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# COPYRIGHT, CONTRACT AND CODE: WHAT WILL REMAIN OF THE PUBLIC DOMAIN?

*P. Bernt Hugenholtz\**

## I. INTRODUCTION

Electronic commerce is taking the world by storm. The tremendous success of on-line retailing, electronic banking, Internet auctioning and other forms of network-based trading has taken even techno-optimists by surprise. It is generally expected that a major portion of the trillions of ECUs, dollars and yen that will be earned on the Internet in the years to come will derive from selling "content." More and more information and entertainment products that are currently distributed as tangible goods (music CDs, videos, books, newspapers, magazines, CD-ROMs, etc.) will be sold and delivered over the Internet.

Already, the complicated copyright problems of the Internet have generated ample literature<sup>1</sup> and legislative initiatives. In December 1996, two treaties aimed at adapting international copyright law to the digital networked environment were concluded in the framework of the World Intellectual Property Organisation<sup>2</sup> (WIPO). The WIPO Treaties were soon followed by the enactment of the Digital Millennium Copyright Act in the United States<sup>3</sup> (DMCA) and a proposal for a European Copyright Directive.<sup>4</sup>

But even if equipped with all the rights that they so persistently demand, rights holders will remain vulnerable to

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1. See, e.g., THE FUTURE OF COPYRIGHT IN A DIGITAL ENVIRONMENT (P. Bernt Hugenholtz ed., 1996).

2. World Intellectual Property Organisation Copyright Treaty, Dec. 20, 1996, 36 I.L.M. 65; World Intellectual Property Organisation Performances and Phonograms Treaty, Dec. 20, 1996, 36 I.L.M. 76.

3. Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860, 2863-72 (1998) (codified in scattered sections of 17 U.S.C.).

4. Commission of the European Communities, Amended Proposal for a European Parliament and Council Directive on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, COM(99)250 final [hereinafter European Copyright Directive].

forms of digital piracy and other forms of unauthorized use that content providers are exposed to when entering the on-line market place. The information industry's rapid migration towards a networked-based distribution model, and growing concerns over the effectiveness of the copyright system in a digital environment, have inspired rights holders to look for alternative protection regimes or strategies. Contract law, in particular, appears to have all the makings of becoming a perfect alternative to copyright protection. The structure of the Internet facilitates the establishment of a multitude of contractual relationships between information producers and end-users, either directly or through intermediaries. Besides contract, content providers may employ a wide range of technological protection measures to protect their valuable "goods" against piracy and leakage: encryption, the use of passwords or special log-in procedures, anti-copying devices, electronic "watermarks," etc.

Together, contract and technology constitute the *Electronic Copyright Management System*<sup>5</sup> (ECMS), a fully automated system of secure distribution, rights management, monitoring and payment of copyright protected content. Various experiments with ECMSs are currently underway or have already been completed. Possibly the largest multidisciplinary study conducted on ECMSs to date is the IMPRIMATUR project,<sup>6</sup> subsidized by the European Commission's Esprit Programme until its termination in 1999. The project involved several large European content providers, collecting societies, intermediaries, telecommunications operators and universities, including the Institute for Information Law of the University of Amsterdam (IViR).<sup>7</sup>

In this article, written from a European perspective, both potential substitutes for the copyright regime will be discussed. The combination of contract and technology poses a direct threat to the copyright system as we know it,<sup>8</sup> and may re-

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5. See Charles Clark, *The Answer to the Machine is the Machine*, in THE FUTURE OF COPYRIGHT IN A DIGITAL ENVIRONMENT, *supra* note 1, at 139-45.

6. *Intellectual Multimedia Property Rights Model and Terminology for Universal Reference*, Ground-breaking work on Electronic Copyright Management Systems (visited Mar. 14, 2000) <<http://www.imprimatur.net>>.

7. See COPYRIGHT AND ELECTRONIC COMMERCE (P. Bernt Hugenholtz ed., 2000) (forthcoming).

8. See Paul Goldstein, *Copyright and Its Substitutes*, 1997 WIS. L. REV. 865,

quire an entirely new body of information law to safeguard the public domain.

## II. CONTRACT LAW

The World Wide Web presents the ideal environment for establishing a multitude of contractual relationships between information providers and end-users. Both its "textual" environment and its interactive nature are perfect conditions for a contractual culture to grow and flourish.<sup>9</sup> Contract law, thus, may become the instrument *par excellence* to fill the legal vacuum of the Internet. Information producers, intermediaries and end-users are free to create their own rules, without government intervention, and to experiment at will with novel legal approaches. Ideally, new legal norms may emerge from this self-regulatory laboratory; norms far better tailored to the new environment of the Internet.

However, contract law has a darker side as well. Cyberspace is not an egalitarian society with equal chances for every "netizen." In a world totally ruled by contract, weaker parties risk being subjugated and fundamental freedoms may be jeopardized. Freedom of contract may become contractual coercion, especially when dominant undertakings abuse their market power to impose contractual rules on powerless consumers, as if they were public authorities.

Outside the Internet, direct contractual relations between information producers and consumers are still relatively scarce. Whoever buys a book at a bookstore or a CD at a record store does not normally engage in contractual relations with the author or the publisher of the work. An exception may be the buyer of a computer program or CD-ROM, who finds himself bound directly to the producer by a so-called *user license*. More often than not these "licenses" are euphemisms for the exact opposite, much like the "warrants" or "guarantees" provided by manufacturers of consumer electronics. In practice, user licenses leave "licensed" consumers very little room to move. The computer program may be used on only one ma-

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865.

9. See Robert P. Merges, *The End of Friction? Property Rights and Contract in the "Newtonian" World of On-Line Commerce*, 12 BERKELEY TECH. L.J. 115 (1997).

chine; apart from the occasional back-up copy, no further copies may be produced; the software may not be lent, made available for rental or resold, etc.

It is generally expected that user licenses will become the rule, rather than the exception, on the Internet. Already, so-called "click-through," "mouse-click" or "click-wrap" contracts are frequently sighted (and routinely entered into) on the World Wide Web. In the years to come, most information products delivered electronically will be licensed: newspapers, periodicals, books, recorded music, computer software, etc. Thus, the legal relationship between information producers and consumers will increasingly be governed by contract. The technological measures discussed elsewhere in this article will play an important role in this process. For the consumer who refuses to accept the conditions of the license, the information product that is offered on the Web will remain hidden behind a layer of technological protection.

Assuming that contracts formed over the Internet are valid in principle,<sup>10</sup> the question arises whether the terms of these user licenses can override the statutory limitations of copyright. Does an information producer have the right to contractually subject a user to restrictions that go further than copyright law prescribes? For example, may the license prevent the user from copying the work for private purposes, to quote from the work or to make copies for educational or scientific purposes?

This question has already led to extensive legal discussion<sup>11</sup> and case law<sup>12</sup> in the United States. The U.S. debate has been inspired for the most part by Draft Article 2B of the Uniform Commercial Code—a model law for transactions in information. Article 2B of the UCC was eventually adopted in the Summer of 1999 under a new name: the Uniform Computer Information Transactions Act (UCITA). In Europe, the de-

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10. See Bernardine Trompenaars, *Formation and Validity of On-Line Contracts*, in COPYRIGHT AND ELECTRONIC COMMERCE, *supra* note 7.

11. See J.H. Reichman, *Electronic Information Tools—The Outer Edge of World Intellectual Property Law*, 17 U. DAYTON L. REV. 797, 817-18 (1992); Goldstein, *supra* note 8, at 866-68; Maureen A. O'Rourke, *Copyright Pre-emption After the ProCD Case: A Market-Based Approach*, 12 BERKELEY TECH. L.J. 53 (1997); Niva Elkin-Koren, *Copyright Policy and the Limits of Freedom of Contract*, 12 BERKELEY TECH. L.J. 93 (1997).

12. See *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996).

bate has only recently begun.<sup>13</sup>

In comparing the American and European approaches to this complex issue, it is important to note the conceptual differences between U.S. copyright law and European "authors' rights" legislation. As mandated by the Copyright Clause in the U.S. Constitution,<sup>14</sup> American copyright law serves a distinctly utilitarian function. Accordingly, the U.S. Copyright Act is geared towards promoting innovation and a healthy information industry by providing sufficient incentives to potential creators, while at the same time preserving a "robust" public domain. Perceived from this constitutional perspective, copyright law may be seen as an instrument of information policy, both by protecting and "unprotecting" certain subject matter within the domain of literature, science and art. The doctrine of *pre-emption* guarantees that the constitutional rationale of American copyright remains intact; state contract law may not undermine federal copyright policies.

In contrast, copyright in Europe is still very much regulated on a country-by-country basis. The Member States of the European Union have, until today, preserved their autonomy in this field, but must comply with a handful of harmonization directives that the European Council and Parliament have adopted since 1991.<sup>15</sup> The specific constitutional foundation on which copyright rests in the United States does not have a parallel in most European countries. Unlike the United States, continental-European "authors' rights" are based primarily on notions of natural justice: "authors' rights are not created by law but always existed in the legal consciousness of man."<sup>16</sup>

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13. See Lucie Guibault, *Contracts and Copyright Exemptions*, in COPYRIGHT AND ELECTRONIC COMMERCE, *supra* note 7.

14. U.S. CONST. art. I, § 8, cl. 8 ("To promote the Progress of Science and useful Arts . . .").

15. See Council Directive 91/250/EEC on the legal protection of computer programmes, 1991 O.J. (L 122) 42 [hereinafter European Software Directive]; Council Directive 92/100/EEC on rental right and lending right and on certain rights related to copyright in the field of intellectual property, 1992 O.J. (L 346) 61; Council Directive 93/83/EEC on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission, 1993 O.J. (L 248) 15; Council Directive 93/98/EEC harmonizing the term of protection of copyright and certain related rights, 1993 O.J. (L 290) 9; Directive 96/9/EC of the European Parliament and of the Council on the legal protection of databases, 1996 O.J. (L 77) 20 [hereinafter European Database Directive].

16. EDWARD W. PLOMAN & L. CLARK HAMILTON, COPYRIGHT: INTELLECTUAL

In the pure *droit d'auteur* philosophy, copyright is an essentially unrestricted natural right reflecting the "sacred" bond between the author and his personal creation.<sup>17</sup>

Both the principle of freedom of contract and the "property rights" nature of European copyright would appear to leave ample room for licensing provisions that override user freedoms existing under copyright law. Indeed, copyright limitations not serving a clearly defined social function, such as statutory licenses enabling photocopying in government institutions or the broadcasting of musical works, may well be set aside by contractual arrangements. Conversely, limitations that reflect unequivocal public policies, such as consumer protection or freedom of competition, will probably be considered non-overrideable—even in Europe. This is true, *a fortiori*, for copyright limitations reflecting fundamental freedoms, such as the right to privacy or the freedom of expression and information protected *inter alia* in the Convention for the Protection of Human Rights.<sup>18</sup> Thus, provisions in licensing agreements that would unduly prohibit private copying or critical review might be considered null and void.

The European legislature has been the first to expressly enact copyright limitations of a mandatory nature. The European Software Directive<sup>19</sup> contains four such exemptions, presumably geared at protecting consumer interests and promoting competition. According to Article 5(2) of the Directive, "the making of a back-up copy by a person having a right to use the computer program may not be prevented by contract insofar as it is necessary for that use."<sup>20</sup> Also, the observing, studying or testing of a computer program may not be contractually restricted.<sup>21</sup> Following Recital 17 of the Software Directive, the same applies to running a program and for error correction.<sup>22</sup>

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PROPERTY IN THE INFORMATION AGE 13 (1980).

17. See F.W. GROSHEIDE, AUTEURSRECHT OP MAAT: BESCHOUWINGEN OVER DE GRONDSLAGEN VAN HET AUTEURSRECHT IN EEN RECHTSPOLITIEKE CONTEXT 207 (1986). Admittedly, other rationales underlying the copyright equation (e.g., economic efficiency, protection of culture, dissemination of ideas) are recognized as well in Europe. See *id.* at 129-43.

18. Convention for the Protection of Human Rights and Fundamental Freedoms, Nov. 4, 1950, 213 U.N.T.S. 221.

19. European Software Directive, *supra* note 15.

20. *Id.* art. 5(2).

21. See *id.* arts. 5(3), 9(1).

22. *Id.* art. 5(1).

The extremely complex provisions on “decompilation” (reverse engineering) are declared mandatory as well.<sup>23</sup> The European Database Directive also contains a number of mandatory exemptions.<sup>24</sup> The legitimate user may perform acts inherent to normal usage;<sup>25</sup> and the right to re-utilize non-substantial parts of a database may not be overridden.<sup>26</sup> Surprisingly, the proposed European Copyright Directive is silent on the question of “overridability.”

Of course, European law sets various other limits to parties’ freedom to enter into information transactions. Consumer law is particularly well developed in many countries of the EU, and may protect not only consumers, but also small businesses against the unconscionable licensing practices of dominant information providers. Unfortunately, most consumer law is still very much oriented towards an economy of physical goods, and does not provide adequate protection in respect of information goods or services. Interestingly, in a recent letter to Parliament, the Dutch Minister of Justice has suggested introducing so-called “unwaivable use rights” in order to expressly protect information consumers against unconscionable licensing practices.<sup>27</sup>

### III. TECHNOLOGICAL MEASURES

The Internet is sometimes described as a global copying machine, with millions of irresponsible and anonymous pirates pushing the buttons. Indeed, the problems of copyright enforcement on the Internet are mind-boggling. It comes as no surprise that many information producers are hesitant to offer their vulnerable goods over the Internet. This explains, at least in part, the relative paucity of copyright protected material currently available on the Internet.

What if existing legal instruments are insufficient or inadequate to protect property interests? Professor Mackaay provides the answer: “Build your own fence.”<sup>28</sup> In the same way

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23. See *id.* arts. 6, 9(1).

24. European Database Directive, *supra* note 15, art. 15.

25. See *id.* art. 6(1).

26. See *id.* art. 8.

27. Dutch Minister of Justice Expresses Concerns over Proposed Copyright Directive in Letter to Parliament (visited Mar. 14, 2000) <<http://www.ivir.nl/final-UK.htm>>. See Elkin-Koren, *supra* note 11, at 102-06.

28. Ejan Mackaay, *The Economics of Emergent Property Rights on the Internet*,



prospective landowners established property rights in the American wild west by using poles and barbed wire, information producers in cyberspace can erect digital fences and thereby create novel property rights.

The digital barbed wire is called encryption: the encoding of information. By using encryption commercial information producers can prevent the unauthorized access to their information services or products. Access is allowed only to those in possession of the right key. Besides encryption, information providers may employ a wide range of technological protection measures: the use of passwords or special log-in procedures, combinations of hardware and software, anti-copying devices, electronic watermarks, etc.

Technological measures will be applied mostly in combination with contract. The measure constitutes both the starting point and the final touch to the contractual relationship between information provider and consumer. Consumers not or no longer party to the contract will be excluded.

Clearly, technological protection measures are powerful new weapons in the copyright arsenal. On top of the existing copyright layer, the technological measures provide an extra layer of protective armor. However, for rights holders even this additional layer apparently does not suffice. A third layer is already in the making: the legal protection of technological protection of copyright protected works.<sup>29</sup>

Article 11 of the WIPO Copyright Treaty requires the contracting states to:

provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights . . . and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.<sup>30</sup>

The proposed Copyright Directive, that will eventually imple-

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in THE FUTURE OF COPYRIGHT IN A DIGITAL ENVIRONMENT, *supra* note 1, at 13, 20.

29. See K. Koelman & N. Helberger, *Protection of Technological Measures*, in COPYRIGHT AND ELECTRONIC COMMERCE, *supra* note 7.

30. World Intellectual Property Organisation Copyright Treaty, *supra* note 2, art. 11. Cf. Thomas C. Vinje, *A Brave New World of Technical Protection Systems: Will There Be Room For Copyright?*, 18 EUR. INTELL. PROP. REV. 431 (1996).

ment the WIPO Copyright Treaty for the entire European Union, also contains a provision preventing the circumvention of technological measures.<sup>31</sup> However, the European proposal goes an essential step further than the corresponding WIPO provision. It would prohibit not only acts of circumvention as such, but also the manufacturing or selling of equipment that is suited for that purpose. Already, the Software Directive contains an early predecessor of such a provision.<sup>32</sup>

The new regime inspires all sorts of questions. Questions, in the first place, regarding the scope of the new right. Are these provisions aimed merely at acts or activities that facilitate copyright infringement, or do they reach further? An especially complicating factor is the existing system of statutory limitations of copyright, which allows for unauthorized copying for certain specified "good causes." Is the act of circumventing a technological measure in the context of such exempted uses permitted or prohibited? The words "permitted by law" in the WIPO provision suggest that circumvention to enable such exempted uses is, indeed, permitted.

But what about the proposed Copyright Directive that

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31. European Copyright Directive, *supra* note 4. Article 6 of the amended proposal reads:

1. Member States shall provide adequate legal protection against the circumvention without authority of any effective technological measures designed to protect any copyright or any rights related to copyright as provided by law or the *sui generis* right provided for in Chapter III of European Parliament and Council Directive 96/9/EC, which the person concerned carries out in the knowledge, or with reasonable grounds to know that he or she pursues that objective.
2. Member States shall provide adequate legal protection against any activities, including the manufacture or distribution of devices, products or components or the provision of services, carried out without authority, which:
  - a) are promoted, advertised or marketed for the purpose of circumvention of, or
  - b) have only a limited commercially significant purpose or use other than to circumvent, or
  - c) are primarily designed, produced, adapted or performed for the purpose of enabling or facilitating the circumvention of, any effective technological measures designed to protect any copyright or any right related to copyright as provided by law or the *sui generis* right provided for in Chapter III of European Parliament and Council Directive 96/9/EC.

*Id.* art. 6.

32. European Software Directive, *supra* note 15, art. 7(1)(c).

prohibits the production and trade in anti-circumvention devices? Note that much information that will be technologically protected either belongs to the public domain, such as statutes and case law, or may be reproduced without authorization if a statutory limitation applies.<sup>33</sup> If circumventing as part of exempted copying is permitted, producing the necessary equipment can hardly be prohibited. For similar reasons, photocopying machines, video recorders, personal computers and other reproduction equipment considered suitable for "substantial non-infringing uses,"<sup>34</sup> have never been considered illegal.

The new regime also raises intriguing questions of proportionality. In view of the existing, well-stocked arsenal of protective means content providers already can rely on, it is doubtful whether the new regime is really necessary. The information industry has seen spectacular growth with only a single layer of protection: copyright. *Three* layers of protection (including the European Database Protective, even four) is simply overdoing it. Where have the good times gone when granting rights of intellectual property was a (well-reasoned) exception to the rule of free competition.<sup>35</sup>

Moreover, the new regime is difficult to reconcile with one of the most important rationales of the copyright system: promoting the dissemination of culture and knowledge in society. Under the copyright system, the author expressing his ideas (i.e., making his ideas public) is rewarded with an exclusive exploitation right. The new regime has the opposite effect. It rewards making information inaccessible with a supplementary right, while keeping the copyright intact.<sup>36</sup>

The combination of technological measures and on-line licenses conjures a somber picture of the future. Are we heading for a world in which each and every use of information is dictated by fully automated systems? A world in which every

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33. See Vinje, *supra* note 30, at 434. "[T]echnical protection does not follow the contours of copyright." *Id.*

34. Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417 (1984).

35. See Hugh Laddie, *Copyright: Over-Strength, Over-Regulated, Over-Rated?*, 18 EUR. INTELL. PROP. REV. 253, 259-60 (1996) ("We should not be handing out monopolies like confetti while muttering 'this won't hurt.'").

36. See Pamela Samuelson, *Copyright, Digital Data, and Fair Use in Digital Networked Environments*, in THE ELECTRONIC SUPERHIGHWAY 117, 125-26 (Ejan Mackaay et al. eds., 1995).

information product carries with itself its own unerasable, non-overridable licensing conditions? A world in which what is allowed and what is not, is no longer decided by the law but by *computer code*? As Professor Lessig has observed: "In the well-implemented system, there is no civil disobedience. Law as code is a start to the perfect technology of justice."<sup>37</sup>

For copyright law, the emerging rule of "code" may have far reaching consequences. Vinje expects the information provider will replace copyright "with a new, private regime of their own making that admits no exceptions and pays no heed to the public domain."<sup>38</sup> According to Professor Samuelson, "There may be nothing for copyright to do, except perhaps to serve as a kind of *deus ex machina* justifying the use of technological and contractual means for protecting works in digital form."<sup>39</sup>

The large-scale application of licenses and technological measures will undoubtedly disturb the delicate balance between intellectual property protection and information freedoms, which is presently codified in the copyright law. All sorts of information presently unprotected (data, statutes, case law, government information, "expired" works of literature, science and art, etc.) may eventually disappear from the public domain.

Should the legislature intervene? Perhaps the invisible hand of the market mechanism will come to the rescue. In the 1980s a massive consumer boycott prevented the market success of "copy protected" software. Let's hope that books that combust upon a first or second reading will never become best-sellers.

Moreover, even a copyright counterbalanced by mandatory limitations cannot offer a remedy against the "fencing in" of the public domain. Copyright does not provide for a right to gain *access* to information. Other bodies of law only rarely provide for a right of individual citizens to receive information. The main exception is the freedom of information legislation enacted in many countries that grants citizens the right to be informed by the government. In horizontal relationships (be-

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37. Lawrence Lessig, *The Zones of Cyberspace*, 48 STAN. L. REV. 1403, 1408 (1996).

38. Vinje, *supra* note 30, at 437.

39. Samuelson, *supra* note 36, at 125.

tween citizens) a similar right of access to information has, until today, never been truly recognized.<sup>40</sup> Under special competitive circumstances, competition law may also provide a remedy. Judging from the *Magill* case,<sup>41</sup> decided by the European Court of Justice in 1995, an information monopolist may be compelled to supply information to a competitor, if, as a consequence of the monopolist's refusal to license, a value-added information product or service for which consumer demand may be reasonably expected fails to appear on the market.

Interestingly, recent developments in European broadcasting law may be the symptoms of an emerging right to information in the public interest. Both on the national and the European level, legislative measures have been taken to safeguard public access to the broadcasting of "important events." The European Convention on Transfrontier Television, which was concluded in the framework of the Council of Europe in 1989, invites Member States to:

examine the legal measures to avoid the right of the public to information being undermined due to the exercise of a broadcaster of exclusive rights . . . of an event of high public interest and which has the effect of depriving a large part of the public . . . of the opportunity to follow that event on television.<sup>42</sup>

The Recitals preceding the Convention on Transfrontier Television clarify that the Convention is founded, at least in part, on the freedom of expression and information embodied in Article 10 of the European Convention on Human Rights.<sup>43</sup>

The amended European Television Directive contains a similar, more detailed provision aimed at keeping the broadcasting of important events "in the clear."<sup>44</sup> Member States

40. See *Televizier I*, HR 25 June 1965, NJ 9836 (Neth.); *De Geillustreerde Pers NV v. Nederland*, [1978] ECC 164.

41. Joined Cases 241 & 242/91, *Radio Telefis Eirean v. Commission*, 1995 All ER (EC) 416, [1995] 4 C.M.L.R. 718 (1995).

42. Council of Europe: *European Convention on Transfrontier Television*, May 5, 1989, Europ. T.S. No. 132, art. 9.

43. *Id.* at pmb., para. 4.

44. Council Directive 97/36/EC of the European Parliament and of the Council amending Council Directive 89/552/EEC on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities, 1997 O.J. (L 202) 60. Article

are encouraged to draw up lists of events "of major importance for society" that may not be broadcast exclusively by pay television services. Not surprisingly, most of the "important events" secured for public broadcasting are sports-related.

If legislatures were to contemplate legal measures to cure the negative effects of the wide-scale application of trusted systems, and to safeguard the public domain, comparable legislation outside the field of broadcasting law might be considered, for example, a right of access to (socially, culturally or economically) "important" scientific source material, works of art, etc. Of course, other pro-active measures to stimulate the public supply of information and information services, for example, by granting subsidies, would also deserve serious consideration.

#### IV. CONCLUSION

The non-hierarchical architecture of the Internet provides the ideal environment for the growth of a flourishing contractual and technological culture. The combination of contractual and technological measures will decrease the need for and use of legal protection systems *erga omnes*. Seen in this light, the persistent call for increasing copyright protection appears ill-founded. The same is true, *a fortiori*, for the introduction of a third legal regime: legal protection of technological protection of copyright protection.

In a pessimistic vision of the future, the Internet will gradually lose much of its open character. Encrypted information products and services will enforce their own pre-programmed

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3(a)(1) of the amended Directive reads as follows:

Each Member State may take measures in accordance with Community law to ensure that broadcasters under its jurisdiction do not broadcast on an exclusive basis events which are regarded by that Member State as being of major importance for society in such a way as to deprive a substantial proportion of the public in that Member State of the possibility of following such events via live coverage or deferred coverage on free television. If it does so, the Member State concerned shall draw up a list of designated events, national or non-national, which it considers to be of major importance for society. It shall do so in a clear and transparent manner in due and effective time. In so doing the Member State concerned shall also determine whether these events should be available via whole or partial live coverage, or where necessary or appropriate for objective reasons in the public interest, whole or partial deferred coverage.

*Id.* art. 3(a)(1).

conditions of use automatically. *Code* will rule the Internet with iron logic. In a worst case scenario, only a new body of public information law, that can secure a right of access to "important" information will be able to safeguard the public domain.