HADOPI graduated response regime, right holder organizations collect IP addresses of suspected infringers using peer-to-peer networks. The evidence collected by the right holder organizations is then transmitted to the HADOPI regulatory authority, who then obtains from Internet access providers the names of the subscribers corresponding to the IP addresses. The HADOPI then sends an initial e-mail to the relevant subscribers informing them of their duty to ensure that their Internet access is not used for infringing purposes, and reminding the subscriber of the existence of legal online content offers and the damage created by OCI. The e-mail indicates that the person can contact the HADOPI for further information. To date, the HADOPI has sent out approximately 1,000.000 first warnings. Repeat infringers then receive a registered letter from the HADOPI stating that the subscriber has been identified again as the source of infringing content, and that if the conduct continuses the HADOPI may transmit the file to the public prosecutor for sanctions, which may include suspension of Internet access. To date approximately 100,000 registered letters of this type have been sent. For subscribers that continue to show evidence of infringing activity, the HADOPI then

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42 *Agreement for the Development and the Protection of Cultural Works and Programs on New Networks* (undated), available at www.hadopi.fr/sites/default/files/page/pdf/accordelysee.pdf (consulted August 24, 2012).

43 French Constitutional Court Decision No. 2009-580, June 10, 2009.

selects certain files for further action based in part on whether the subscriber had made any effort to contact the HADOPI. For those files, the HADOPI asks the relevant subscriber to participate in a hearing and present his views, and then the HADOPI selects a relatively small number of files to transmit to the public prosecutor who can then seek an order from a judge to interrupt the subscriber's Internet access. As of the date of this paper, no court has ordered the suspension of any Internet access, and the HADOPI's chairperson has indicated that approximately 300 files are being reviewed for possible transmission to the public prosecutor.

Since the date it was created, the HADOPI has been subject to vocal criticism from advocates of Internet freedom. A number of influential members of the French socialist party criticized the HADOPI as being a waste of money, an invasion of fundamental rights and ineffective. After his May 2012 election as President of France, François Hollande asked Pierre Lescure, former CEO of the French pay TV channel Canal +, to make recommendations on reforming HADOPI. Released in May 2013, Lescure's recommendations include maintaining the graduated response mechanism, but moving its administration out of the HADOPI (which would disappear), and into the French broadcasting authority, the *Conseil Supérieur de l'Audiovisuel* (CSA).[44] Lescure recommends eliminating the sanction consisting in cutting off a user's Internet access, and imposing instead a minor fine of €60.

3.4 The UK Digital Economy Act

(a) The DEA provides for two phases of regulation

Enacted in April 2010, the UK Digital Economy Act[45] covers a wide variety of subjects, one of which is the problem of OCI. To deal with OCI, the DEA foresees two phases of regulation. The first phase consists of a mechanism under which right holders would detect the IP addresses of suspected online infringers and forward these IP addresses to the relevant ISPs. The ISPs would then send warning notices to the suspected infringers. The ISPs would also be required to provide to right holders an anonymous list of subscribers for whom the ISP had previously received a large number of infringement notices from the right holders. This anonymous list would permit right holders to go to court in order to request the name of the relevant subscribers for the purpose of bringing individual copyright infringement actions.

The second phase of regulation would only kick in if the first phase is ineffective. The second phase consists of technical measures that UK ISPs may be required to implement in order to limit OCI. These technical measures may include the limitation of Internet access for certain subscribers, a measure similar to the French graduated response regime.

(b) OFCOM must adopt implementing rules

Both phases are contingent on the adoption of detailed implementing rules by OFCOM, the UK's telecom and broadcasting regulator. The DEA provides either that the detailed rules would be developed in the form of a code of conduct by industry stakeholders, a code which would then be approved by OFCOM, or in the absence of agreement by industry stakeholders, that the code would be adopted directly by OFCOM. Shortly after adoption of the DEA, OFCOM launched a public consultation regarding the draft code of

44 Lescure (2013) p. ___.

45 Digital Economy Act 2010 c. 24.

practice that OFCOM intended to adopt. In the meantime, two British ISPs challenged the DEA before the High Court of England on the ground that the DEA violated several European directives and also constituted a disproportionate restriction on the fundamental rights of Internet users. The High Court validated virtually all provisions of the DEA. The court's review of the DEA provides a good look into the proportionality principle, and the kind of balancing that must occur when implementing measures to limit OCI. I will come back to this in part xxxx of this paper.

After the High Court's decision, the two UK ISPs lodged an appeal before the Court of Appeal. On March 6, 2012, the Court of Appeal upheld the initial decision of the High Court. Consequently it is now possible for OFCOM to adopt the initial code of obligations that would permit the first phase of the DEA to go into operation. OFCOM issued a new draft of these regulations on 26 June 2012 for public consultation.[46]

Twelve months after the initial obligations code comes into force (which is now expected to happen in 2014), OFCOM must prepare a report for the Secretary of State containing a detailed assessment as to whether the initial phase consisting of the sending of notices to subscribers has resulted in a decrease in OCI. The Secretary of State can then instruct OFCOM to conduct further assessment, including industry consultation as to whether additional technical measures should be imposed on ISPs in order to limit OCI. OFCOM must then prepare a report for the Secretary of State assessing the effect of various technical measures. Based on that report the Secretary of State may make an order that ISPs implement those technical measures. However, the Secretary of State's order would first have to be approved by both Houses of Parliament.

In addition to granting the Secretary of State the power to impose technical measures on ISPs, the DEA empowers the Secretary of State to adopt regulations regarding court injunctions requiring service providers to block access to sites for the purpose of preventing OCI.[47] The service providers that could be affected by injunctions of this type would include publishers of websites, hosting providers, and providers of other online services. However, industry must be consulted and, as with the order to impose technical measures, the Secretary of State must gain approval by both Houses of Parliament within a 60 day "super-affirmative" window. Given that OFCOM has undertaken a review of the way in which the legislation relating to blocking injunctions might work and has concluded that it is likely to be ineffective,[48] in particular as s97A of the UK Copyright, Designs and Patents Act already provides copyright owners with a remedy, it seems unlikely that the Secretary of State will adopt any site-blocking regulations.

3.5 Irish graduated response mechanism

Ireland's principal ISP Eircom entered into a settlement agreement with several record companies in 2008 pursuant to which Eircom agreed to apply a graduated response regime to its subscribers. Under the agreed system, the right holders would introduce themselves into peer-to-peer networks and note the IP addresses of persons suspected of committing OCI. The right holders would then transmit the information to Eircom, who would write to the relevant subscribers to remind them of their obligation under their Eircom contract not to use their Internet access to infringe copyright. After receiving

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46 OFCOM, *Online Infringement of Copyright and the Digital Economy Act 2010, Notice of Ofcom's proposal to make by order a code for regulating the initial obligations*, 26 June 2012.

47 Digital Economy Act 2010, Explanatory Notes, p. 13.

48 Ofcom Report, "*Site-Blocking" to reduce online copyright infringement*, 27 May 2010.

three such notices, the subscriber would lose his or her Internet access for one week, and after receiving four notices, Internet service from Eircom would be withdrawn altogether.

The graduated response regime as implemented by Eircom came under legal attack by the Irish data protection authority, who claimed that the system disproportionately violated users' privacy rights. In a decision that will be discussed in more detail below, the Irish High Court upheld Eircom's graduated response system.[49]

3.6 ACTA

Signed by 29 countries,[50] the Anti-Counterfeiting Trade Agreement (ACTA)[51] contains provisions on intellectual property enforcement not unlike those contained in the European Copyright in the Information Society Directive and the European Intellectual Property Enforcement Directive. The European Commission has confirmed that ACTA does not deviate from current European law, although to remove any doubt the European Commission asked the European Court of Justice to confirm ACTA's conformity to European law.[52] ACTA is subject to considerable controversy in Europe. The European Parliament recently refused to approve ACTA.[53] Under the Lisbon Treaty,[54] approval of the European Parliament is required for any international treaty binding on the European Union. The European Parliament's Civil Liberties Committee issued an influential opinion recommending that the European Parliament reject the ACTA treaty.[55] The committee's reasoning was based in part on the substance of the treaty, and in part on the lack of democratic debate in connection with the treaty's negotiation. The substantive concerns were linked to the arguably vague terminology used in the treaty.

Particularly important for this paper are the ACTA provisions relating to infringement committed over digital networks. Article 27(6) and (7) of ACTA require that signatories of ACTA adopt laws prohibiting the circumvention of technical protection measures or the unauthorized removal of electronic rights management information. Article 27(4) states that signatories may provide in their laws for a mechanism for right holders to obtain, *via* competent authorities, the identity of suspected infringers in a manner that would permit the right holder to pursue its remedies directly against the relevant infringer. Article 27(1) states that signatories shall provide for expeditious remedies to prevent infringement and remedies which constitute a deterrent to further infringements over digital networks. These measures must be implemented, however, in a manner that "avoids the creation of barriers to legitimate activities, including electronic commerce, and, consistent with that Party's law, preserve fundamental principles such as freedom of expression, fair process, and privacy."[56] Finally, Article 27(3) of ACTA states that

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49 *EMI Records v. Data Protection Commissioner*, High Court (Ireland), 2012/167 JR, June 27, 2012.

50 22 Member States of the European Union, the European Union, plus Australia, Canada, Japan, Morocco, New Zealand, Singapore and South Korea.

51 Anti-Counterfeiting Trade Agreement between the European Union and its Member States, Australia, Canada, Japan, the Republic of Korea, the United Mexican States, the Kingdom of Morocco, New Zealand, the Republic of Singapore, the Swiss Confederation and the United States of America, as published by the Council of the European Union, 12196/11, 23 August 2011.

52 *European Commission officially referred ACTA to the European Court of Justice*, Statement by John Clancy, EU Trade Spokesman, 11 May 2012.

53 *European Parliament rejects ACTA*, European Parliament press release dated July 4, 2012.

54 Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, 13 December 2007.

55 Opinion on the compatibility of the Anti-Counterfeiting Trade Agreement with the rights enshrined in the Charter of Fundamental Rights of the European Union, European Parliament, Committee on Civil Liberties, Justice and Home Affairs, 4 June 2012, 2011/0167 (NLE).

56 ACTA, *supra* note 50 at Article 27(2).

signatories will "endeavour to promote cooperative efforts within the business community to effectively address trademark and copyright or related rights infringement while preserving legitimate competition and, consistent with that Party's law, preserving fundamental principles such as freedom of expression, fair process, and privacy."[57]

The European Parliament Civil Liberties Committee on civil liberties criticized this last provision on the ground that it requires signatories to encourage private enforcement measures implemented by Internet intermediaries, and that such private arrangements may themselves violate the fundamental rights of citizens.

ACTA also calls for the creation of a "ACTA Committee" whose job will be to collect best practices in connection with enforcement mechanisms and exchange information regarding infringement trends.[58] The role of the ACTA committee is not unlike that of the European Observatory on Infringements of Intellectual Property Rights, created pursuant to the EU Regulation N° 386/2012 of 19 April 2012.[59]

The European Parliament's rejection of ACTA means that the treaty is likely dead, even though some of the issues may re-emerge in the context of the Transatlantic Trade and Investment Partnership (TTIP) discussion recently launched by the European Commission and the Obama administration.

4. PART THREE: THE PROPORTIONALITY TEST AND HOW IT SHOULD BE APPLIED.

4.1 Lack of legitimacy of existing measures

From this brief review of current initiatives, one recurring problem with measures to limit OCI is their perceived lack of legitimacy. The French graduated response regime, the UK's DEA, and ACTA have all generated significant political backlash. The DEA and the French graduated response regime, both of which were adopted by parliaments in their respective countries after full debate, nevertheless suffer from a perceived lack of legitimacy by the public at large. The lack of legitimacy is linked to the perception that OCI measures protect the interests of copyright owners at the expense of individual rights, and that the importance of Internet freedom and net neutrality have not been sufficiently taken into account. Implicit in this criticism is the belief that copyright is an outdated property right that needs to make room for new digital uses.

Copyright is a special kind of property right.[60] The complexity of copyright as a property right and the delicate balances that copyright represents, make the application of technical measures to limit OCI more complex than would be the case for measures designed to limit the theft of cars, for example. The problem of legitimacy encountered by lawmakers and governments trying to implement OCI measures is linked not only to the technical measures themselves, but also to the proper boundaries of copyright in a given situation. It is difficult to separate the two discussions. A person who claims that a measure to limit OCI unduly limits his or her freedom of expression may in fact be saying that copyright should not apply to his or her copying activity. The debate then has a tendency to shift away from the technical measure itself, and focus on the underlying justification for copyright and the scope of copyright's exceptions. This makes political debate on technical measures limiting OCI much more complex than a debate on

57 *Id.*, at Article 27(3).
58 *Id.*, at Article 36.
59 Regulation (EU) N° 386/2012, *supra* note 37.
60 Richard A. Posner, *Intellectual Property: The Law and Economics Approach*, 19 J. of Econ. Perspectives 57 (2005).

measures to limit child pornography, for example. In the case of child pornography, there are no exceptions that would make child pornography legal in some cases. The debate focuses solely on the technical measure itself, including whether the measure is overbroad and may have potential adverse effects on the Internet ecosystem. However, the debate is not polluted by disagreements on the underlying policy of whether child pornography should be illegal.

The purpose of this paper is not to propose a reform of copyright law, although a number of authors suggest such a reform. However, understanding the special nature of copyright, and copyright's already fragile compromise between property rights and freedom of expression helps explain why a balancing mechanism is so critical when considering OCI measures. An explicit balancing test is not only necessary to satisfy legal requirements, it is necessary to improve the perceived legitimacy of any OCI measure.

We propose an explicit methodology that would permit a regulatory authority to balance competing rights and interests in a transparent manner, similar to the way regulatory authorities currently adopt decisions in the field of electronic communications. In the European framework applicable to electronic communications, regulatory authorities are given a relatively long list of objectives that they must consider and attempt to maximize in all cases. They must then evaluate various regulatory options, including the option of doing nothing, and find the option that maximizes the achievement of relevant objectives contained in the list, and mitigates any adverse effects. The result is not perfect, but it forces regulatory authorities to use a robust and transparent reasoning process to reach a given solution where conflicting rights are at stake. A similar methodology is used by the Library of Congress to determine what uses of copyrighted works justify circumvention of technical measures. The use of an explicit methodology also permits courts to review regulatory decisions and quickly identify errors.

4.2 What rights need to be balanced in connection with OCI measures?

Case law has brought to light the various rights that must be balanced in connection with any OCI measure. This section contains a brief description of those rights.

(a) Copyright.

Copyright is protected by the US Constitution and has been recognized as part of the fundamental right to property in Europe. Copyright was created in order to encourage people to create, to innovate, and to publish their creations. According to lawmakers' calculation, society is better off if people are encouraged to create and share their creations, and without copyright, they would be less inclined to do so.[61] Some scholars contest whether copyright is really necessary to motivate people to create, citing the creative activity of Wikipedia or open source software contributors, who create without any expectation that their creations will be protected or remunerated.[62]

Copyright is a property right, which means that the copyright owner can prevent others from having access to, or reproducing, the copyright owners' work.[63] Copyright represents a limitation to freedom of expression. It also creates a monopoly, arguably harmful to competition and to freedom to conduct a business.

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61 Posner (2005).

62 Benkler (2006).

63 Boyer (2012) explains that copyright is a "private-public good" because copyright possesses the characteristic of "exclusion" but not the characteristic of "rivalry."

Lawmakers were aware of these restrictive effects when copyright was created, which is why copyright has a number of built-in safeguards, to ensure that these restrictive effects of copyright do not outweigh the positive effects. These safeguards consist of:

The idea versus expression dichotomy. Copyright does not protect ideas, but only the original expression of those ideas. The idea *versus* expression distinction is used by courts to permit others to exercise their freedom of expression by copying the ideas contained in another person's copyrighted work, provided that the copier does not use the original expression from the first copyrighted work.

Copyright is limited in time. The copyright monopoly comes to an end at a certain point,[64] at which time the work falls within the public domain. Once in the public domain, the work may be freely used by others. The duration of copyright has given rise to controversy. Some argue that the current duration of 120 years in the US is so long that it is virtually unlimited. In theory, the duration of the monopoly should be only as long as is necessary to maintain copyright's positive societal effects on creation, and not a minute longer.[65]

Copyright is subject to numerous exceptions. Copyright law already imposes limits on the copyright owner's right. The copyright owner may not prevent someone from using or copying his or her work for research or academic purposes, or for purposes of parody. A person may make a copy of a work for time-shifting purposes. A cable operator may retransmit television programs without the permission of the right holder; a radio station need not seek the permission of each and every songwriter, music publisher and record label in order to broadcast music. A software developer need not seek the permission of the copyright owner of another software program in order to make his own program compatible. Each time there has been a problem of copyright interfering excessively with certain forms of useful activity, or a situation where individual negotiation is not practical, lawmakers have extended the list of exceptions or created a compulsory license so that those forms of useful activity could take place, albeit in some cases in exchange for payment of a fee.[66]

Copyright is limited by competition law. Although not written expressly into the copyright statute, competition law also provides a limit to the copyright owner's right to prevent others from accessing the work. Competition law may in some case require that the copyright owner grant a license to a competitor, even when he does not want to.[67] In other cases, competition law may affect the copyright owner's ability to divide licenses territorially.[68]

An implicit exception for casual downloading. Linked to the question of technical measures to prevent OCI is the question how much illegal copying should reasonably be allowed. Eliminating all illegal copying would not be feasible at any reasonable cost, and would infringe on other fundamental rights in an unacceptable manner. A regulator will be seeking to eliminate a reasonable amount of illegal copying.[69] Answering the question

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64 Generally 70 years after the death of the author.

65 Posner (2005).

66 For an economic analysis of copyright exceptions, *see* Boyer (2012)

67 *RTE v. Commission*, Joined cases C-241/91 P and C-242/91 P, ECJ 6 April 1995, ("Magill" case).

68 *Premier League v. QC Leisure*, Joined Cases C-403/08 and C-429/08, 4 October 2011.

69 A parallel can be drawn between copyright infringement and Ronald Coase's characterization of interference between radio licenses: "there is no reason to suppose that the optimum situation is one in which there is no interference." One can similarly posit that the optimum situation for OCI is not an environment with no infringement. Ronald H. Coase,

of what is a "reasonable" or "efficient" level of illegal copying comes very close to the question faced by lawmakers in defining what constitutes "fair use." An OCI measure that targets only large-scale infringers will be creating a *de facto* exception for small-scale or casual downloading.[70] Such a tolerance for small-scale infringement will be appropriate because a more intrusive OCI measure would disproportionately affect individual rights and/or be unduly costly to implement. This kind of cost benefit analysis may resemble the cost benefit analysis in determining whether a given use of a copyright-protected work is "fair" under a "fair use" exception.

As noted above, copyright is constitutionally protected both in the US and in Europe. The European Court of Justice recognized in the *Promusicae* case[71] that copyright is entitled to protection as part of the fundamental right to property, but that copyright has to be balanced against other fundamental rights such as the right to privacy.

(b) **Freedom of expression**

Freedom of expression is protected by the First Amendment of the United States Constitution and by Article 10 of the ECHR. Both US and European courts have recognized that freedom of expression is important in its own right but also as an enabler of other fundamental rights in a democratic society. Freedom of expression is not an absolute right. It can be limited and balanced against other rights.

This balancing is expressly provided for in Article 10(2) of the European Convention for the Protection of Human Rights and Fundamental Freedoms ("ECHR"), which provides:

> "*The exercise of these freedoms [to expression], since it carries with it duties and responsibilities, may be subject to such formalities, conditions, restrictions or penalties as are prescribed by law and are necessary in a democratic society, in the interests of national security, territorial integrity or public safety, for the prevention of disorder or crime, for the protection of health or morals, for the protection of the reputation or rights of others, for preventing the disclosure of information received in confidence, or for maintaining the authority and impartiality of the judiciary.*"

In *Reno v. ACLU*, the US Supreme Court held that content published on the Internet should be entitled to the same high level of First Amendment protection as content published in newspapers.[72] The court held that the application of broadcasting-like content restrictions would create an impermissible chilling effect on the distribution of content *via* the Internet.

Freedom of expression does not protect the distribution of content that is illegal.[73] For example, the distribution of infringing content is not protected by freedom of expression. Consequently a mechanism that blocks infringing content, and only infringing content, would not violate freedom of expression. Courts are skeptical, however, that any system can, with 100% accuracy, only block unlawful content. Even if the system accurately identifies a copyrighted work, the system will not know whether the particular use of the

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The Federal Communications Commission, *supra* note 17 at 27. *See also*, Stephen Breyer, *Regulation and Its Reform*, Harvard University Press, 1982 at 104, stating that the objective of automobile safety regulations is to eliminate an "unreasonable" number of deaths.

70 Olivier Bomsel & Heritiana Ranairoson, *Decreasing Enforcement Costs: The Scope of Graduated Response*, 6 Rev. of Econ. Res. On Copyright Issues 13 (2009).

71 *Promusicae v. Telefonica*, CJEU Case C-275/06.

72 *Reno v. ACLU*, *supra* note 10.

73 *Harper & Row Publishers,* 471 US 555, at 569

work might be covered by one of the statutory exceptions to copyright.[74] There may be situations where a system blocks a copyrighted work when in fact the particular use of the copyrighted work is permissible under a statutory exception. If there exists even a small risk that a system will be overbroad, courts will find that there is a significant restriction to freedom of expression that needs to be weighed carefully against other rights.

In the United States, the First Amendment protects in some circumstances the right to remain anonymous.[75] However, a US court of appeals held that the First Amendment does not permit an individual to remain anonymous in order to exchange infringing content.[76] In Europe, the right to remain anonymous has been raised more as a privacy right rather than as part of freedom of expression.

The high level of First Amendment protection given to content on the Internet also carries with it certain procedural safeguards. The US Supreme Court held that the publisher of content is entitled to be heard by a court before, or shortly after, his or her content is removed from distribution.[77] Consequently any government order to remove content must respect the due process rights of the publisher, by affording the publisher a right to present his case as to why the content is not illegal and should not be removed. As noted above, the domain name forfeitures conducted by the US government as part of operation "In Our Sites" have been criticized as potentially violating this rule of First Amendment due process.

(c) **Privacy.**

Like freedom of expression, the right to privacy is guaranteed in most constitutions and international treaties on fundamental rights.[78] The right to privacy includes a number of different rights and interests that are loosely grouped together under the label "privacy." US and European legal systems accord greater or lesser weight to each of these aspects of privacy,[79] but each aspect is present in one form or another. One aspect of privacy particularly cherished in the US is the protection against unreasonable searches or surveillance by the government. The US Constitution[80] and a long history of case law protect citizens against unreasonable government surveillance or interference with what an individual does within his or her own home.[81] The US Supreme Court reaffirmed this branch of privacy recently when it held that police could not use GPS technology to track a suspect without first obtaining a search warrant.

Another aspect of privacy is the right to not have private aspects of one's personal life disclosed publicly. In a famous 1890 law review article Samuel Warren and Louis Brandeis called this the "right to be left alone."[82] Protected aspects of private life may include a person's medical history, intimate family photos, private correspondence, or even the list of websites visited on the Internet. This second aspect of privacy has become

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74 *SABAM v. Netlog,* CJEU Case C-360/10,

75 *Buckley v. American Constitutional Law Foundation*, 525 US 182, at 199-200 (1999)

76 *Arista Records LLC v. Doe 3*, Docket No. 09-0905-cv (2d Cir. 2010)

77 Freedman v. Maryland, 380 US 51, 58 (1965) ; Henry Monaghan, *First Amendment "Due Process"*, 83 Harv. L. Rev. 518 (1970) ; Mark Lemley, Eugene Volokh, *Freedom of Speech and Injunctions in Intellectual Property Cases*, 48 Duke L. J. (1998)

78 European Convention on Human Rights, Rome, 4 November 1950, Article 8.

79 James Whitman, "*The Two Western Cultures of Privacy: Dignity versus Liberty*," 113 Yale L.J. 1151, 2003-2004.

80 United States Constitution, Fourth Amendment

81 *United States v. Jones*, 565 U.S. __ (2012).

82 Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 Harvard L. Rev. N° 5 (1890).

particularly complex with the advent of social media because people today routinely share details about their private lives with large numbers of friends, thereby blurring the line between public and private spheres.

A third aspect of privacy considers personal data almost like a property right, which users should be able to control and selectively license to others. This may include the right to use a person's name, address or photo or e-mail address for a given purpose. These kinds of personal data are not necessarily intimate and so do not always fit within the "private sphere" category above. A person's name is in many respects a public fact. Nevertheless, the law of many countries recognizes that individuals have a right to control these kinds of personal data, although the extent of that control is subject to debate. The control may be linked to concepts akin to property rights, or based on the ability to control and protect one's honor.[83]

Finally, the last aspect of privacy is the requirement that citizens be protected against potential misuse of systems that process large amounts of personal data. This aspect of privacy law recognizes that the handling of large amounts of personal data represents an inherent risk, much like the storage of toxic chemicals. Consequently, laws impose safeguards around the collection and processing of personal data to minimize the risk that large amounts of data might be lost or misused.

The right to privacy is protected by Article 8 of the ECHR. But like freedom of expression, the right to privacy is not absolute and can be balanced against other rights and freedoms. Article 8(2) of the ECHR contains balancing language similar to that used in the treaty for freedom of expression:

> "*There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.*[84]"

In Europe there has been considerable litigation surrounding the issue of whether the collection of IP addresses of alleged infringers, and the translation of those IP addresses into names of subscribers, violates the subscribers' right to privacy. These cases show that the processing of the IP addresses does affect the right to privacy of individual subscribers, but that the limitation of privacy is permissible if the system is surrounded by appropriate safeguards and respects the principle of proportionality.[85] An Irish court went so far as to say that the users of peer-to-peer networks have no expectation of privacy because they are displaying their infringing goods in a public place for anyone to see.[86] A content owner who visits a public place and makes note of IP addresses of persons proposing his or her content is therefore not infringing any privacy rights. In an earlier case the Irish court also found that privacy law does not protect communications that infringe the rights of others: "Criminals leave the private sphere when they infringe the rights of others, or conspire in that respect."[87] Other courts take a broader view, considering that OCI measures carry risks for citizens in general, not just for persons

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83 Whitman, *supra* note 73 at 1210.

84 ECHR, *supra* note 72 at Article 8(2)..

85 *Bonnier Audio v. Perfect Communication*, CJEU Case C-461/10, at para. 59.

86 *EMI v. Data Protection Commissioner*, High Court (Ireland), 2012/167 JR, June 27, 2012, at para. 7.2 : "An activity of swarm participation for peer-to-peer downloading does not legitimately carry the expectation of privacy."

87 *EMI Records (Ireland) Ltd & Ors v UPS Communications Ireland Ltd* [2010] IEHC 377, at para. 68.

involved in illegal downloading activities. In particular, OCI measures can create systems that could potentially be misused for highly intrusive monitoring activities.

(d) **Right to a fair trial and to the presumption of innocence.**

The right to a fair trial carries with it a host of procedural safeguards intended to ensure that no adverse decision is taken with regard to a person without that person having an opportunity to defend him or herself before an impartial tribunal.[88] Linked to the right to a fair trial is the presumption of innocence, which means that the prosecution bears the burden of affirmatively proving the facts of a violation; it is not up to the accused to affirmatively prove his or her innocence.[89] These rights are protected both by Article 6 of the ECHR and by Article 48 of the EU Charter.

In the context of measures to fight OCI, the right to a fair trial comes into play in several respects. First, it means that a person targeted by a decision relating to OCI has a right to prior notice and a right to be heard before the decision is made. Consequently, should a court or a regulator decide that a given website or service should be blocked because its content infringes copyright, the affected website publisher should be notified in advance and given an opportunity to defend itself by arguing, for example, that a fair use exception applies. The lack of prior notice and hearing is one of the aspects of the US government's "In Our Sites" program that has drawn criticism.[90]

Similarly, the right to a fair trial requires that the person or persons making the adverse decision must be independent. Independence in this sense means that the decision maker is independent of the persons who conducted the investigation and collected the facts supporting the accusation. Courts are generally independent because their only job is to decide individual disputes; they do not conduct investigations. For regulatory authorities, the question is more complicated because the regulatory authority may have both an adjudicatory function and an investigation function. For this reason, the right to a fair trial requires a strict separation within the regulatory authority between these two functions. If the separation is properly implemented, the regulatory authority can be deemed independent for the purposes of making individual adjudications.

A critical part of the right to a fair trial is the right to an effective appeal. The appeal is generally to a court, regardless of whether the initial decision-maker was a court or a regulatory authority.

Finally, the presumption of innocence comes into play when determining the level of proof that must be adduced by the prosecution in a case. This issue becomes particularly acute in connection with OCI measures that target end-users, such as the graduated response regime in France. The proof of a violation is linked to the IP address of a particular computer. But it is impossible to know who was behind a computer at a given moment, and therefore apply sanctions against the person who actually committed the offense. To get around this difficulty, French lawmakers created a statutory duty of care that applies to the *subscriber* of the Internet access service: the person having contracted for the Internet access must take reasonable measures to ensure that their access line is not used for illegal copying. The violation that is punished in France through suspension of the Internet access consists not of the actual act of OCI, but instead of a repeated

88 ECHR *supra* note 72, Article 6.

89 Charter of Fundamental Rights of the European Union (2000/C 364/01), Article 48.

90 Sellars, *supra* note 23.

violation of the subscriber's statutory duty to ensure that his or her access is not used for infringement. This technique is similar to that used by lawmakers to deal with motor vehicle violations. For certain motor vehicle violations, the police will not know who was driving the car at a given time. They will know only that the car exceeded a speed limit or was illegally parked. The owner of the car may not be the person who actually committed the violation. Nevertheless, lawmakers have in some cases provided *via* statute that the registered owner of the car will be financially liable for certain traffic tickets regardless of who was actually driving.[91] These legislative shortcuts help avoid insoluble problems of proof. They are possible only for violations involving minor fines. For more serious violations, for example violations involving a potential prison term, the right to a fair trial would require that the guilt of the actual individual who committed the offense be affirmatively proven.

(e) **Right to conduct a business.**

The Court of Justice of the European Union stated recently that the right to conduct a business, recognized by Article 16 of the European Charter of Fundamental Rights, was affected by measures to limit OCI. [92] Consequently, any technical measure to limit OCI must take into account the cost on technical intermediaries and the effect that the measure would have on their business.

(f) **Other policy objectives.**

In addition to the fundamental rights mentioned above, a regulatory framework for OCI will include a number of policy objectives that a regulatory authority will try to achieve. These policy objectives will include the promotion of innovation, consumer choice, competition, net neutrality and investment, as well as the promotion of new (legal) distribution models for content.

4.3 The balancing test and proportionality

Having identified the key rights that need to be balanced, we examine below how those rights should be balanced.

(a) **Three criteria of the European Court of Human Rights.**

The European Court of Human Rights has developed three criteria that must be cumulatively satisfied whenever governments introduce measures to limit fundamental rights such as freedom of expression or privacy.[93] These three criteria appear in one form or another in all the court decisions relating to technical measures to limit OCI, and must form the cornerstone for any regulatory framework designed to deal with OCI.

First criterion: the measure must be provided for in a law that has been adopted pursuant to democratic procedures.[94] This is the first safeguard for individual rights. When parliament has adopted a law that specifically allows for a restrictive OCI measure, there is a presumption that the measure has been subject to a democratic debate and that the outcome of that debate already represents a balance of competing interests and rights. The law must specifically envisage the restrictive measure in question in order to pass

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91 *See, e.g.*, Article L 121-3 of the French Traffic Code.

92 *SABAM v Netlog*, CJEU Case C-360-10, at para. 44.

93 Cormac Callanan, Marco Gercke, Estelle De Marco & Hein Driez-Ziekenheiner, *Internet Blocking – balancing crybercrime responses in democratic societies*, October 2009.

94 Opinion of the Advocate General in the *SABAM Scarlet* case, *supra* note 8.

this first test. A law that gives broad but unspecified powers to the courts, to the government or to an administrative agency to impose restrictive measures is less likely to pass this first test. Consequently any law adopted to put into place a regulatory framework for OCI must explicitly identify the measures that are in the regulator's toolbox.

Second criterion: the measure must seek to achieve a legitimate objective. This second test will in most cases be easy to pass. Restrictive measures adopted in democratic societies generally seek to promote an objective such as protection of youth, protection of property rights, cultural diversity or public order. As we saw above, the protection of copyright is recognized as a form of protection of property, which is itself a constitutionally recognized right. Consequently, any measure adopted to limit OCI will necessarily satisfy this second test.

Third criterion: the measure must be necessary in a democratic society. This test is the most difficult of the three. It is equivalent to the proportionality test that courts apply to each measure implemented to limit OCI. The measure must be narrowly tailored to achieve the desired objective without affecting more than absolutely necessary other fundamental rights. It is this proportionality test that must form the core of the regulatory balancing test to deal with OCI, and which we present as a cost benefit analysis below.

These three criteria appear in various forms in court decisions and in international documents dealing with fundamental rights, such as a recent United Nations report on the promotion and protection of the right to freedom of opinion and expression.[95]

(b) **Judicial application of the proportionality test: BT TalkTalk.**

Several recent court decisions illustrate how the proportionality test should be applied to OCI measures. One of the most interesting decisions is that of the British High Court in the BT TalkTalk case.[96] Two British ISPs, BT and TalkTalk, challenged the legality of the UK DEA on several grounds, including violation of several European directives. What is significant for purposes of our demonstration is the claim that the DEA fails the proportionality test. According to BT and TalkTalk, the restrictive measures envisaged by the DEA affect more than necessary other fundamental rights and therefore fail the proportionality test. The British government prevailed on this issue: the lower court held that the DEA satisfied the proportionality test. On appeal, BT and TalkTalk did not raise the proportionality argument again. Consequently, the lower court's analysis remains valid. Below is a short analysis of the court's reasoning.

(i) Should a court give deference to lawmakers' balancing?

An important threshold question raised by the court in the BT TalkTalk case is to what extent the court should second-guess balancing that was already done by the parliament. Should the court approach the question anew, or should the court give deference to the balancing that was already done by lawmakers? This point connects back to the first test in the three-step test, *ie.* that the restrictive measure be adopted in a law that has been subject to democratic debate. If the balancing test was done *via* the compromises adopted

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95 United Nations General Assembly, Human Rights Council, Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, Frank La Rue, 16 May 2011, A/HRC/17/27.

96 *BT/Talk Talk*, *supra* note 5.

through the legislative process, a court should hesitate before second-guessing the outcome of that balancing.

In the BT TalkTalk case, the court found that where the balancing of interests relates to broad social values and benefits, the court should defer to the legislature because: (i) the legislature is more accountable to citizens than courts are,[97] and (ii) the legislature will generally have better access to relevant information on societal balances than the court will.[98]

The court said it would apply closer scrutiny if the relevant measure consisted in restricting a fundamental right without a clear countervailing fundamental right being promoted on the other side. This ties back with the second test in the three-step test, *ie*. that the restrictive measure be adopted for the purpose of promoting a legitimate objective.

Giving some deference to the legislature does not mean blindly accepting its conclusions. It means instead that where the balancing test is close, the court will accept the legislature's conclusions and not necessarily substitute its own. In the regulatory framework proposed in this paper, the balancing would be done not by parliament but by a regulatory authority pursuant to a methodology, and a toolbox of measures, defined in advance by parliament. Consequently the court's scrutiny of the regulatory authority's balancing might be higher than the scrutiny of the parliament's balancing. In appeals of regulatory decisions, courts generally give some deference to the technical findings of regulatory authorities, particularly in areas where regulatory authorities have special expertise. However, for questions relating to the balancing of fundamental rights, courts will generally apply their own balancing anew, and determine if the regulatory authority came to the right outcome.

(ii) Identification of the conflicting rights and interests

After determining what level of scrutiny should be applied to the measure, the court proceeded to explore the content of the balancing test as applied to the DEA.

First, the court listed -- as I have in this paper -- the relevant rights and interests in competition with each other. The court identified three different kinds of rights and interests:

- First, the rights of content owners to protect their copyright against unlawful activity on the Internet;
- Second, rights of Internet intermediaries to enjoy exemptions from liability and freedom of regulatory burdens in connection with their activity;

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97 "First, there is considerable support in the case law for the proposition that the Courts should afford particular deference to elected and accountable decision makers where the decision concerns subject matters that are regarded as within the particular province of the political branches…. 'greater deference will be due to the democratic powers where the subject matter in hand is peculiarly within their constitutional responsibility.'" *BT/TalkTalk*, *supra* note 5, at para. 210.

98 "Secondly, Parliament struck the challenged balance after a lengthy process of consultation of all interested parties, which took account of the representations made by those parties, and after a voluntary, non-legislative scheme was tried out. That process is likely to have provided the decision maker with an insight and capacity that the court is unlikely to enjoy." *Id.*, at para. 212.

- Third, the rights of users to enjoy unrestricted access to information on the Internet.

The court stressed that the rights to be balanced were all recognized as fundamental rights:

> *…this is not a case where, on the one side, there is a human right, or a fundamental EU freedom, and on the other side the State is seeking to restrict or interfere with that right on the grounds of general utility or welfare.*[99]

Citing the *Promusicae* judgment of the CJCE[100] and the ECHR, the court concluded that copyright is an important right of property and that its enjoyment and exploitation is recognized as a fundamental right.[101] The court stated that some fundamental rights suffer no restriction, such as the right to life or the prohibition of torture and inhuman or degrading treatment or punishment. However, the right of freedom of expression, although it is a fundamental pillar of a democratic society, is subject to some restrictions. The right to the protection of privacy may also be restricted using a balancing test.

The court then proceeded to balance the various competing interests. To quote the court, an OCI measure may restrict fundamental rights:

> *provided that the restrictions in fact correspond to objectives of general interest and do not, taking account of the aim of the restrictions, constitute disproportionate and unacceptable interference, impairing the very substance of the rights guaranteed.*[102]

The court here restates the second and third tests of the three-step test we discussed above. The terms "disproportionate and unacceptable" used by the court are redundant. A restriction that is disproportionate would necessarily be unacceptable. Consequently addition of the word "unacceptable" after the word "disproportionate" adds nothing to the sentence. The phrase "impairing the very substance of the rights guaranteed" provides an example of when a restriction would be disproportionate (and therefore unacceptable): Any restriction that makes the exercise of a fundamental right difficult or impossible, and not just less convenient, would be disproportionate, and therefore unacceptable. Respect for the "essence of the right" is also reflected in Article 52(1) of the European Charter of Fundamental Rights, which provides that:

> *Any limitation on the exercise of the rights and freedoms recognised by this Charter must be provided for by law and respect the essence of those rights and freedoms. Subject to the principle of proportionality, limitations may be made only if they are necessary and genuinely meet objectives of general interest recognised by the Union or the need to protect the rights and freedoms of others.*[103]

The test was also well summarized by the High Court of Ireland, in its June 27, 2012 decision *EMI Records v. Data Protection Commissioner*:

> *"…the nature of the injunction sought; the limitation to and the duration of any monitoring; the breadth or narrowness of scope of any order; the nature of the equipment*

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99 *Id.*, at para. 215

100 *Promusicae v. Telefonica*, Case C-276/06, CJEC Jan. 29, 2008.

101 *BT/TalkTalk, supra* note 5, at para. 215

102 *Id.*, at 217, quoting the European Court of Justice in *Schmidberger v. Republik Österreich*, Case C-112/00, CJEC June 12, 2003.

103 Article 53, Charter of Fundamental Rights of the European Union, 2000/C 364/01, OJEC Dec. 18, 2000, C364/1 (hereinafter the "EU Charter").

> *to be used; the potential for the interference of that equipment with the proper use of the existing systems of the intermediary; the balance of burden as to equipment and personnel and cost; the intrusiveness of any remedy into legitimate privacy and entitlement to communicate; and any potential data protection impingements, together constitute the main factors in a court determining where the proportionality of a remedy to the mischief of the improper use of intellectual property online is to be struck or whether an injunction application is to be refused, despite legal compliance, on discretionary grounds."*[104]

4.4 The proportionality test implies a cost benefit analysis.

As we have seen above, the key test revolves around proportionality. But what does proportionality mean? And is it possible to create a proportionality test that could be applied by an independent regulatory authority in order to craft appropriate measures to limit OCI? Is it even possible for an independent regulatory authority to apply the test, or must the test always be applied by a court or by parliament?

The heart of proportionality is to be able to show that the measure envisaged is the least burdensome of the various options being considered, while still being effective.[105] A relatively ineffective measure that creates high costs would be disproportionate. A very effective measure creating low costs would be proportionate. The term "costs" means both the costs of implementing the measure for technical intermediaries, but also other costs to society such as the costs to citizens of restricting the exercise of one of their fundamental rights such as freedom of expression or their right to privacy, or the costs to the Internet ecosystem of violating net neutrality.

The benefit of the measure would be equal to the anticipated social benefit (or cost savings) of the measure assuming its full potential is realized, multiplied by the anticipated effectiveness of the measure, *ie.* the probability that the full potential will be realized.

> *Benefit = (Cost savings that would occur if the measure is 100% effective) x (% effectiveness of the measure).*

A 100% effective measure may be very expensive to implement, leading to a situation where total costs exceed total benefits, an inefficient outcome. As with regulation designed to prevent traffic fatalities, the goal of regulation designed to prevent OCI is to prevent a reasonable amount of harm from occurring, the level of "reasonable" depending in large part on the cost of the prevention measures available.[106] The goal of the OCI regulatory authority will be to find a measure that delivers a relatively high benefit in terms of protecting copyright while minimizing costs, both economic costs and costs to fundamental rights. Put simply, proportionality requires the application of a measure that provides the most "bang for the buck." With this in mind, it is easy to understand why scholars have criticized government measures that address OCI solely through ISPs and actions directed against individual subscribers. Actions targeting other internet intermediaries such as payment providers or advertising networks might be more effective and create fewer costs.

It is also easy to understand why crafting proportionate OCI measures can be a moving target. Proportionality is not static. The cost benefit test can vary dramatically over time.

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104 *EMI Records v. Data Protection Commissioner*, High Court (Ireland), 2012/167 JR, June 27, 2012, para. 8.10

105 L. Hancher, P. Larouche & S. Lavrijssen, *Principles of Good Market Governance*, 4 J. of Network Industries 355 at p. 365 (2003)

106 Breyer (1982), p. 104.

An OCI measure that is proportionate at a given point in time may no longer be proportionate several years later. In France, the HADOPI graduated response mechanism was built with only peer-to-peer file sharing in mind. Assuming that the cost of creating and administering the HADOPI graduated response regime is significant, and that the system creates non-trivial costs in terms of potential invasions of privacy, then there must be a stronger countervailing benefit on the other side in terms of fighting OCI and promoting legal content offers. If Internet users turn away from peer-to-peer technology toward streaming or direct download, the original cost benefit analysis will be altered. The benefit side of the equation will go down, with no corresponding decrease on the cost side.

The cost benefit analysis may also change simply because more information on the true costs or benefits of the measure becomes available over time. This is frequent in the field of health and safety regulations. Evidence can emerge that a drug or a certain kind of vehicle safety feature is dangerous to users, thereby drastically altering the original cost benefit analysis. Or it may turn out that a relatively costly measure reaps very little benefit.

Cass Sunstein examined dozens of health and safety regulations in the United States and calculated the cost of each measure compared to each life-year saved because of the measure. It is morally difficult to put a price on a human life. However, a comparison of the relative cost of saving one year of a human life using different regulatory measures is useful in deciding which regulatory measures are the most effective and should be pursued. Sunstein found that many health and safety regulatory measures were extremely costly to implement and saved very few lives. If the money used for those costly measures but ineffective measures had been used to implement other less costly but more effective measures, many more lives would have been saved.

If a legislature attempts to apply the cost benefit analysis at a granular level, and impose a specific technical standard as a result, the result is likely to be a law that will quickly come obsolete. A law requiring that all cars be equipped with a particular kind of airbag, or a law defining how ISPs should deal with peer-to-peer file exchanges, will be obsolete the day a more efficient kind of passenger restraint system is invented, or the day when peer-to-peer ceases to be the principal vehicle for OCI. By contrast, if a legislature sets a general objective of "safe cars" or of "limiting OCI," and gives guidelines to a regulatory authority, the regulatory authority will then be able to evaluate the effectiveness and costs of preventive measures on a dynamic basis and correct the balance as necessary in order to achieve proportionality. To be effective, the regulatory authority must also have a wide range of measures in its toolbox, and be able to reach a wide range of technical intermediaries. Otherwise, the regulatory authority will not be able to implement the most proportionate measure, either because the best measure is not in the regulator's toolbox to begin with, or because the technical intermediary who would be ideally placed to implement the measure is outside of the regulator's statutory power.

In order to better understand the CBA I propose in this paper for OCI, let us look at each category of costs and benefits that the regulator authority might consider.[107]

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[107] Mark MacCarthy proposed an inventory of costs in his 2010 article *What Payment Intermediaries Are Doing About Online Liability and Why It Matters*, 25 Berkeley Technology L. J. 1039, at 1062 (2010).

The case law dealing with OCI measures has identified two main categories of costs: (i) costs that a measure would generate for the technical intermediaries and for the economy in general, and (ii) costs borne by citizens whose fundamental rights may be restricted as a result of the measure. In addition the regulator must consider the benefits of the measure, such as the costs that the OCI measure will likely reduce, such as the costs created by infringement.[108]

(a) Costs for technical intermediaries.

As the European Court of Justice held in the SABAM Netlog case, the proportionality test must take into account the costs that a given measure would create for businesses.[109] Businesses benefit from the right to conduct their business free from interference.[110] Imposing costs on businesses interferes with this right. Naturally businesses are subject to taxation and numerous other measures that limit their freedom, so the interference with this right is possible, and relatively frequent. If the relevant costs are imposed on only certain types of businesses, however, particular issues may arise. For example, in the *BT TalkTalk* case, the Court of Appeal found that the imposition on ISPs of even 25% of the costs for the relevant OCI measures violated the European Authorisation Directive, which prohibits the imposition of fees on operators of electronic communications networks other than fees linked to the administration of licenses.[111]

In France, the constitution prohibits the imposition of cost burdens on a particular kind of business for purposes of helping law enforcement.[112] For example, equipment that telecom operators are required to install to facilitate government wiretaps must be reimbursed by the government.[113]

These special legal requirements do not exist everywhere, and need not affect our CBA. We can therefore keep our approach simple, and use the postulate that the imposition of costs on ISPs or other technical intermediaries creates a burden for those entities that needs to be taken into account when conducting the proportionality test. A regulatory authority must attempt to quantify all the costs that a measure would create for technical intermediaries, evaluate whether those costs are reasonable compared to the expected benefits, and evaluate ways to mitigate those costs or shift them to someone else, for example to right holders who are the principal beneficiaries of the measures, or to taxpayers. Shifting costs from one player to another does not modify the total costs in the cost-benefit analysis. However, shifting costs to the principal beneficiaries of the measures may permit a regulator to better simulate a negotiated "Coasian" outcome.

One relevant factor in evaluating costs to Internet intermediaries is to determine whether the intermediary already has a system in place that it uses for other purposes and that can, with little cost, be used to limit OCI. In the *Newzbin* cases, the High Court of England ordered British Telecom to use its Cleanfeed system, which BT used to block access to

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108 Unlike MacCarthy (note 102, *supra*, at p. 1057), we do not propose to supplement the cost-benefit test with a separate balance of equities.

109 *SABAM v. Netlog*, Case C-360/10, CJEU Feb. 16, 2012.

110 "…such an injunction would result in a serious infringement of the freedom of the hosting service provider to conduct its business since it would require that hosting service provider to install a complicated, costly, permanent computer system at its own expense, which would also be contrary to the conditions laid down in Article 3(1) of Directive 2004/48, which requires that measures to ensure the respect of intellectual property rights should not be unnecessarily complicated or costly." *Id.*, at para. 46.

111 *BT/TalkTalk, supra* note 5.

112 French Constitutional Court, Decision n° 2000-441 D., December 28, 2000.

113 French Code of Posts and Electronic Communications, Article L 34-1.

child porn sites, to also block access to a site that had been judged as promoting OCI. While not perfect, BT's Cleanfeed system could be repurposed at relatively little cost and was reasonably effective, leading the court to prefer the Cleanfeed system over other more costly and intrusive options.[114]

Another factor to mitigate costs might be to impose OCI measures only on large Internet intermediaries that benefit from economies of scale. In order to minimize the disproportionate effects that OCI measures might have on smaller ISPs, OFCOM has proposed to exempt small ISPs from the obligation to compile lists of alleged infringers and to send warnings to them under the DEA.[115]

(b) Costs for the economy flowing from the imposition of the technical measure

The imposition of obligations on technical intermediaries might also create costs for the economy in general, by discouraging market entry, or encouraging market exit by smaller players, thereby decreasing competition and innovation.[116] Technical OCI measures might be proportionally less costly for large players to implement than for smaller players or new market entrants, thereby reinforcing the market power of large existing players. If these costs are not reimbursed, they could create barriers to entry, thereby making markets less contestable and competitive. If they are not reimbursed by right holders, technical intermediaries might also increase their prices to reflect the cost of the technical measure, which could cause certain Internet users to reduce their activity.[117]

Imposing obligations on technical intermediaries may also damage innovation and growth by altering the open and neutral architecture of the Internet. This category of costs is concerned solely with the effects on innovation, competition and growth, and not with the potential costs associated with users' more limited access to content, which is dealt with in Section 3.3(d) below.

In addition to the cost burden associated with implementing a given technical measure, its imposition may also skew competition because the measure reflects a particular technology or approach promoted by one actor that disadvantages its competitors. To minimize this potential cost, regulators should endeavor to impose technologically neutral remedies, performance standards as opposed to technologically specific "design" standards.[118] Regulators should make sure that measures are subject to public consultation and stakeholder comments, so as to identify any hidden competitive distortions.[119]

(c) Costs related to restrictions to users' fundamental rights

The costs associated with limiting an individual's freedom of expression or right to privacy are hard to quantify. As noted above, a limitation that would eliminate the essence of the right would have an intolerably high cost to society and would necessarily

114 *Twentieth Cenury Fox v. BT*, (2011) 1981 EWHC.

115 OFCOM, *Online Infringement of Copyright and the Digital Economy Act 2010, Notice of Ofcom's proposal to make by order a code for regulating the initial obligations*, June 26, 2012, at p. 35.

116 Eldar Haber, *The French Revolution 2.0: Copyright and the Three Strikes Policy*, 2 Harvard J. of Sports & Entertainment L. 298 at p. 310 (2010); For a discussion of the potential anticompetitive effects of standards, *see* Breyer, *supra* note 63 at p. 115

117 Douglas Lichtman, "Holding Internet Service Providers Accountable," Regulation, Winter 2004-2005, 54 at p. 58.

118 Directive 2002/21/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive), as amended by Directive 2009/140/EC, Article 8(1); Breyer, *supra* note 63 at p. 105.

119 Hancher, Larouche & Lavrijssen, *supra* note 101 at p. 359.

be disproportionate and illegal. Courts pay special attention to freedom of expression and freedom of access to information because the right enables the exercise other fundamental rights necessary for democracy. The elimination of freedom of expression would have a spillover effect resulting in the destruction of other fundamental rights. It is relatively easy therefore to quantify the cost of a severe restriction of freedom of expression as compared to other countervailing costs. The cost will always be extremely high, probably in excess of any possible countervailing benefits. The only case where a severe restriction of freedom of expression may be justified temporarily is in wartime, because the countervailing costs at issue are the potential loss of many human lives.[120]

In the case of measures to limit OCI, human life is not at stake. Any limitations to freedom of expression will therefore have to be extremely limited. Any subtle and indirect limitations to freedom of expression that may flow from OCI measures will have to be identified, even if the costs of those restrictions will be difficult to quantify. In order to identify any such limitations, the regulator should ask whether the OCI measure would prevent an individual from benefiting from one of the exceptions to copyright, such as the fair use exception in the United States. This line of inquiry is similar to the one conducted by the Library of Congress when evaluating anti-circumvention measures.[121]

While freedom of expression is probably the most important right potentially affected by technical measures, the right to privacy will also likely be affected. Measures intended to limit OCI will often have a potential adverse effect on privacy. A system that tracks online behavior to detect OCI carries inherent risks because the system, or the data it collects, can potentially be misused. Like the collection of geolocation information, the collection of IP addresses for purposes of limiting OCI must be surrounded by safeguards to avoid possible abuse. A system that does not permit the identification of individual downloaders will create lower privacy costs than a system that permits such identification.

A regulatory framework already exists in Europe for determining the level of risk to privacy that can be tolerated for a given measure, and the required level of safeguards.[122] Most systems designed to limit OCI in Europe must be reviewed by data protection authorities whose job is to determine whether the processing of personal data is "excessive" in a given situation and present adequate safeguards to protect privacy.[123] This determination by DPAs is equivalent to a proportionality test, but only focused on privacy rights.[124]

Among the open questions that will have to be resolved before implementing a regulatory framework for OCI in Europe is how the OCI regulatory authority would interact with the data protection regulatory authority. If the data protection regulatory authority were to have a veto right over any decision of the OCI regulatory authority, this would in effect substitute the data protection authority's balancing for the OCI authority's, which would defeat the purpose of creating a separate OCI authority whose

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120 Winston Maxwell & Julie Massaloux, *Freedom of Speech and the Internet: European and US Perspectives after September 11th, 2001*, Communications & Strategies, n° 47, 3d quarter 2002, 121 at p. 126.

121 *See infra*, section __

122 DIRECTIVE 95/46/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, Article 6(1)(c).

123 *Id*.

124 Charlotte Bagger Tranberg, *Proportionality and data protection in the case law of the European Court of Justice*, 1 Int. Data Privacy L. 4, p. 239 (2011).

objective is to apply the proportionality test to OCI measures taking *all* relevant rights and costs into account. A better system would be an obligation for the OCI authority to "take account" of the opinion of the data protection authority, but not an obligation to follow the opinion where the OCI authority has good reasons not to do so. It would then be up to a court to decide whether the OCI authority failed to give sufficient weight to the data protection authority's opinion. This is similar to the system that exists in Europe for regulatory decisions involving electronic communications. In most jurisdictions, the regulatory authority for electronic communications must consult with and take account of the opinion of the competition authority.[125]

(d) Benefits from reduction of OCI

The benefits are equal to the difference between the total costs linked to OCI before and after the relevant measure is implemented.

Quantifying costs linked to OCI has proven difficult, because each copyrighted work illegally copied by an Internet user does not translate into one lost sale. The correlation is more complex. Some have argued that OCI actually promotes legitimate sales of copyrighted works by helping promote the work and allowing Internet users to sample the work before they buy it.[126] Others have argued that the reason for decreased sales of copyrighted works is not OCI at all, but instead the unwillingness or inability of right holders to adapt their distribution models to the new digital environment.

Most economists conclude that OCI creates a significant cost for copyright owners in the form of lost sales, but that OCI is responsible for part, but not all, of the decrease in legitimate sales.[127]

As with the discussion of the costs on technical intermediaries, the costs on copyright owners can be divided into two parts:

- The direct costs suffered by copyright owners because of lost sales caused by OCI;

- Other potential indirect costs to the economy, such as a reduction in the number of independent music labels, reduction in the number of new artists that sign with a music label, reduction in the number of book publishers or independent motion picture distributors. Just as the costs of technical measures can potentially decrease competition and innovation among ISPs and other technical intermediaries, the costs associated with OCI can potentially decrease competition and diversity among distributors of copyrighted content, resulting in a reduction in the quantity and diversity of works being published and the number of retail outlets. OCI has potential effects ranging from a general reduction in the number of albums produced, to the closure of book and record stores. OCI may not be solely, or even mainly, responsible for some of these effects.[128] The closure of book and record shops may be due to the emergence of legitimate online retailers such as Amazon and iTunes rather than to OCI. Nevertheless OCI may contribute to this effect, so a regulator should try to evaluate whether this cost is significant.

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125 Article 3(4), Framework Directive, *supra* note 113.

126 Felix Oberhlolzer-Gee & Koleman Strumpf, *The Effect of File Sharing on Record Sales: An Empirical Analysis*,115 J. of Pol. Econ. 1 at p. 2 (2007).

127 Patrick Mooney, Subarna Samanta and Ali H.M. Zadeh, *Napster and its Effects on the Music Industry: An Empirical Analysis*, 6 J. of Social Sci. 303 (2010).

128 Joel Waldfogel, *Copyright, Protection, Technological Change, and the Quality of New Products: Evidence from Recorded Music Since Napster,* National Bureau of Economic Research Working Paper 17503, October 2011.

OCI is also a barrier to commercial and technical innovation in the development of new online distribution models. In a market where OCI is widespread and unfettered, potential market entrants may have little incentive to invest in new risky business models for distributing online content.

The absence of investment and risk-taking in new distribution models creates costs to the economy in addition to the direct cost resulting from lost sales, and these costs – whatever their amount -- need to be taken into account by a regulator in the proportionality test.

The costs of OCI will vary depending on the kind of work being copied. The costs associated with the copying of a recently released or unreleased film will be much higher than those associated with the copying of an old library film, particularly if the old library film is not available on any legal distribution platform.

The purpose of this paper is not to try to quantify these relevant costs or even try to draw precise correlations between them. Instead, our purpose is to list the costs that an independent regulatory authority should take into account when evaluating the costs and benefits of a given measure to limit OCI. It will be up to the regulatory authority to try to quantify those costs where appropriate based on available evidence, including international benchmarks and independent economic studies.[129]

5. PART THREE: A REGULATORY AUTHORITY IS NEEDED TO ADOPT PROPORTIONATE OCI MEASURES

The preceding section described the rights that should be balanced and the method for applying the proportionality test. In this section we will address the question of why a regulatory authority should do the balancing, and what procedural safeguards should be put into place to ensure that the regulator's actions do not violate procedural rights.

5.1 Why a regulatory authority can be helpful

As we saw above, one of the fundamental drawbacks of OCI measures to date has been their obsolescence in the face of swift technological change. Lawmakers may elaborate complex laws to deal with certain kinds of copying -- for example digital audiotape copying or peer-to-peer file exchanges -- but by the time the measures are implemented, technology has moved on.[130] Moreover, as we saw above, a rigorous application of the proportionality test requires a fine-tuned evaluation of the costs and benefits of any measure, and selection of the measure that creates the highest benefit for the lowest cost to society. This sort of analysis has to be done on an ongoing basis, particularly in a fast-changing environment like the Internet.

The approaches to date are unsatisfactory because they boil down to either very general rules that are then interpreted *ex post* by courts, or more detailed laws that prescribe specific measures in connection with OCI, but that are quickly outdated. An example of the first category of general rules is the liability safe harbor rules contained in the DMCA or the European E-Commerce Directive. These liability safe harbors are interpreted *ex post* by courts, which means that the rules are flexible and can keep up with technology. But they suffer from a lack of predictability. Stakeholders do not know in advance

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129 *See, eg* United States Office of Management and Budget Circular A-4, Sept. 17, 2003, which describes a methodology for quantifying costs and benefits from various regulatory alternatives.

130 Joseph P. Liu, *Regulatory Copyright*, 83 N.C.L. Rev. 84 (2004)

whether their particular activity falls within the relevant safe harbor until a court reviews the facts of their particular case, which may take years.

An example of the second category of measures is the French graduated response regime, which is relatively detailed but solely focused on actions toward consumers. Moreover, the decrees implementing the French law focus solely on peer-to-peer technology. The French framework lacks the ability to evolve to address new technologies and market developments. As a result, the French graduated response regime is unable to deal with new forms of OCIs, including direct downloads and streaming. Moreover, the regulatory authority has only one tool in its toolbox, the graduated response system. The regime therefore quickly becomes obsolete, fuelling criticism that the measures are not cost-effective.

To address the obsolescence problem, this paper proposes that the balancing methodology outlined in Section 3 above be performed by an independent regulatory authority. Much as the US Library of Congress is required to revisit every three years the rules regarding circumvention of technical protection measures, a regulatory authority with responsibility over OCI measures would be required to adapt its rules to accompany technological and market change.

(a) **Lawmakers' dilemma: general versus detailed rules**

We propose that a regulatory authority be given the task of balancing rights and implementing OCI measures that satisfy the proportionality test. However, it may not be easy for lawmakers to take this step.

In the field of measures to limit OCI, lawmakers have a dilemma. On the one hand, given the sensitivity of the issues and the careful balancing that must accompany any measure, lawmakers will want to draft detailed legislation in order to get the balance right. Detailed legislation will permit lawmakers to do the balancing themselves, contributing to the measure's legitimacy. As pointed out by the court in the *BT TalkTalk* case, the legislature is arguably the best institution to balance sensitive rights and interests, because the legislature is directly accountable to citizens. Also, lawmakers may wish to avoid delegating regulatory authority for something as politically sensitive as measures to limit OCI. However, a careful balance struck after detailed legislative debate and compromise will result in a text that is perfectly adapted to the technology, business models and social context that existed at the time the debate took place. When the law is actually applied, the balance struck by the legislature may already be outdated, overtaken by technological change and new social or business trends. The law will be ineffective, derided by critics as creating risks for fundamental rights, costing taxpayer money, without yielding any of the benefits that were supposed to be part of the original equation. A good example if this is the American Home Recording Act (AHRA), in which the US Congress enacted detailed rules to deal with copyright infringement via digital audiotape recorders. Digital audiotape recorders never became popular and AHRA was quickly obsolete.[131]

Another choice for legislatures is to write laws that are so general that they cannot be outdated. This option has advantages. A general law is more likely to stand the test of time, because courts can interpret the law in light of new technological developments and

131 *Id.*

fact situations.[132] US copyright law's provision on "fair use" is an example of a general provision that courts can adapt to myriad new technological or factual contexts.[133] Fair use involves a balancing not unlike the balancing that should occur for any measure designed to limit OCI. The contours of fair use are developed over the years through case law. In each situation, the court applies the fair use balancing test to the particular facts before it. The result is a highly accurate balancing test for a given fact situation, but creates an unpredictable environment for stakeholders, who will have difficulty guessing in advance whether their own conduct falls within a fair use exception or not. This lack of predictability could discourage innovation and investment, and create a chilling effect on individual rights. An artist who wishes to create a satirical version of a well-known movie may not be able to finance his creation because of the uncertainties surrounding the fair use exception.

In sum, a law that is too precise will have the advantage of being predictable, but runs the risk of becoming obsolete. A law that is too general will better stand the test of time, but will create uncertainty for stakeholders.

A third potential route, the one recommended by this paper, is for the legislature to adopt a detailed balancing methodology and entrust an independent regulatory authority with its application. This option permits the law to evolve with technological changes, and provides more predictability than the situation in which only the courts apply the balancing test *ex post* to each individual case. The regulatory authority would seek stakeholder input and apply the balancing test *ex ante* to broad categories of factual and technological situations, developing regulations or guidelines that could be adjusted or repealed with relative ease when they are no longer needed. In theory, regulations would remain on the books only as long as they are absolutely necessary, and the proportionality test would be applied on a dynamic, forward-looking basis.

This regulatory methodology has been used in Europe since 2002 for the regulation of electronic communications. Many of the regulatory principles contained in the 2002 European framework for electronic communications could be transposed, and used as a foundation to create a new regulatory framework for dealing with OCI, as we will see below. The approach is also consistent with regulatory best practice.[134]

(b) **Can a regulatory authority balance fundamental rights?**

A threshold question is whether a regulatory authority can be entrusted with balancing fundamental rights. Are fundamental rights somehow too sensitive for a regulatory authority? Should the balancing of fundamental rights always be done by courts or by legislatures?

Regulatory authorities often deal with technical and/or economic regulation. Most of the decisions of regulatory authorities under the EU framework for electronic communications relate to measures designed to promote competition. One might conclude from this that regulatory authorities are good technicians and economists, but are not well adapted to judging individual liberties. In reality, regulatory authorities already balance fundamental rights, either implicitly or explicitly. Many so-called

132 Arielle Singh, *Agency Regulation in Copyright Law: Rulemaking Under the DMCA and Its Broader Implications*, 26 Berkeley Tech. J. 527 (2011) (citing Richard A. Posner, *Economic Analysis of the Law* (3d Ed. 1986)).

133 *See*, P. Bernt Hugenholtz & Martin R.F. Senftleben, *Fair Use in Europe – In Search of Flexibilities*, Working Paper, University of Amsterdam, Nov. 2011.

134 Hancher, Larouche & Lavrijseen, *supra* note 101.

technical regulations in fact have a direct impact on fundamental rights. In telecommunications, the scope and financing of universal service have a direct impact on citizens' ability to communicate and access information on the Internet, which are essential for citizens' exercise of freedom of expression. To determine what constitutes reasonable network management, the US Federal Communications Commission applies a proportionality test not unlike the balancing test proposed in this paper. A health regulatory authority's decision regarding the pricing of a medicine could have dramatic effects on individuals' access to health care. Regulatory authorities in charge of broadcasting or data protection explicitly balance fundamental rights. The French broadcasting authority's decision to sanction a satellite channel because of its anti-Semitic content required a balancing of freedom of expression against the respect for French rules barring anti-Semitic and racist speech.[135] In Europe, the role of data protection authorities consists in balancing the right of privacy against other competing interests, including freedom of expression. The French data protection authority's recent decision requiring that public electronic archives not be searchable by name until 120 years after a person's birth represents a balance between the right for citizens to access information and individuals' privacy rights.[136] The US Copyright Office, which is part of the Library of Congress, establishes rules on when technical measures to prevent copying can be circumvented. Although the job sounds technical, the Copyright Office's rulemaking goes to the heart of balancing copyright interests against freedom of expression. The Copyright Office's methodology is similar to the one proposed in this paper, and has led some commentators to propose the creation of a full-fledged regulatory authority for copyright matters in the US.[137]

Regulatory authorities balance fundamental rights all the time. There is nothing inherently wrong or unusual about this. The key is ensuring that regulatory decisions affecting fundamental rights are surrounded by robust procedural safeguards, such as due process and the right to an effective appeal.

5.2 Regulatory models: The example of the EU regulatory framework for electronic communications

Created in 2002, the European regulatory framework for electronic communications provides regulators with a roadmap on how to balance competing, and sometimes contradictory, interests. The framework also contains procedural safeguards and rules that are critical for good regulation, some of which have already been mentioned above. Importantly, the EU framework comes with a strong deregulatory philosophy, requiring that regulations be withdrawn as soon as they are no longer needed.

The European framework first requires that each European Member State have a regulatory authority that is independent, and that has sufficient resources to do its job. In the field of electronic communications, the independence of the regulatory authority is important because of the conflict of interest that would otherwise exist between the government in its role as shareholder of the incumbent telecommunications operator and the government in its role as regulator of competition. A conflict of interest could also be seen to exist in connection with measures to limit OCI. If the government were the OCI regulator, there would always be a suspicion that the government's role as law

135 http://www.csa.fr/en/Juridical-area/Decisions-du-CSA/Al-Manar-le-Conseil-decide-d-engager-une-procedure-de-sanction

136 *Commission Nationale de l'Informatique et des Libertés* (CNIL), Recommendation n° 2010-460, December 9, 2010.

137 Singh, *supra* note 126.

enforcement body would affect the regulator's function in balancing fundamental rights. The conflict of interest, whether real or perceived, would diminish the legitimacy of the regulator's decisions. It would also potentially weaken the legality of the regulator's decisions under the European Convention of Human Rights, which generally requires that any measure limiting a fundamental right be reviewed by an independent decision-maker.[138] The independence of regulatory authorities is required by the 2002 framework on electronic communications, but also by the European directive on the protection of personal data.[139]

The rules on the independence of the regulatory authority require that the authorities' decisions be adopted without the influence of any external body, including the legislature or the government.[140] Independence also requires that the regulatory authority have sufficient resources to do its job effectively. An authority that is dependent on the government for its budget cannot be deemed truly independent since the government could reduce the authority's budget in case the government does not agree with the authority's decisions.

After setting down the rules for an independent regulatory authority, the European framework for electronic communications establishes a list of the things the regulatory authority should do. The list includes items such as managing frequencies, assigning numbers, issuing and managing licenses, conducting market analyses, imposing procompetitive remedies on any operator found to hold significant market power, and arbitrating interconnection and access disputes. This list of tasks is very specific to the telecommunications industry, and is not relevant for matters involving OCI. Of greater relevance is the mission statement and list of rights and interests that the regulatory authority should balance when performing its tasks. Contained in Article 8 of the Framework Directive, the list of regulatory objectives contains all the principles that the regulatory authority should take into account before issuing any decision. The list of principles contains objectives that are specific to the electronic communications industry, such as the promotion of infrastructure investment, but also objectives that are part of good regulation, such as the principle of proportionality, technological neutrality and regulatory predictability.

The objectives listed in Article 8 of the Framework Directive are often in competition with each other. The most obvious example is the tension between the objective of promoting competition and the objective of promoting investment in new infrastructure. A regulatory decision that promotes new market entry by guaranteeing to new market entrants low cost access to the incumbent operator's network might discourage investment in new infrastructure by the incumbent operator. Another conflict that is frequently encountered is the tension between the principle of technological neutrality and the objective of efficient management of radio frequencies. In order to promote the efficient management of radio frequencies, a regulatory authority will prefer to impose certain technological standards on the holders of radio licenses. Imposing a technological standard will conflict with the principle of technological neutrality imposed by Article 8 of the Framework Directive. This does not prevent the regulatory authority from imposing technological standards in radio licenses. However, when it does impose a technological standard, the regulatory authority must fully justify why the standard is

138 *Kruslin v. France*

139 Directive 95/46/EC, *supra* note 120. Article 28,

140 *Commission v. Germany*, Case C-518/07, CJEC, March 9, 2010.

necessary and show that the limitation to the principle of technological neutrality is in this instance unavoidable and counterbalanced by the benefits derived from imposing the standard. This is exactly the kind of balancing that courts require in connection with OCI measures.

The framework for electronic communications also requires that each regulatory decision satisfy a proportionality test. The regulatory authority must weigh the competing interests at stake; it must consider several regulatory solutions and choose the solution that is the least burdensome while still achieving the desired objective. Some regulatory authorities in Europe go so far as to conduct an explicit impact assessment, comparing several regulatory options (including the option of doing nothing) and weighing the costs and benefits of each option before adopting a final decision.

The European framework for electronic communications also requires that regulatory authorities consult with stakeholders and with the European Commission prior to adopting any major decision. The regulatory authorities are required then to take into account the views of stakeholders and of the European Commission when drafting their final decision. Naturally, the European framework also includes procedural safeguards such as the right to appeal any decision made by the regulatory authority.

In sum, the European framework provides regulatory authorities with a detailed roadmap on how to balance competing rights and interests. Regulatory authorities must consult stakeholders before adopting a decision and ensure that each decision respects the principle of proportionality. Regulators must consider several regulatory options and choose the one that is the most effective and least burdensome.

This methodology used for the regulation of electronic communications is quite similar to the methodology used by courts when evaluating the legality of measures to limit OCI. Consequently the European framework for electronic communications could easily serve as an example for a regulatory framework that would deal with OCI. The structural and procedural aspects of the European electronic communications framework could almost be applied as is. Measures relating to the independence of the regulatory authority, relating to the right of effective appeal, and to the need to consult stakeholders prior to adopting any significant decision could be applied without change to OCI measures. What would change of course are the specific tasks that the regulatory authority would be entrusted with, as well as the roadmap of competing objectives and principles that the regulatory authority should take into account in each case.

5.3 Other possible models: Library of Congress, OFCOM and HADOPI

(a) Copyright Office rulemaking for anti-circumvention measures

When developing its rules on anti-circumvention measures, the Librarian of Congress, acting through the Copyright office must balance a number of factors. For example, the Librarian of Congress must determine whether the circumvention of the technical measure is the only way to permit users to have access to the work for a given non-infringing use.[141] The regulator previously held for example that it was not necessary to give professors of film studies the right to circumvent the DVD anticopy measures in

[141] 37 CFR Part 201, Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, Final Ruling, October 27, 2000.

order to create film clips for their classes.[142] The regulator indicated that the vast majority of films were also available in VHS analog format and that the professors could use that format to create their compilations. Consequently it was not necessary to grant professors the right to crack DVD protection measures because professors could easily have recourse to other means to make their legitimate copies.

When defining what kind of circumvention measure is permitted, the Librarian of Congress must take into account several factors:

- The availability for use of copyrighted works;
- The availability for use of works for nonprofit archival, preservation, and educational purposes;
- The impact that the prohibition on circumvention of technological measures applied to copyrighted works has on criticism, comment, news reporting, teaching, scholarship, or research;
- The effect of circumvention of technological measures on the market for or value of copyrighted works; and
- Such other factors as the librarian considers appropriate.[143]

The rulemaking procedure is conducted by the Register of Copyrights, currently Maria Palente. The Register of Copyrights then makes recommendations to the Librarian of Congress. The Librarian of Congress must then consult with the Assistant Secretary for Communications and Information of the Department of Commerce.

Singh (2011)[144] and Liu (2004)[145] have analyzed the role of the Librarian of Congress in connection with this rulemaking process, and concluded that the Librarian's role could serve as a model for a broader role for a regulatory authority in copyright matters. Arielle Singh notes that the Copyright Office lacks the requisite independence, insofar as the Library of Congress is part of the legislative branch. Singh suggests that the regulatory function of the Copyright Office should be moved to an agency in the executive branch, similar to other regulatory agencies such as the FCC. What is important for the purposes of this paper is to note that there already exists in the United States a regulatory authority that balances the rights of copyright owners against freedom of expression in order to set technical rules regarding the circumvention of technical protection measures. Currently the role of the Librarian of Congress is limited to setting rules regarding anticircumvention measures. Conceptually, however, there is no reason why the regulatory authority's role could not be expanded to deal more broadly with technical measures intended to limit OCI. The list of criteria to be taken into account, the balancing process, the opportunity for public comment, and the requirement that the rules be revised every three years are all parts of a methodology that could be applied by a regulatory authority with the broader mission, such as a mission to evaluate measures destined to limit OCI to ensure that those measures do not unduly restrict other fundamental rights such as freedom of expression and privacy.

142 *Id.*, at §E(3).
143 17 U.S.C. §1201(a)(1)(c)
144 Singh, *supra* note 125.
145 Liu, *supra* note 123.

(b) OFCOM's role under the DEA

The DEA entrusts OFCOM with the responsibility of preparing two kinds of regulations. The first regulation is called the "initial obligations code." The second regulation is called the "technical obligations code." The DEA sets out minimum requirements for each regulation to be adopted by OFCOM. Those minimum requirements include both the substantive provisions that must be covered by the relevant regulation, and also the general principles that each regulation must satisfy, including the principle that the regulation impose only obligations that are proportionate, that the regulation be transparent and that the measures proposed in the regulation be objectively justifiable and nondiscriminatory. For the initial obligations code, the DEA gives a preference for elaboration of the code in a multi-stakeholder process, with OFCOM having the authority to approve the code that has emerged from the multi-stakeholder process. The DEA gives OFCOM the authority to draft the initial obligations code if the multi-stakeholder process does not produce results.

The initial obligations code must provide rules defining how copyright owners will collect IP addresses and evidence of infringement and transmit that evidence to ISPs while respecting user privacy. The regulation will indicate the minimum requirements that must be satisfied by copyright owners when they collect such evidence, the minimum thresholds that must be satisfied by the copyright owners before they send copyright infringement reports to ISPs, and how the costs of the process will be shared between content owners and ISPs.[146] The initial obligations code will also describe the form of the notice that ISPs must send to their subscribers to inform them about the copyright infringement reports received from the copyright owners and under what conditions the copyright infringement reports can be released to copyright owners. The code must contain provisions permitting Internet subscribers to object, and have their appeal heard by an independent person.[147] OFCOM must also have the power to resolve disputes between copyright owners and ISPs.[148]

The DEA also directs OFCOM to prepare reports for the Secretary of State, including reports on the levels of infringement, the perceived efficacy of measures taken by copyright owners and ISPs pursuant to the initial obligations code, the extent to which copyright owners are making content available through legitimate online offers, and steps taken by copyright owners to inform, and change the attitude of, members of the public in relation to the infringement of copyright.[149] On the basis of these reports, the Secretary of State can direct OFCOM then to prepare an assessment regarding the appropriateness of further technical measures to limit OCI. OFCOM must prepare this assessment after a broad consultation of stakeholders. Based on this assessment, the Secretary of State can then instruct OFCOM to prepare a code of technical obligations, which would describe the technical measures that should be implemented to further limit OCI, such as measures to limit bandwidth or block access to certain services. Again, the DEA contains a list of the substantive provisions that the technical obligations code must contain, as well as a list of general principles (eg proportionality) that the code must satisfy. Before becoming

146 Digital Economy Act 2010, § 7
147 *Id.*, § 13
148 *Id.*, § 12
149 *Id.*, § 8

effective, the code of technical obligations must be submitted to and approved by both houses of Parliament.[150]

The DEA has created an interesting balance of authority in the UK between Parliament, government, and an independent regulatory authority OFCOM. Parliament has given broad rulemaking authority to OFCOM in connection with the system of notification of infringements to Internet subscribers (phase 1) and in connection with the second technical measures to limit OCI (phase 2). OFCOM's rulemaking authority is subject to a strict framework established by the statute, which dictates the subjects that must be covered in the regulation and the guiding principles that the regulation must comply with, such as proportionality, transparency and non-discrimination. The DEA also permits the UK government to specify other subjects that OFCOM must address in the relevant regulations, thereby ensuring that the subjects listed in the statute can be supplemented. The DEA gives a preference to multi-stakeholder codes of conduct, which would then become binding after approval by OFCOM. Any regulation prepared by OFCOM must be approved by the Secretary of State, and in the case of the technical regulations code, the regulation must also be approved by Parliament.

OFCOM is given an extensive fact-finding and reporting responsibilities. Importantly, it is the Secretary of State, and not OFCOM, that decides whether it is appropriate to move to phase 2 and envisage the application of technical measures to limit OCI, although this second step must also in the end be approved by Parliament.

In summary, British Parliament has defined the general objectives in the framework for taking measures to limit OCI via a two-phase process. Parliament then entrusted an independent regulatory authority with the responsibility for developing detailed rules regarding these two phases. Parliament gave the British government the power to direct OFCOM to include additional subjects in its regulations, the power to request OFCOM to provide information reports, the power to approve OFCOM's initial code of obligations and the power to decide whether to advance to phase 2 by instructing OFCOM to prepare a draft code of technical obligations. As noted above, Parliament reserved for itself the power to give the final green light before any technical measures become effective. It is too early to determine whether this institutional arrangement is effective, but it appears to date the most sophisticated attempt to create a flexible regulatory framework for OCI measures.

(c) HADOPI's role in the graduated response engine

(i) Structure and functioning of the HADOPI regulatory authority

The pros and cons of the graduated response regime have been analyzed elsewhere.[151] The important point for this paper is to examine the structure and functioning of the HADOPI as a regulatory authority focusing on OCI. The French law creating the HADOPI gave the regulatory authority three broad missions: to administer the graduated response regime, and to encourage the development of online offers of legal content and to manage issues relating to the interoperability of technical protection measures. The graduated response branch of the HADOPI's mission is the one that has attracted political and media attention. The graduated response system was relatively complex and required a number of implementing decrees and the implementation of new IT systems.

150 *Id.*, §10

151 Bomsel & Ranairosen, *supra* note 64; Haber, *supra* note 111.

A number of procedural safeguards also had to be implemented. For example the French law required the creation of a separate commission within the HADOPI, called the Commission for the Protection of Rights, which is in charge of implementing the graduated response regime. This structural separation is designed to ensure that HADOPI's actions with regard to individual suspected infringers are conducted by a panel that is entirely independent from HADOPI's other policy work.

The HADOPI law did not specify that the graduated response regime is limited to peer-to-peer file exchanges. The law itself is technologically neutral. However, the implementing decrees limit application of the graduated response regime solely to peer-to-peer file exchanges, thereby limiting the ability of the regulatory authority to extend the graduated response approach to other forms of OCI.[152] This limitation obviously restricts the HADOPI's ability to adapt the graduated response regime to technological change.

(ii) HADOPI's three missions

The French law of June 12, 2009 gives the HADOPI three general missions:

First, to encourage the development of legal content offers and to observe the legal and illegal use of copyrighted works over the Internet;

Second, to protect copyrighted works with regard to infringements committed over the Internet;

Third, to regulate and observe the development of technical protection measures such as DRM's and measures to permit the identification of copyrighted works.[153]

With regard to the HADOPI's mission to encourage the development of legal offers, the law entrusts the HADOPI regulatory authority with the responsibility of awarding trust marks to content providers in order to permit users to easily identify offers of legal content. The HADOPI is also supposed to evaluate experiments in content recognition and filtering technologies that may be conducted by technology providers, right holders or ISPs.[154] The HADOPI must report on technological developments in its annual report to the French Parliament.[155]

With regard to HADOPI's second mission, the French law sets forth in relative detail the steps of the graduated response regime that HADOPI must administer. The law entrusted the government, not HADOPI, with rulemaking authority in connection with the graduated response regime. Unlike the situation in the United Kingdom, where OFCOM has the principal responsibility of drafting regulations that would apply to OCI measures, the French law gave the HADOPI regulatory authority practically no rulemaking authority in connection with the graduated response regime. All the detailed rules are set forth in decrees enacted by the government. The HADOPI then simply executes the procedures defined by the government.

With regard to HADOPI's third mission, the French law gives HADOPI a dispute resolution role in connection with questions of interoperability of technical protection

152 French Decree n° 2010-236 of March 5, 2010.

153 French Intellectual Property Code, Article L331-13.

154 *Id.*, Article L331-23.

155 *Id.*, Article 331-14.

measures and in connection with claims that technical protection measures prevent users from making legitimate copies based on certain legal exceptions under French copyright law.[156] HADOPI has thus far had no occasion to use its dispute resolution power in connection with technical protection measures.

In sum, the French parliament gave HADOPI a broad mandate to encourage the development of legal offers but very little powers to actually do anything on this subject other than to attribute trust marks, watch experiments, and make annual reports to Parliament. For the graduated response regime, HADOPI's second mission, HADOPI has signficant powers, but no discretion to create its own rules or adapt those rules to reflect technological and market developments. The rulemaking authority is entrusted solely to the government. In its third mission to manage technical protection measures the HADOPI has both power and flexibility, via its dispute resolution powers, to create and adapt rules to technological and market developments. This last role of the HADOPI is not unlike that of the Library of Congress when it establishes rules regarding the circumvention of technical protection measures in the United States, except that HADOPI has no authority to adopt regulations, but only to resolve disputes.

HADOPI has had almost no activity in this third area, even though it is arguably in this third area where HADOPI has a true role as an independent regulatory authority. In the first and second role, the HADOPI's role is not that of a typical regulatory authority, because HADOPI lacks the ability to propose rules and adapt the rules to reflect technological and market developments.

Based on this broad legislative mandate, the HADOPI has developed initiatives related to the delivery of trust marks for online content delivery platforms to help them differentiate their services from platforms that feature infringing content. The HADOPI has also launched an initiative called "The HADOPI Labs" devoted to studying new business and technological models for the distribution of content online. These missions are not unlike those given to the European observatory on intellectual property infringement pursuant to the recent European regulation.[157] Although the HADOPI has a relatively broad mission in connection with the promotion of online offers for legal content, the French law creating the HADOPI does not attach any particular legal consequences to the work or guidelines that may be developed by the HADOPI in this area, or give the HADOPI any specific powers other than to create the trust mark. Because of this, there does not seem to be an advantage for companies to participate in HADOPI initiatives or to apply any guidelines that the HADOPI might issue. In this respect, the current regulatory model is not ideal, because it lacks incentive-based measures that would motivate stakeholders to support and apply any HADOPI recommendations. An incentive-based measure might consist, for example, in creating a liability safe harbor for Internet intermediaries who apply HADOPI recommendations.

5.4 Three set of rules for a regulatory authority dealing with OCI

None of the existing models of regulatory authority satisfies all the criteria for an "ideal" regulatory authority to deal with OCI. In particular, the Library of Congress, OFCOM and HADOPI models are too limited, and do not permit the broad-based balancing necessary to implement proportionate OCI measures. A new system therefore needs to be designed.

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156 *Id.*, Article L 331-32.

157 Regulation 386/2012, *supra* note 37.

The regulatory framework proposed in this paper would be built upon three sets of rules: first, a body of rules defining the kinds of decisions that the regulatory authority would be entitled to adopt, and the legal effect of those decisions. Second, a body of rules describing the regulatory authority's mission statement and the rights and interests that the regulatory authority must balance for each of its decisions. Third, a body of rules describing how the regulatory authority would be structured and the procedural safeguards that would surround its actions.

(a) Rules describing the kinds of decisions the regulatory authority would be entitled to adopt and the legal effect of those decisions

The tasks with which an OCI regulatory authority would be entrusted would include defining measures to be applied to various Internet intermediaries for the purpose of limiting OCI. These measures could take the form of guidelines, voluntary best practices or mandatory rules. The law defining the regulatory authority's power should provide a liability safe harbor for Internet intermediaries that apply any of the measures recommended or imposed by the regulatory authority. In Europe at least, one of the reasons why intermediaries hesitate to implement voluntary measures to fight OCI is the fear that they would lose their liability safe harbor status under the E-Commerce Directive, or else be accused to taking a unilateral action that infringes on individual rights (eg. privacy). By removing this fear, the regulator would obtain much higher compliance with the recommended best practices.

The legislative mandate given to the regulatory authority must be broad enough to encompass all kinds of Internet intermediaries, including telecommunications operators, Internet backbone providers, Internet access providers, content delivery networks, domain name registries and registrars, search engines, hosting platforms, payment service providers, and Internet advertising networks. The scope of players subject to potential OCI measures must be broad so that the regulatory authority can have at its disposal a range of potential measures and in any given situation choose the measure that is the least burdensome and the least threatening for individual rights. For example, measures applied by an Internet advertising network may be more proportionate than measures applied by an Internet access provider. Without a broad choice of internet intermediaries to work with, the regulatory authority will not be able to select a measure that satisfies the proportionality test.

The type of measures should also be left quite broad so as to allow the regulatory authority the ability to pick the most proportionate measure in the circumstances.[158] The measures might include pedagogical actions, so-called graduated response measures, the blocking of payments or advertising revenues to certain platforms, requiring that search engines downgrade certain sites from search results, or that certain legitimate sites appear higher on search results.[159] The recommended measure might even include outright blocking of access. Some of the tools in the regulatory toolbox, such as blocking measures, will be politically controversial and may be difficult for a legislature to include in the law. Or else it may be necessary for certain more intrusive actions that the measure be confirmed by a judge or parliamentary committee. However for the system to be designed correctly and to result in the most proportionate OCI measures, all tools, even the most intrusive, must be included in the regulator's toolbox, even if the use of some

158 Hancher *et al.,* argue that principles of good market governance require that regulatory authorities be given a clear legislative mandate and flexible powers. Hancher, Larouche & Lavrijssen, *supra* note 101 at pp. 362-363.

159 Lescure (2013), p. __

tools (eg. blocking) may require enhanced protections. This situation is similar to the remedy of functional separation, which is included in the toolbox of electronic communications regulators in Europe, but which to date has never been used. The presence of a radical tool in the toolbox helps the regulatory authority convince stakeholders to embrace less intrusive options.

In addition to establishing rules for OCI measures, the regulatory authority should also have the power to adjudicate disputes. Rapid dispute resolution has proven to be one of the key tools for advancing regulatory objectives under the European framework for electronic communications. It constitutes an important supplement to the general rulemaking powers of the regulator.[160] In many cases a rule will impose a technical measure in general terms, but the details regarding the technical systems to be used, or the allocation of the costs among the various stakeholders, will be left to individual negotiation. In the field of interconnection or access, when parties disagree regarding the sharing of costs or the technical interfaces to be used, either party can bring in arbitration before the regulatory authority which renders its decision in no more than 4 months.

In 2009 the European framework for electronic communications was broadened to give regulatory authorities in Europe power to adjudicate disputes relating to net neutrality. In adjudicating any such dispute, the regulatory authority must take into account the objective of allowing Internet users to have access to the content and applications of their choice, but must also take into account the other regulatory principles and objectives listed in Article 8 of the Framework Directive. In any such dispute, the regulatory authority will be involved in a balancing test involving key fundamental rights such as the ability to access information on the Internet. The adjudicatory role of a regulatory authority for OCI would be similar. The regulatory authority would have to balance interests, including the interest of Internet users to have access to the content and applications of their choice, as well as the interests of copyright owners to ensure that their rights are effectively protected on the Internet.

There is an important difference between a regulatory authority dealing with electronic communications and a regulatory authority dealing with OCI: a regulatory authority dealing with electronic communications will be balancing rights among telecommunications operators while taking into account the interests of consumers. Operators have resources to defend their positions before the regulator. An OCI regulator would be directly balancing rights of companies (copyright holders and Internet intermediaries) and citizens. Citizens will lack resources to defend their positions before the regulator, creating a risk of asymmetric influence. In the United States, consumer groups such as the Electronic Frontier Foundation exercise a strong lobbying role in matters involving copyright infringement and individual rights, including before the Library of Congress. The presence of organized consumer groups is important to maintain a balance in any system involving an OCI regulator.

(b) **Rules describing the regulatory authority's objectives and balancing test**

The regulatory framework will contain a set of principles that would constitute the regulator's mission statement. The regulatory authority's general objective will be to adopt proportionate measures to limit OCI, including the specific measures referred to in the first group of rules above. Beyond this general objective, the mission statement would

160 Stephen P. Croley, *Theories of Regulation: Incorporating the Administrative Process*, 98 Columbia L. Rev. 1 at p.114 (1998)

provide the regulatory authority with a list of more specific objectives, together with the rights and interests that the regulatory authority must balance before making any decision. The regulatory authority will strive to limit OCI and encourage innovation and the development of new business models for the legal distribution of online content, while at the same time preserving individual rights and the open character of the Internet. The regulatory authority will ensure that its decisions respect the principle of proportionality, in particular by analyzing the cost and benefits of any proposed measure and choosing the regulatory option that is the least intrusive while still achieving the desired result. In its cost and benefit analysis, the regulatory authority will weigh the anticipated benefits from the reduction of OCI, but also the costs of the proposed measure to Internet intermediaries, to the economy, and to individual Internet users in terms of restrictions to their individual rights.

Where possible, the regulatory authority will favor voluntary stakeholder-led solutions. In the field of OCI as in other areas, industry-led solutions are often the easiest to enforce because they are understood by market actors and are more likely to prompt voluntary compliance.[161] Industry-led solutions are also likely to come closest to reaching the equivalent of an efficient market outcome. According to the Coase theorem, a bargained solution for dealing with OCI would ideally lead to the socially optimal result.[162] To use the terms of Stephen Breyer[163], content providers would "bribe" technical intermediaries to implement technical measures designed to eliminate the optimal amount of OCI. The cost of eliminating all OCI would be far too high for right holders to pay. Consequently right holders would only pay for elimination of the worst cases of OCI, thereby assuring a reasonable balance between the extreme of doing nothing and the extreme of trying to eliminate all OCI, neither of which would be optimal.[164] The bargained-for technical solutions would presumably focus on intermediaries who are "least cost avoiders," so that the right holders get the maximum return on their investment.[165] One of the key roles of a regulator would be to make sure that consumer interests are fairly represented in the bargain.

While a regulatory authority should encourage stakeholder solutions, the authority must still evaluate the impact of a negotiated solution on other rights, and adjust the solution accordingly. In the bargaining process between right holders and technical intermediaries, internet users may be inadequately represented and not part of the bargain. Consequently a regulatory authority will still need to make sure that the solution does not disproportionately affect fundamental rights or distort competition.

Finally, the regulatory authority will ensure that regulatory measures are technologically neutral, are introduced only in the presence of a demonstrable need (*ie.*, a market failure[166]), and that regulatory measures are removed as soon as they are no longer necessary.

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161 Breyer, *supra* note 63 at 178 "*…bargaining minimizes enforcement problems, because it produces consensus*."

162 Ronald H. Coase, *The Problem of Social Cost*, 3 J.L. & econ. 1 (1960)

163 Breyer, *supra* note 63 at 23.

164 Bomsel & Ranaisroson, *supra* note 64.

165 G. Calabresi and A. Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 Harv. L. Rev. 1089 (1972).

166 MacCarthy, *supra* note 102, at 1049; Breyer, *supra* note 63 at 184.

(c) Rules on procedural and structural safeguards

The third body of rules relates to the procedural and structural safeguards surrounding the regulatory authority. The rules would provide for the independence of the regulatory authority by providing for a mechanism of funding that affords the regulatory authority adequate resources on a lasting basis. The directors of the regulatory authority should be named for fixed non-renewable terms and the members of the regulatory authority should if possible represent the main political currents of the country. The financial resources of the regulatory authority should permit it to hire a staff of experts in economics, technology, and law so that the regulatory authority can develop expert positions without relying on external resources. The adjudication function of the regulatory authority should be separated from the policy and rulemaking function of the authority. Any individual adjudication decision should be accompanied by the basic procedural rules for a fair trial *i.e.* that each party be given an adequate opportunity to be heard and that the body making the decision be impartial. Impartiality means that the regulatory authority would have to create a separate internal tribunal that would not be influenced by the other investigatory and policy making parts of the regulatory authority. Naturally, all decisions of the regulatory authority should be subject to fast judicial review and the court reviewing the decision should have the power to review the underlying merits of the dispute.

The regulatory authority would be required to undertake broad public consultation before any proposed rulemaking. The rulemaking decisions of the regulatory authority would also be subject to judicial review, but the judicial review in that case would be limited to verifying that the regulatory authority properly applied the methodology and mission statement, and did not exceed its statutory authority.

6. CONCLUSION

Our paper has shown that measures designed to limit OCI must pass a rigorous proportionality test. The proportionality test requires an analysis of the benefits and the costs associated with the proposed measure, including costs associated with limitations that the OCI measure might create for fundamental rights. Any OCI measure must be calibrated to produce the maximum effectiveness for the minimum cost. A regulatory authority is best placed to conduct this kind of cost-benefit analysis. Only a regulatory authority will be able to apply the proportionality test on a dynamic and forward-looking basis. Indeed, one of the problems with existing measures designed to limit OCI is that the initial proportionality test applied by the legislature quickly becomes outdated because technology and the market have moved on. A carefully balanced measure to limit OCI may satisfy the proportionality test at one point in time, but as Internet technology and markets evolve, the original equation will shift causing the proportionality test to fail. A regulatory authority can apply the test on a regular basis and adjust (or eliminate) measures that no longer pass the test.

We have shown that several regulatory frameworks already exist to deal with OCI but that those frameworks are not satisfactory mainly because the regulatory authority does not have at its disposal the full range of regulatory tools that would permit a proper application of the proportionality test. To ensure that a regulatory authority chooses the most effective and least burdensome regulatory option, the regulatory authority must have at its disposal a broad range of potential measures that can be applied to limit OCI. Moreover, the regulatory authority must be able to reach a broad range of Internet

intermediaries. If the range of intermediaries subject to regulatory action is limited, the regulatory authority will in many cases not be able to adopt a measure that best satisfies the proportionality test. The most effective and least intrusive measure might involve an Internet intermediary that is beyond the regulator's statutory reach.

This paper presents the three bodies of rules that would form the basis for the proposed regulatory framework designed to limit OCI. The first body of rules would consist of the list of actions that the regulatory authority would be entitled to implement to limit OCI. Those actions would run the gamut from non-intrusive measures such as voluntary guidelines to highly intrusive measures such as the implementation of mandatory blocking. In addition to the ability to develop guidelines and binding rules, the regulatory authority should also have a dispute resolution power.

The second body of rules would define the methodology that the regulatory authority would have to use before implementing any measure. That methodology would involve a careful identification of the rights and interests potentially affected by any OCI measure, if possible a quantification of the related costs and benefits, and the search for the most proportionate measure, *i.e.* the measure that will deliver the greatest benefit for the lowest cost.

Finally, the third body of rules will involve the essential procedural safeguards that must surround the regulatory authority's actions, including rules relating to the authority's independence, the separation of its adjudicatory function from the investigation and policymaking function, the requirement of conducting broad stakeholder consultations before any regulatory action is undertaken, and of course the right to swift judicial appeal of any regulatory action.

The framework proposed in this paper raises several potential difficulties that will have to be overcome. By far the most serious obstacle to implementing the proposed framework is the political sensitivity of measures designed to limit OCI. It may be difficult for lawmakers to entrust to a regulatory authority a broad range of tools to fight OCI because some of the tools in the toolbox will spark strong political opposition. The best system – the one proposed in this paper -- consists in giving a regulatory authority a broad range of regulatory tools, a strict methodology on how to use them, and procedural safeguards to ensure that the regulatory authority does not exceed its authority or misapply the methodology. Political reality may prevent legislatures from giving this much leeway to an independent regulatory authority for a subject as politically sensitive as OCI. The politically most likely outcome is for the regulatory authority to be given a toolbox only half full, with the most sensitive measures removed. This would reduce the authority's effectiveness and prevent the regulatory authority from implementing the most proportionate measure in some cases. However, compromise solutions may be available, such as the requirement that the regulatory authority apply to a court before implementing certain intrusive measures. In the UK, the compromise consists in OFCOM and the Government having to seek the approval of parliament before moving to phase 2 of the DEA's graduated response regime. One French journalist recently called for the creation of an "HADOPI 2.0" in charge of protecting the rights of individual Internet users as well as copyright owners.[167] "HADOPI 2.0" would not only have the power to sanction OCI, but would also be able to order right holders to make certain content available on legal download platforms, or order Internet platforms to restore access to content that

[167] *Une HADOPI 2.0 au service du public, c'est possible ?* August 29, 2012, www.numerama.com.

was wrongfully removed. This might argue for entrusting the mission of reducing OCI to the same regulatory authority as the one that enforces net neutrality rules.

A second question that will have to be resolved is how the regulatory authority dealing with OCI measures would interact with other regulatory authorities, particularly those entrusted with the application of privacy law. The balancing process and proportionality test applied by the regulatory authority for OCI will overlap in many respects with the proportionality test applied by data protection authorities when evaluating measures that could have a negative impact on privacy. Our suggested solution to this problem is for the regulatory authority in charge of OCI measures to consult with data protection authorities and to take account of their opinions. However, the opinions of the data protection authorities should not be binding on the OCI authority. Otherwise, the data protection authority would have *de facto* control over the decisions of the OCI authority, thereby defeating the purpose of creating a separate OCI authority with the ability to undertake a broad balancing test.

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