COPYRIGHT LAW ON THE INFORMATION SUPERHIGHWAY: A CRITICAL ANALYSIS OF THE PROPOSED AMENDMENTS TO THE COPYRIGHT ACT

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Does current copyright law adequately protect digitized works[1] on the information superhighway?[2] Two schools of thought have

1. A digital work is one that is "encoded in numerical format. . . . Works that are not encoded digitally are typically referred to as analog works. Examples of non-digital expression are the printed words on the page of a book, or the grooves in a long-playing record album, which a stereo system transforms into music." 2 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 8B.02[A][1] (1996). Professor Nimmer states that digital technology is so flexible that "every work of music, literature, graphic art--even every audio and visual nuance of an epic motion picture--can be expressed in digital format. It may not be an exaggeration to state that any form of information can be translated into a series of O's and 1's." *Id.*

2. The "information superhighway" metaphor used throughout this Comment includes current computer and communications networks, such as the Internet, as well as proposed systems such as the National Information Infrastructure (NII). *See* BRYAN

come to opposite conclusions over this important issue. One group of individuals believes that copyright law is sufficiently flexible to provide protection to works in a digital environment.[3] Others believe that copyright law neither adequately protects, nor should be the source of protection for intellectual property on the information superhighway.[4] A government task force recently addressed this question and concluded that not only was copyright law the proper method of protection, but that only a few minor amendments to the Copyright Act are necessary to ensure the integrity of works transmitted on the information superhighway.[5]

PFAFFENBERGER, INTERNET IN PLAIN ENGLISH 210 (1994) in which Mr. Pfaffenberger states that the term "information superhighway" inaccurately describes the proposed NII because of its emphasis on high-speed systems. He does state, however, that such an information superhighway may already exist in the current Internet system.

3. Professor Arthur Miller of Harvard Law School believes that copyright law offers sufficient protection to works transmitted over the information superhighway.

> Since the birth of copyright, every age has seen the emergence of a new medium of expression or technology that has led people to express the fear and concern that it defied the boundaries of existing doctrines or that the new candidate for protection was so strikingly different that it required separate legal treatment. These apprehensions were voiced about photography, motion pictures, sound recordings, radio, television, photocopying, and various modes of telecommunication. In each instance, the copyright system has managed over time to incorporate the new medium of expression into the existing framework.

Arthur R. Miller, *Copyright Protection for Computer Programs, Databases, and Computer-Generated Works: Is Anything New Since CONTU?*, 106 HARV. L. REV. 977, 982 (1993) (footnotes omitted). *See also* Jane C. Ginsburg, *Putting Cars on the "Information Superhighway": Authors, Exploiters, and Copyright in Cyberspace*, 95 COLUM. L. REV. 1466, 1468 (1995).

4. Richard Lanham believes that copyright law is insufficient to protect works on the information superhighway because "[c]opyright law is based on print. . . . It has been stretched to protect images and sounds but the stretching has always shown, and now electronic text breaks the intellectual fabric down completely." RICHARD A. LANHAM, THE ELECTRONIC WORD: DEMOCRACY, TECHNOLOGY, AND THE ARTS xii (1993). *See also* Raymond T. Nimmer & Patricia Ann Krauthaus, *Copyright on the Information Superhighway: Requiem for a Middleweight*, 6 STAN. L. & POL'Y REV. 25, 26 (1994); John Perry Barlow, *The Economy of Ideas: A Framework for Rethinking Patents and Copyrights in the Digital Age*, Wired, Mar. 1994, at 84.

5. Information Infrastructure Task Force, Working Group on Intellectual Property Rights, Intellectual Property and the National Information Infrastructure: The Report of the

This Comment critically analyzes the proposed amendments to the Copyright Act as recommended by the task force. Section I examines the origin and purpose of copyright law and how it has been amended to recognize new methods of expression. Section II analyzes each recommended amendment to the Copyright Act by examining current copyright law, copyright problems posed by the transmission of works on the information superhighway, and proposed solutions to these problems. Each amendment is considered from the standpoint of whether, given current copyright law, the proposed change is necessary; and if so, whether it is sufficient to protect copyrighted works. Finally, Section III argues that since some of the proposed amendments are unnecessary and others provide insufficient protection, Congress should seriously consider the foregoing objections to these proposals before amending the Copyright Act.

I. A BRIEF HISTORY OF COPYRIGHT LAW

The Constitution authorizes Congress "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."[6] Although the Constitution does not explicitly establish

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Working Group on Intellectual Property Rights (Sept. 1995) [hereinafter White Paper]. The White Paper states that

> [t]houghout more than 200 years of history, with periodic amendment, United States law has provided the necessary copyright protection for the betterment of our society. The Copyright Act is fundamentally adequate and effective. In a few areas, however, it needs to be amended to take proper account of the current technology. The coat is getting a little tight. There is no need for a new one, but the old one needs a few alterations.

Id. at 212 (footnote omitted). The White Paper justifies amending the Copyright Act by stating that "when technology gets too far ahead of the law, and it becomes difficult and awkward to adapt the specific statutory provisions to comport with the law's principles, it is time for reevaluation and change." *Id.* at 211.

6. U.S. CONST. art. I, § 8, cl. 8. The House Report on the 1909 Copyright Act states:

> The enactment of copyright legislation by Congress under the terms of the Constitution is not based upon any natural right that the author has in his writings,

a system of copyright law, Congress has been given the authority to create such law. Exercising this authority, Congress has chosen to provide authors with a limited monopoly of exclusive rights in the original works they create.[7]

The public policy shaping the creation of American copyright law attempts to balance a copyright owner's limited monopoly with the benefit that society derives from using the copyrighted material.[8] If a copyright owner obtains too much monopoly power, then the author enjoys a disproportionate profit, and the public fails to fully benefit from the work.[9] Conversely, if society gains too much benefit from using a copyrighted work, there is little incentive for an author to create additional works since full compensation is not possible.[10]

> for the Supreme Court has held that such rights as he has are purely statutory rights, but upon the ground that the welfare of the public will be served and progress of science and useful arts will be promoted by securing to authors for limited periods the exclusive rights to their writings.
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> The Constitution does not establish copyrights, but provides that Congress shall have the power to grant such rights if it thinks best. Not primarily for the benefit of the author, but primarily for the benefit of the public, such rights are given. Not that any particular class of citizens, however, worthy, may benefit, but because the policy is believed to be for the benefit of the great body of people, in that it will stimulate writing and invention to give some bonus to authors and inventors.

H.R. Rep. No. 2222, 60th Cong., 2d Sess. 7 (1909).

7. 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 1.03[A] at 1-44.28 (1995).

8. Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975). The United States Supreme Court stated that the limited monopoly

> reflects a balance of competing claims upon the public interest: Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts. The immediate effect of our copyright law is to secure a fair return for an "author's" creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good. . . . When technological change has rendered its literal terms ambiguous, the Copyright Act must be construed in light of this basic purpose.

Id. (footnotes omitted).

9. *Id.*

10. *Id.*

In order to maintain a balance between the opposing interests, Congress, throughout the last two centuries, has modified copyright law to recognize new copyrightable works and to expand protection to existing works.[11] In 1790, Congress passed the first federal copyright law, providing copyrights to maps, books, and charts.[12] A dozen years later, Congress extended protection to engravings, etchings, and prints.[13] In 1831, musical compositions were also granted copyrights.[14] With the development of photography, photographic negatives received copyright protection in 1865.[15] In 1870, copyrights were also recognized in paintings, drawings, statuettes, statuary, models, and designs of fine art.[16] Twenty-nine years later, Congress consolidated these copyright laws into the Copyright Act of 1909.[17] Shortly after passage of the 1909 Act, copyright law was expanded to include motion pictures.[18] Finally, almost fifty years later, copyright protection was also given to sound recordings.[19]

Although past copyright law attempted to balance the competing interests of authors and users, technological advances threatened this equalibrium by providing faster and easier ways for copyrights to be infringed. In an effort to address this concern, Congress passed the Copyright Act of 1976.[20] This Act expanded protection to works "*now known or later developed*, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device."[21] Congress intended that this broadly written

11. Miller, *supra* note 3, at 982.
12. Act of May 31, 1790, ch. 15, 1 Stat. 124 (1790).
13. Act of Apr. 29, 1802, ch. 36, 2 Stat. 171 (1802).
14. Act of Feb. 3, 1831, ch. 16, 4 Stat. 436 (1831).
15. Act of Mar. 3, 1865, ch. 126, 13 Stat. 540 (1865).
16. Act of July 8, 1870, ch. 230, 16 Stat. 198, 212 (1870).
17. Act of Mar. 4, 1909, ch. 320, 35 Stat. 1075 (1909).
18. Act of Aug. 24, 1912, ch. 356, 37 Stat. 488 (1912).
19. Act of Oct. 15, 1971, Pub. L. No. 92-140, 85 Stat. 391 (1971).
20. Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (codified as amended at 17 U.S.C. § 101 et seq. (1994)).
21. 17 U.S.C. § 102(a) (1994) (emphasis added).

provision would provide copyright protection to new forms of expression developed by new technologies.[22]

Prior to the Copyright Act of 1976, copyright law was primarily concerned with the reproduction and distribution of physical works. Use of digital technology to manipulate information did not become widespread until some time after passage of this Act. Although the Copyright Act does not directly address the effect of digital technology on copyrights, it does suggest that if additional protection is required, that issue may be considered more fully in later amendments.[23]

In the Commission on New Technological Uses of Copyrighted Works (CONTU), Congress, to a limited extent, did address the potentially adverse effect that digital technology has on copyright law. As a result, in 1980, Congress amended Section 117[24] of the

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22. *See* H.R. Rep. No. 1476, 94th Cong., 2d Sess. (1976), *reprinted in* 1976 U.S.C.C.A.N. [hereinafter House Report]. The legislative history of the Copyright Act of 1976 states:

> The history of copyright law has been one of gradual expansion in the types of works accorded protection, and the subject matter affected by this expansion has fallen into two general categories. In the first, scientific discoveries and technological developments have made possible new forms of creative expression that never existed before. In some of these cases the new expressive forms--electronic music, filmstrips, and computer programs, for example--could be regarded as an extension of copyrightable subject matter Congress had already intended to protect, and were thus considered copyrightable from the outset without the need of new legislation. In other cases, such as photographs, sound recordings, and motion pictures, statutory enactment was deemed necessary to give them full recognition as copyrightable works.
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> Authors are continually finding new ways of expressing themselves, but it is impossible to foresee the forms that these new expressive methods will take. The bill does not intend either to freeze the scope of copyrightable subject matter at the present stage of communications technology or to allow unlimited expansion into areas completely outside the present congressional intent.

Id. at 5664.

23. *Id.* at 5731.

24. This section states that

> it is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program provided:

Copyright Act to allow the owner of a computer program to make one copy only if it was for archival purposes or necessary for the operation of the program.[25] The CONTU Report, however, did not consider the challenges that face copyrighted works transmitted in a digital format.

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(1) that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that is used in no other manner, or

(2) that such new copy or adaptation is for archival purposes only and that all archival copies are destroyed in the event that continued possession of the computer program should cease to be rightful.

Any exact copies prepared in accordance with the provisions of this section may be leased, sold, or otherwise transferred, along with the copy from which such copies were prepared, only as part of the lease, sale, or other transfer of all rights in the program. Adaptations so prepared may be transferred only with the authorization of the copyright owner.

17 U.S.C. § 117 (1994).

25. Similarly, ten years later Congress enacted the Computer Software Rental Amendment Act which, *inter alia*, provided that an owner of a phonorecord or computer program could not dispose of it by renting or lending it to another unless explicitly given authorization from the copyright owner. This Act states that

unless authorized by the owners of copyright in the sound recording or the owner of copyright in a computer program (including any tape, disk, or other medium embodying such program), and in the case of a sound recording in the musical works embodied therein, neither the owner of a particular phonorecord nor any person in possession of a particular copy of a computer program (including any tape, disk, or other medium embodying such program), may, for the purposes of direct or indirect commercial advantage, dispose of, or authorize the disposal of, the possession of that phonorecord or computer program (including any tape, disk, or other medium embodying such program) by rental, lease, or lending, or by any other act or practice in the nature of rental, lease, or lending. Nothing in the preceding sentence shall apply to the rental, lease, or lending of a phonorecord for nonprofit purposes by a nonprofit library or nonprofit educational institution. The transfer of possession of a lawfully made copy of a computer program by a nonprofit educational institution to another nonprofit educational institution or to faculty, staff, and students does not constitute rental, lease, or lending for direct or indirect commercial purposes under this subsection.

Id. § 109(b)(1)(A).

In anticipation of copyright law problems, several amendments to the Copyright Act have been proposed in order to protect works transmitted over the information superhighway.

II. PROPOSED AMENDMENTS TO THE COPYRIGHT ACT

In December of 1991, President Bush signed into law the High Performance Computing Act, which called for the creation of an information superhighway linking research organizations, schools, libraries, and governments.[26] Similarly, the Clinton Administration proposed the creation of an advanced information superhighway known as the National Information Infrastructure (NII).[27] The NII is described as "a seamless web of communications networks, computers, databases, and consumer electronics."[28] What distinguishes the proposed NII from the current national information infrastructure[29] is that the new system will connect all existing networks into one high-speed network providing interactive communication between computers, fax machines, televisions, and other electronic devices. For example, computers will communicate with televisions, televisions with telephones, and telephones with other digital devices, in order to provide a complete and uninterrupted network for the flow of information.[30]

The success of the NII, as with any information superhighway, is dependent on the information it makes available to users. Proponents of the NII claim that it will revolutionize people's lives by providing a wealth of easily accessible information and entertainment services.[31]

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26. High Performance Computing Act of 1991, 15 U.S.C. §§ 5501-5528 (Supp. III 1991).

27. The National Information Infrastructure: Agenda for Action, 58 Fed. Reg. 49,025 (1993). In this section of the Comment, "NII" is used interchangeably with "information superhighway."

28. *Id.*

29. The White Paper acknowledges that a national information infrastructure already exists in the form of telephones, televisions, computers, fax machines and other electronic devices connected by separate communications networks. White Paper, *supra* note 5, at 7-8.

30. *Id.* at 8.

31. *Id.*

This digital information system, however, will also provide the opportunity for unprecedented copyright infringement. In a matter of seconds, in the privacy of a home or office, almost any digital work can be reproduced or transmitted without the owner's permission. Authors and providers will be reluctant to place their creative products on this information superhighway unless copyright protection is available for their works.

To address potential copyright problems created by the NII, a Clinton Administration task force created the Working Group on Intellectual Property Rights ("Working Group").[32] Through public hearings and written comments, the Working Group analyzed current copyright law regarding the transmission of works over the NII.[33] In July of 1994, the Working Group published its findings and recommendations in a report known as the "Green Paper."[34]

In September of 1995, after reviewing comments on the Green Paper,[35] the Working Group presented the "White Paper" with its final recommendations to Congress. With minor changes to the Green Paper, the White Paper presents specific solutions in the form of proposed amendments to the Copyright Act. The White Paper finds that minor amendments to the Copyright Act are necessary to ensure

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32. The task force recognizes that "the broad public interest in promoting the dissemination of information must be balanced with the need to ensure the integrity of intellectual property rights and copyrights in information and entertainment products." 58 Fed. Reg., 43,030.

33. White Paper, *supra* note 5, at 3.

34. Information Infrastructure Task Force, Intellectual Property and the National Information Infrastructure: A Preliminary Draft of the Report of the Working Group on Intellectual Property Rights (July 1994) [hereinafter Green Paper]. The Green Paper focused primarily on the application of copyright law to the NII.

35. White Paper, *supra* note 5, at 3.

> Following the release of the Green Paper, the Working Group heard testimony from the public in four days of hearings in Chicago, Los Angeles and Washington, D.C., in September 1994. In addition, more than 1,500 pages of written comments on the Green Paper and reply comments were filed, in paper form and through the Internet, by more than 150 individuals and organizations -- representing more than 425,000 members of the public -- during the comment period, which extended over four months.

Id. at 4.

the protection of copyrighted works and the ultimate success of the NII.[36] The following analysis examines each of these recommended amendments in the order addressed in the White Paper.

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36. The White Paper contains minor changes from the Green Paper in its recommendations to Congress. Three new subjects are included in the White Paper that were not addressed in the Green Paper: library exemptions, reproduction for the visually impaired, and criminal offenses. Two subjects were eliminated from the White Paper's recommendations: licensing and the first sale doctrine.

Under the Copyright Act, Congress has mandated specific licensing requirements in situations where the transaction cost associated with each license agreement is much greater than the individual royalty charged. *See* Green Paper, *supra* note 34, at 134. In such a system, the user of the copyrighted material pays a statutory set fee to the author or agent of the work. The advantage of compulsory licensing is that authorized use of the copyrighted materials is obtained quickly, easily and inexpensively, since each author and user is not required to contact the other in order to enter into individual agreements. *Id.*

The Green Paper stated that transaction costs associated with the information superhighway would be relatively low in comparison to the royalties sought, since digital technology may enable users to enter into individual contracts with the press of a few keys. *Id.* The Green Paper, therefore, recommended, without amendment to the Copyright Act, that the marketplace determine the licensing system that was best suited for the NII. *Id.* This recommendation, however, is excluded from the White Paper.

The Copyright Act grants copyright owners the exclusive right to distribute their works to others by rental, lease, or lending. This right of distribution, however, is not absolute, but is limited by the first sale doctrine. This doctrine provides that an owner of a copy of a work who is not entitled to the exclusive right to distribute under copyright law may, nevertheless, dispose of that work through sale, lending, or lease. 17 U.S.C. § 109(a) (1994). The exception to this provision is that "neither the owner of a particular phonorecord nor any person in possession of a particular copy of a computer program (including any tape, disk, or other medium embodying such program), may, for the purposes of direct or indirect commercial advantage, dispose of [it] . . . by rental, lease, or lending." *Id.* § 109(b)(1)(A). For example, if an individual purchased a book, that work could be resold, given away, or otherwise disposed of without infringing the copyright owner's distribution rights. If the same book was recorded on audio tapes or stored on a computer disk, however, the owner of the work would be prevented from disposing of it unless all copies were disposed of at the same time.

Due to the unique characteristics of digital technology, the transmission of copyrighted works over the information superhighway creates the same problems as experienced by sound recordings and computer programs. The major concern is that the original copy of the work remains in the transmitting computer while the person receiving the transmission gets a perfect copy of the original. *See* Green Paper, *supra* note 34, at 124. To address this concern, the Green Paper recommended that the first sale doctrine not apply to the distribution of works by transmission, since a transmission involves "both the reproduction of the work and the distribution of the reproduction." *Id.* at 125. The Green Paper suggested that Section 109 be amended to "not apply to the sale or other disposal of the possession of that copy or phonorecord by transmission." *Id.* The first sale doctrine

A. The Transmission of Copies and Phonorecords

1. The Distribution Right

A fundamental requirement for copyright protection is that a work of authorship[37] be "fixed" in a tangible means of expression.[38] The broad language of the Copyright Act defines a "fixed" work as one embodied in a "copy" or "phonorecord."[39] "Copies" are material objects embodying a work, such as books, pictures, and other tangible items.[40] "Phonorecords," on the other hand, are material objects embodying sounds, such as audiotapes and records.[41] Fixation in

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exemption, therefore, would not apply to copyrighted works transmitted on the information superhighway. This recommendation, however, was also eliminated from the White Paper.

37. The Copyright Act describes works of authorship as: (1) literary works; (2) musical works, including any accompanying words; (3) dramatic works, including any accompanying music; (4) pantomimes and choreographic works; (5) pictorial, graphic, and sculptural works; (6) motion pictures and other audiovisual works; (7) sound recordings; and (8) architectural works. 17 U.S.C § 102(a) (1994).

38. Copyright protection exists in "original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device." *Id.*

39. The Copyright Act defines a "fixed" work as one

> in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration. A work consisting of sounds, images, or both, that are being transmitted, is "fixed" for purposes of this title if a fixation of the work is being made simultaneously with its transmission.

Id. at § 101 (definition of "fixed").

40. The Copyright Act defines "copies" as

> material objects, other than phonorecords, in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. The term "copies" includes the material object, other than a phonorecord, in which the work is first fixed.

Id. (definition of "copies").

41. The Copyright Act defines "phonorecords" as

copies and phonorecords may be "by any method now known or later developed" from which the work or sounds are "perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device."[42]

Copyright protection may be denied to some works transmitted over the information superhighway due to the lack of fixation.[43] Works that are not fixed prior to or during transmission do not receive protection, since a transmission is not a fixation in a tangible means of expression.[44] "Live" transmissions over the information superhighway do not satisfy the fixation requirement unless the work is also simultaneously fixed, such as copying the information into memory while it is transmitted.[45] Similarly, some works are not sufficiently fixed because they are "purely evanescent or transient reproductions such as those projected briefly on a screen, shown electronically on a television or other cathode ray tube, or captured momentarily in the 'memory' of a computer."[46] The Copyright Act requires that the fixation of the work be "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration."[47] Because the transmission of a work is not a material object and, therefore, cannot be sufficient for meeting

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> material objects in which sounds, other than those accompanying a motion picture or other audiovisual work, are fixed by any method now known or later developed, and from which the sounds can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. The term "phonorecords" includes the material object in which the sounds are first fixed.

Id. (definition of "phonorecords").

42. *Id.* (definitions of both "copies" and "phonorecords").

43. The legislative history to the Copyright Act indicates, however, that "an unfixed work of authorship, such as an improvisation or an unrecorded choreographic work, performance, or broadcast, would continue to be subject to protection under State common law or statute, but would not be eligible for Federal statutory protection under section 102." House Report, *supra* note 22, at 5665.

44. The White Paper acknowledges that "[a] transmission, in and of itself, is not a fixation. While a transmission *may* result in a fixation, a work is not fixed by virtue of the transmission alone." White Paper, *supra* note 5, at 27 (emphasis added).

45. *See* Baltimore Orioles, Inc. v. Major League Baseball Players Assoc., 805 F.2d 663, 668 (7th Cir. 1986), *cert. denied*, 480 U.S. 941 (1987).

46. House Report, *supra* note 22, at 5666.

47. 17 U.S.C. § 101 (1994) (definition of "fixed").

the fixation requirement under current copyright law, the work is denied copyright protection.

Once a work is fixed in a tangible means of expression, the Copyright Act provides an author with five exclusive rights to control the use of the work.[48] The distribution right allows a copyright owner to "distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease or lending."[49] For example, the author of a computer program who retains the right to distribute it under the Copyright Act[50] has the sole power to decide the method by which to make the work available to the public. Because computers can transfer exact copies of copyrighted works easily and quickly, protecting the right to distribute works on the information superhighway is a difficult task. An author's right to control the distribution of his work can be thwarted by common technology existing in many homes and offices. Any unauthorized dissemination of a work to the public constitutes an infringement of the author's distribution right.

The White Paper states that a document, program, or other digitized, copyrighted material transmitted from one computer to another represents a distribution of the work.[51] By connecting computers to communications systems, individuals have the capability

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48. The Copyright Act establishes the following exclusive rights:

> (1) to reproduce the copyrighted work in copies or phonorecords;
> (2) to prepare derivative works based upon the copyrighted work;
> (3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending;
> (4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly; and
> (5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly.

17 U.S.C. § 106 (1994).

49. *Id.* § 106(3).

50. Copyright owners may sell the individual exclusive rights in a work. *See id.* § 201(d).

51. White Paper, *supra* note 5, at 213.

to distribute an unlimited number of documents, programs, or other copyrighted materials without erasing the originals in the process. The resultant transmissions create exact duplicates in the receiving computers, while the originals remain in the sending machines. The White Paper contends that if a work remains in one computer while copies are sent to other machines, the practical effect is that the work has been distributed.[52] The White Paper argues, therefore, that the Copyright Act should state that a distribution of a work occurs when it is transmitted from one computer to another.[53]

According to the Copyright Act, copyright owners possess the exclusive right to control the distribution of copies or phonorecords.[54] A copyright owner, for example, has the exclusive right to sell a book to the public. If, however, the contents of the book were in a computer memory and transmitted to another individual, the White Paper argues that it is unclear whether the resulting transmission would qualify as a "distribution of copies or phonorecords of a work."[55] The problem here is that "copies" and "phonorecords" are defined as material works, while digital transmissions are immaterial works.[56]

The White Paper contends that since the distribution right is limited to physical copies and phonorecords, it may be possible to circumvent current copyright law through the transmission of non-physical digital works.[57] To solve this problem, the White Paper recommends that Section 106(3) of the Copyright Act be amended to

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52. The White Paper also states that activities such as placing a work in the memory of a computer by scanning, uploading, downloading, and file transfers from one computer to another implicate the infringement of the reproduction right. *Id.* at 65-66.

53. *Id.* at 213.

54. *Id.* § 106(3).

55. White Paper, *supra* note 5, at 213.

56. The White Paper argues that copies distributed by transmission should not be treated any differently than those distributed by conventional means. *Id.* at 216. It is also contended that "[c]opies distributed via transmission are as *tangible* as any distributed over the counter or through the mail. Through each method of distribution, the consumer receives a *tangible* copy of the work." *Id.* (emphasis added). This assertion makes sense only when "tangible" is defined as "readily apprehensible by the mind," not in its most commonly understood meaning of "having physical form." BLACK'S LAW DICTIONARY 1456 (6th ed. 1990).

57. White Paper, *supra* note 5, at 213.

include distribution by transmission.[58] As a result of this proposed amendment, a distribution would take place each time a work is transmitted. Copyright protection, therefore, would exist for non-physical, digital works transmitted over the information superhighway.

The White Paper's recommendation to expand the distribution right to include distribution by transmission raises several criticisms. The United States Copyright Office is correct when it argues that existing statutory provisions and case law already provide copyright protection for works distributed by transmission over the information superhighway.[59] Section 106(3) of the Copyright Act gives authors the right to distribute copies of their works to the public by "sale or other transfer of ownership."[60] The Copyright Office contends that this statutory language currently includes transmissions on the information superhighway, since copyright law does not expressly require that the distribution of copies be limited to physical objects or exclude the distribution of non-physical works.[61] In addition, Section 117 of the Copyright Act provides copyright protection to copies created in the memory of a computer.[62] It does not matter whether the

58. The new subsection would provide copyright owners with the right to distribute works by "rental, lease, or lending, *or by transmission.*" *Id.* app. 2 at 1. It is interesting that the White Paper did not suggest amending the definitions of "copies" and "phonorecords" to include immaterial objects, rather than amending the distribution right to include the distribution of material objects by transmission.

59. Letter from the U.S. Copyright Office to the Working Group on Intellectual Property Rights at 9 (Sept. 1994) (providing comments on the Green Paper) (on file at the U.S. Patent and Trademark Office) [hereinafter Comments from USCO].

60. 17 U.S.C. § 106(3) (1994).

61. Comments from USCO, *supra* note 59, at 9.

62. *Id.* Section 117 of the Copyright Act provides that

> it is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program provided:
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> (1) that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner, or
>
> (2) that such new copy or adaptation is for archival purposes only and that all archival copies are destroyed in the event that continued possession of the computer program should cease to be rightful.

copy was created from a version saved on a disk or one transmitted over the information superhighway. Indeed, even the CONTU Report found that no additional amendments to the Copyright Act were necessary to find copyright infringement in a digital environment.[63] The Copyright Act, therefore, currently provides statutory protection to works transmitted over the information superhighway.[64]

Also, courts have held that copies made in a digital environment are protected by current federal copyright law. In *Advanced Computer Services of Michigan, Inc. v. MAI Systems Corp.*,[65] a Virginia district court held that a computer program stored in random access memory (RAM) was sufficiently fixed to be given copyright protection.[66] In *Stern Electronics, Inc. v. Kaufman*,[67] the Second Circuit found that storing software in memory devices was enough to confer copyright protection since it was sufficient to meet the "statutory requirement of a 'copy' in which the work is 'fixed.'"[68]

> Any exact copies prepared in accordance with the provisions of this section may be leased, sold, or otherwise transferred, along with the copy from which such copies were prepared, only as part of the lease, sale, or other transfer of all rights in the program. Adaptations so prepared may be transferred only with the authorization of the copyright owner.

17 U.S.C. § 117 (1994).

63. National Commission on New Technological Uses of Copyrighted Works, Final Report (1978).

64. Ironically, the White Paper is in agreement with this analysis but continues to press for an amendment to the distribution right: "The Working Group has no argument with such an interpretation; it properly conforms to the intent of the distribution right and, we believe, is correct from both a practical and legal standpoint." White Paper, *supra* note 5, at 214. As a justification, the White Paper argues that because there are various views espoused about the distribution of copyrighted works by transmission, there is a "need for clarification and legal certainty." *Id.* at 217. The White Paper also states that "[t]he costs and risks of litigation to define more clearly the right – and the time achieving such clarity would take – would discourage and delay use of the [information superhighway]." *Id.* It is interesting that the same view is not taken in regard to reducing on-line service provider liability. *See id.* at 114-24.

65. 845 F. Supp. 356 (E.D. Va. 1994).

66. *Id.* at 363.

67. 669 F.2d 852 (2d Cir. 1982).

68. *Id.* at 855; *see* 17 U.S.C. § 101 (1994) (definition of "fixed").

Other courts[69] have uniformly attached copyright protection to works saved in computer memory, including those transmitted over a communications system. Case law, therefore, currently provides copyright protection for materials transmitted over the information superhighway.

The Copyright Office also asserts that the proposed amendment to include all distribution by transmission may erroneously include transmissions expressly exempted from copyright protection.[70] If a transmission creates a copy that is "merely transient--appearing only when the work is performed or displayed and there is no transfer of ownership, the distribution right should not be involved."[71] The reason is that the temporary storage of a program in RAM does not constitute a distribution of a work as determined in the library lending exceptions of the Copyright Act.[72] According to the White Paper's proposed amendment, all unauthorized transient copies in a computer's memory would amount to an infringement of the distribution right.[73] Although the White Paper views copies made in RAM as an infringement, the legislative history to the Copyright Act states that the temporary display of images on a screen is a noninfringing reproduction.[74] The recommended amendment, therefore, should be rejected because it expands copyright protection to all transmissions, even ephemeral transmissions that were not intended to be protected.

Additionally, Professor Jessica Litman argues that establishing an explicit statutory right to control distribution by transmission will

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69. *See* Triad Systems Corp. v. Southeastern Express Co., 31 U.S.P.Q. 2d (N.D. Cal. 1994), *aff'd in part on other grounds*, 64 F.3d 1330 (9th Cir. 1995), *cert. denied*, 116 S. Ct. 1015 (1996); Playboy Enterprises Inc. v. Frena, 839 F. Supp. 1552 (M.D. Fla. 1993); Sega Enterprises Ltd. v. MAPHIA, 857 F. Supp. 679 (N.D. Cal. 1994).

70. Comments from USCO, *supra* note 59, at 9-10.

71. *Id.* at 10.

72. *See* 17 U.S.C. § 109 (1994) (The library lending exceptions do not contemplate RAM storage as a possible method of distribution.).

73. Comments from USCO, *supra* note 59, at 10.

74. House Report, *supra* note 22, at 5666. The House Report states that "the definition of 'fixation' would exclude from the concept purely evanescent or transient reproductions such as those projected briefly on a screen, shown electronically on a television or other cathode ray tube, or captured momentarily in the 'memory' of a computer." *Id.*

produce the unintended consequence of significantly expanding copyright owners' exclusive rights at the expense of the public's right to use the material.[75] The proposed amendment would allow owners to "control the reading, viewing, or listening to any work in digitized form" because it grants them exclusive control of their works in this environment.[76] Congress did not intend for copyright owners to have such control over reading works.[77] Neither browsing nor reading materials at a library or store, has ever been an infringement of copyright law.[78] The amendment to include distribution by transmission would upset the balance between the opposing interests of authors and users by making it impossible for the public to even view works in a digital environment without the permission of the author.

Expanding copyright law to include distribution by transmission may also produce adverse and unintended results in the application of other sections of the Copyright Act.[79] According to the White Paper, the distribution right is expressly stated over ninety times in the Copyright Act and implicated in more than one hundred other instances where the subject of publication is mentioned.[80] Although no recommendations were made in the Green Paper concerning the potential impact of the proposed amendment on other sections of the Copyright Act, comments were solicited on this subject.[81] The White Paper, however, fails to analyze this issue, leaving potential problems with other provisions of the Copyright Act unresolved.

The Copyright Office points out that the expanded definition of "distribution" under the proposed amendment may result in an

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75. Letter from Jessica Litman to the Working Group on Intellectual Property Rights, at 3 (Sept. 1994) (providing comments on the Green Paper) (on file at the U.S. Patent and Trademark Office) [hereinafter Comments from Litman]; *see also* Letter from Pamela Samuelson to the Working Group on Intellectual Property Rights (Sept. 1994) (providing comments on the Green Paper) (on file at the U.S. Patent and Trademark Office).

76. Comments from Litman, *supra* note 75, at 3.

77. *Id.* at 6.

78. *Id.*

79. *See* Green Paper, *supra* note 34, at 125.

80. *Id.*

81. *Id.*

increased number of unprotected works in the United States.[82] Unpublished works receive copyright protection in the United States regardless of the author's nationality or domicile.[83] Copyright law, however, protects a published work only if it meets at least one of five additional requirements.[84] According to the White Paper's proposal, many works transmitted over the information superhighway would be considered published and, therefore, must comply with an additional statutory provision before protection attaches.[85] Under this scenario, if within three months of publication an author failed to deposit a copy of each transmitted work with the Library of Congress, no copyright protection would attach.

The amended distribution right would also significantly affect the awarding of statutory damages and attorney's fees in a copyright infringement action.[86] According to Section 412 of the Copyright Act,

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82. Comments from USCO, *supra* note 59, at 12.

83. The Copyright Act provides that unpublished works are "subject to protection under this title without regard to the nationality or domicile of the author." 17 U.S.C. § 104(a) (1994).

84. The Copyright Act provides that published works are given copyright protection if they meet one of the following requirements:

> (1) on the date of first publication, one or more of the authors is a national or domiciliary of the United States, or is a national, domiciliary, or sovereign authority of a foreign nation that is a party to a copyright treaty to which the United States is also a party, or is a stateless person, wherever that person may be domiciled; or
>
> (2) the work is first published in the United States or in a foreign nation that, on the date of first publication, is a party to the Universal Copyright Convention; or
>
> (3) the work is first published by the United Nations or any of its specialized agencies, or by the Organization of American States; or
>
> (4) the work is a Berne Convention work; or
>
> (5) the work comes within the scope of a Presidential proclamation.

Id. § 104(b).

85. White Paper, *supra* note 5, at 219-20.

86. Comments from USCO, *supra* note 59, at 12. The Copyright Act states:

> In any action under this title, other than an action brought for a violation of the rights of the author under section 106A(a) or an action instituted under section 411(b), no award of statutory damages or of attorney's fees, as provided by sections 504 and 505, shall be made for—
>
> (1) any infringement of copyright in an unpublished work commenced before the effective date of its registration; or

unpublished works receive no statutory damages and attorney's fees if infringement occurred prior to registration.[87] Published materials, however, receive no damages and attorney's fees when the infringement occurred after the first publication and before the registration, unless the registration was made within three months of the first publication.[88] Statutory damages and attorney's fees from copyright infringement would be possible, therefore, only if each work transmitted on the information superhighway is registered with the Copyright Office.

Enlarging the distribution right to include distribution by transmission would also require compliance with compulsory mechanical licenses for phonorecords.[89] The Copyright Act establishes a compulsory license system that permits the distribution of phonorecords if the copyright owner receives notice and a statutory royalty.[90] This limitation on the distribution right, however, currently applies only to material phonorecords, not immaterial transmissions. If the information superhighway becomes a method of distributing phonorecords, under current copyright law it would be almost impossible for owners to determine the number of copies made from such transmissions.[91] Expanding the right to distribute to include the transmission of works would therefore require the creation of a new compulsory mechanical license system.

The White Paper's proposal to expand the distribution right to include transmissions has implications far beyond this single amendment. Since many sections of the Copyright Act would be

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(2) any infringement of copyright commenced after first publication of the work and before the effective date of its registration, unless such registration is made within three months after the first publication of the work.

17 U.S.C. § 412 (1994).

87. 17 U.S.C. § 412 (1994).
88. *Id.*
89. Comments from USCO, *supra* note 59, at 12.
90. *See* 17 U.S.C. § 115 (1994).
91. Comments from USCO, *supra* note 59, at 12.

adversely affected, Congress should thoroughly analyze its effect before adopting the recommended amendment.[92]

2. Related Definitional Amendments

a. The Transmit Definition

The transmission of a work on the information superhighway can take the form of a performance, display, reproduction, or some combination of these.[93] The Copyright Act defines "performance" as "to recite, render, play, dance, or act it, either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible."[94] A copyright owner possessing a performance right has the authority to exercise it over a variety of works.[95] The transmission of a work, such as a motion picture, implicates the performance right when the recipient watches the transmission as it is sent.[96] The performance right, however, is not involved if the work is merely saved for later viewing.

The second form of transmission, "display," means to "show a copy of it, either directly or by means of a film, slide, television image, or any other device or process or, in the case of a motion picture or other audiovisual work, to show individual images nonsequentially."[97] A copyright owner enjoys the right to display all works included in the right to perform, except the showing of the motion picture itself and its images.[98] The White Paper contends that every time someone browses a work on the information superhighway by viewing its

92. The Copyright Office also states that other sections of the Copyright Act would be affected by expanding the distribution right to include transmissions. *Id.* at 11-12.

93. White Paper, *supra* note 5, at 217-18.

94. 17 U.S.C. § 101 (1994) (definition of "performance").

95. *Id.* Section 106 of the Copyright Act states that a performance right may exist in the following works: "literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works." *Id.* § 106(4).

96. White Paper, *supra* note 5, at 71.

97. 17 U.S.C. § 101 (1994) (definition of "display").

98. *Id.* § 106(5).

content, a public display has taken place. If, however, the user only searches the titles of works, no public display has occurred.[99]

The third form of transmission is a "reproduction," which means that it is merely a copy of a work existing elsewhere. Current copyright law grants authors the right to control the reproduction of their materials.[100] The White Paper suggests that this form of transmission "will be implicated in most NII transactions . . . because of the nature of computer-to-computer communications."[101] Whenever a work is stored in the memory of a computer, even for very short periods, such as while browsing through documents, the resulting copy constitutes a reproduction.[102]

Because a transmission itself does not necessarily indicate which exclusive rights are involved, the White Paper recommends amending the definition of "transmit" to accommodate different possibilities. Under current copyright law, "transmit" means "to communicate [a performance or display] by any device or process whereby images or sounds are received beyond the place from which they are sent."[103] The White Paper recommends that this definition be amended to include the transmission of a reproduction.[104]

The main criticism of the White Paper's recommendation to expand the current definition of "transmit" to include reproductions is that this amendment is misdirected. The proposed amendment states that "[t]o 'transmit' a reproduction is to distribute it by any device or process whereby a copy or phonorecord of the work is fixed beyond the place from which it was sent."[105] A copy and phonorecord, however, are defined by the Copyright Act as material objects.[106] Material objects cannot be transmitted over the information superhighway; only immaterial digital works are capable of such transmission. The White Paper's recommendation applies only to

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99. White Paper, *supra* note 5, at 72.
100. 17 U.S.C. § 106(1) (1994).
101. White Paper, *supra* note 5, at 64.
102. *See* House Report, *supra* note 22, at 5666.
103. 17 U.S.C. § 101 (1994) (definition of "transmit").
104. White Paper, *supra* note 5, app. 2 at 1.
105. *Id.*
106. 17 U.S.C. § 101 (1994) (definitions of "copy" and "phonorecord").

physical objects. The proposed amendment, therefore, would not protect reproductions that remain in a digital format because they are immaterial works.

b. The Publication Definition

The Copyright Act defines "publication" as "the distribution of copies or phonorecords of a work to the public."[107] According to the legislative history of the Copyright Act, however, "any form of dissemination in which a *material* object does not change hands--performances or displays on television, for example--is not a publication no matter how many people are exposed to the work."[108] The White Paper suggests that the current definition of "publication" is insufficient to include the transmission of materials over the information superhighway since a material object is not exchanged.[109] The problem is that the recipient of a transmission receives a copy even though it does not fit the traditional definition of "publication."[110]

The White Paper, therefore, recommends that the definition be amended to state that "publication" includes the "distribution of copies or phonorecords of a work to the public by sale or other transfer or ownership, by rental, lease, lending, *or by transmission*."[111]

The problem with the White Paper's recommendation to expand the publication definition to include transmissions is that it raises all transmissions to the standard of published works. According to the Copyright Act, certain remedies for the infringement of copyrights of published works are available only if the works are deposited with the Library of Congress.[112] Under the proposed amendment, new obligations arise for authors and information providers who distribute their materials on-line, since almost every transmission would be

107. *Id.* (definition of "publication").
108. House Report, *supra* note 22, at 5754 (emphasis added).
109. White Paper, *supra* note 5, at 218.
110. *Id.* at 218-19.
111. *Id.* app. 2 at 1 (emphasis added).
112. 17 U.S.C. § 412 (1994).

considered published.[113] The immediate effect would be a dramatic expansion of the deposit requirement, since every transmitted work must be deposited in order to provide full. The problem with this scenario is that the Copyright Office is unprepared to handle the large number of works that would be deposited as a result of such a policy.[114] The recommended amendment, therefore, would impose impracticable deposit requirements on copyright owners.

c. The Importation Provisions

The White Paper's last proposal under the distribution right is an amendment to the Copyright Act to forbid the unauthorized transmission of materials into the United States.[115] Current copyright law states that the "[i]mportation into the United States, without the authority of the owner of copyright . . . of copies or phonorecords of a work that have been acquired outside the United States is an infringement of the exclusive right to distribute."[116] Since the statute does not explicitly address the issues of importing works into the United States by transmission, the White Paper recommends that Section 602 of the Copyright Act be amended to include importation by transmission.[117]

The Copyright Office claims, however, that expanding the importation provision of the Copyright Act to include importation by

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113. Letter from the Information Industry Association to the Working Group on Intellectual Property Rights at 10-11 (Sept. 1994) (providing comments on the Green Paper) (on file at the U.S. Patent and Trademark Office) [hereinafter Comments from IIA].

114. *Id.* at 10.

115. White Paper, *supra* note 5, at 221.

116. 17 U.S.C. § 602(a) (1994).

117. The Working Group recommends that Section 602(a) read as follows:

> Importation into the United States, whether by carriage of tangible goods or by transmission, without the authority of the owner of copyright under this title, of copies or phonorecords of a work that have been acquired outside the United States is an infringement of the exclusive right to distribute copies or phonorecords under section 106, actionable under section 501.

White Paper, *supra* note 5, app. 2 at 3.

transmission is unnecessary.[118] Current copyright law already includes the transmission of a copyrighted work over the information superhighway that results in an importation.[119] Indeed, Section 602 of the Copyright Act addresses the importation of copies or phonorecords of a work.[120] Since the White Paper indicates that distributions over the information superhighway implicate the reproduction right, current copyright law should be sufficient to make unauthorized transmissions actionable.[121]

Additionally, the Copyright Office contends that prohibiting unauthorized importation of works through transmissions would be impossible, perhaps unenforceable, and not in the best interest of the United States.[122] Even if the United States Customs Service was authorized to sift through transmissions entering the country, it would be impossible to know whether a transmission results in the infringement of the Copyright Act.[123] Such action by the Customs Service could also result in an unconstitutional invasion of privacy.[124] Furthermore, if the United States began regulating transmissions from abroad, foreign countries would almost certainly regulate our transmissions, which, in turn, could diminish access to international markets over the information superhighway.[125]

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118. Comments from USCO, *supra* note 60, at 14.

119. *Id.*

120. 17 U.S.C. § 602 (1994).

121. White Paper, *supra* note 5, app. 2 at 3.

122. Comments from USCO, *supra* note 60, at 14-15.

123. In fairness to the White Paper, it does state that enforcement would be impractical:

> Although we recognize that the U.S. Customs Service cannot, for all practical purposes, enforce a prohibition on importation by transmission, given the global dimensions of the information infrastructure of the future, it is important that copyright owners have the other remedies for infringements of this type available to them.

White Paper, *supra* note 5, at 221.

124. Comments from USCO, *supra* note 60, at 15.

125. *Id.*

B. Public Performance Right for Sound Recordings

The Copyright Act grants copyright owners an exclusive right to perform certain works publicly.[126] To "perform publicly" means to render a work[127] to the public either at a public place or transmitted to the public at large.[128] This right to publicly perform works, however, does not extend to sound recordings.[129] The legislative history of the Copyright Act indicates that Congress commissioned the Register of Copyrights to gather information concerning the expansion of the public performance right to sound recordings.[130] Shortly thereafter, the Register recommended that this right be expanded to include sound recordings. Until recently, however, Congress did not change the Copyright Act to include a public performance right in sound recordings.

The White Paper recognizes that the transmission of sound recordings on the information superhighway may become very common, but that the legal issues regarding such transmissions are unsettled.[131] Because the current Copyright Act fails to grant protection, owners will not be adequately compensated for transmissions that result in the public performance of a sound recording on the information superhighway.[132] The White Paper, therefore, supports a limited performance right to sound recordings by digital transmission.[133]

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126. 17 U.S.C. § 106(4) (1994).

127. *Id.* § 101 (definition of "perform").

128. *Id.* (definition of "publicly").

129. Sound recordings are defined as "works that result from the fixation of a series of musical, spoken, or other sounds, but not including the sounds accompanying a motion picture or other audiovisual work, regardless of the nature of the material objects, such as discs, tapes, or other phonorecords, in which they are embodied." *Id.* (definition of "sound recordings").

130. House Report, *supra* note 22, at 5721.

131. Green Paper, *supra* note 5, at 132.

132. *Id.*

133. *Id.* The White Paper supports previously pending legislation (H.R. 2576 and S. 1421) that was to provide a performance right in sound recordings.

In November of 1995, the Digital Performance Right in Sound Recordings Act of 1995 was signed into law.[134] This Act amended the Copyright Act in two important ways. First, a new subsection was added that provides copyright owners with an exclusive right to publicly perform sound recordings by digital transmission.[135] Second, the compulsory mechanical license was expanded to include digital transmission delivery.[136] Although the new law provides copyright protection for sound recordings transmitted over the information superhighway, it is still not free from criticism, which may result in its amendment in the near future.[137]

C. Library Exemptions

The Copyright Act exempts libraries from complying with certain aspects of copyright law.[138] For example, no copyright infringement occurs when a library makes only one reproduction of a copy or phonorecord of a work to distribute it as long as certain conditions are met.[139] The public policy behind this exemption attempts to provide libraries with access to copyrighted materials in order to contribute to the public's education. The White Paper recommends extending these exemptions to apply to library access to works on the information superhighway.[140]

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134. Digital Performance Right in Sound Recordings Act of 1995, Pub. L. No. 104-39, 109 Stat. 336 (1995). This Act took effect in February of 1996.

135. *Id.* at § 2, 109 Stat. at 336.

136. *Id.* at § 4, 109 Stat. at 344.

137. Some critics contend that the law is too narrowly written and provides copyright protection only for sound recordings that are digital audio transmissions.

138. 17 U.S.C. § 108 (1994).

139. *Id.*

140. The White Paper recommends that Section 108 of the Copyright Act be amended to read as follows:

> (a) Notwithstanding the provisions of section 106, it is not an infringement of copyright for a library or archives, or any of its employees acting within the scope of their employment, to reproduce no more than three copies or phonorecords of a work, or to distribute no more than one of such copies or phonorecords, under the conditions specified by this section, if –
>
> (1) the reproduction or distribution is made without any purpose of direct or indirect commercial advantage;

The primary criticism of the library exemptions amendment is that it is premature to consider this subject in such detail. It is unknown what type of digital distribution system will exist for libraries in the near future. For example, there may be a fee-based transaction system that eliminates the need for library exemptions.[141] In addition, the Conference on Fair Use, established by the Working Group to study fair uses associated with libraries, continues to search for ways of accommodating library access to works on the information superhighway.[142] The Conference has yet to come to any conclusions for the regulation of library exemptions. Amending the current library exemptions under the Copyright Act should therefore wait until an agreeable solution has been found by the Conference on Fair Use.

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(2) the collections of the library or archives are (i) open to the public, or (ii) available not only to researchers affiliated with the library or archives or with the institution of which it is a part, but also to other persons doing research in a specialized field; and

(3) the reproduction or distribution of the work includes a notice of copyright if such notice appears on the copy or phonorecord that is reproduced under the provisions of this section.

(b) The rights of reproduction and distribution under this section apply to a copy or phonorecord of an unpublished work duplicated in facsimile or digital form solely for purposes of preservation and security or in facsimile form for deposit for research use in another library or archives of the type described by clause (2) of subsection (a), if the copy or phonorecord reproduced is currently in the collections of the library or archives.

(c) The right of reproduction under this section applies to a copy or phonorecord of a published work duplicated in facsimile or digital form solely for the purpose of replacement of a copy or phonorecord that is damaged, deteriorating, lost, or stolen, if the library or archives has, after a reasonable effort, determined that an unused replacement cannot be obtained at a fair price.

White Paper, *supra* note 5, app. 2 at 1-2.

141. Comments from USCO, *supra* note 60, at 29.

142. *Id.* at 83. The White Paper states that "new scenarios should be considered to avoid ambiguity and to continue to protect both the interests of copyright owners and to continue to provide libraries with a safe 'borrowing' guide. Such scenarios are being considered in the on-going Conference on Fair Use." *Id.* at 89.

D. Reproduction for the Visually Impaired

The White Paper recommends that a new section be added to the Copyright Act to provide greater access to copyrighted works for the visually impaired.[143] This new provision is based upon an Australian law that allows non-profit organizations to produce "Braille, large type, audio or other editions of previously published literary works" for the visually impaired.[144] The White Paper's stated reason for this amendment is the desire "[t]o ensure fair access to all manner of printed materials."[145]

One criticism of the White Paper's recommendation to provide the visually impaired with greater access to copyrighted works is that it is inadequate. The Copyright Act provides copyright protection for several kinds of works.[146] The visual impairment amendment, however, would only require an author's literary work be available to the visually impaired. What about non-literary works? Should not the visually impaired have the same access to these materials?[147] Also,

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143. The White Paper suggests that the following new section be added the Copyright Act:

> § 108A. Limitations on exclusive rights: Reproduction for the Visually Impaired.
>
> Notwithstanding the provisions of section 106, it is not an infringement of copyright for a non-profit organization to reproduce and distribute to the visually impaired, at cost, a Braille, large type, audio or other edition of a previously published literary work in a form intended to be perceived by the visually impaired, provided that, during a period of at least one year after the first publication of a standard edition of such work in the United States, the owner of the exclusive right to distribute such work in the United States has not entered the market for editions intended to be perceived by the visually impaired.

Id. app. 1 at 4.

144. *Id.* at 228.

145. *Id.* at 227.

146. 17 U.S.C. § 102 (1994).

147. Professor Nimmer makes this same point about the current provisions of the Copyright Act that provide special status to handicapped individuals. 2 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 8.15[G][2][a] (1996).

what about other handicapped individuals?[148] Are they to be excluded because they did not seek special status from the Working Group?

Furthermore, there are better methods for creating opportunities for the visually impaired to "participate in learning, communication and discourse."[149] If the goal of this amendment is to create greater access to copyrighted works why then, does the proposed legislation limit the unauthorized manufacture and distribution of such materials to non-profit organizations? For-profit companies are more numerous and generally more efficient and effective than non-profit entities, and would allow for greater distribution of such materials.

E. Criminal Offenses

The White Paper states that penalties designed to discourage unauthorized copying are insufficient when applied to the information superhighway. In United States v. LaMacchia,[150] for example, Mr. LaMacchia made available on the Internet unauthorized copies of copyrighted software. For several weeks computer users downloaded hundreds of copies of these programs, depriving the copyright owners of several thousands of dollars in potential sales, as well as control over the distribution of their software. Mr. LaMacchia was arrested and prosecuted for violating a provision of the wire fraud statute.[151] The trial court, however, found that since Mr. LaMacchia did not profit from placing the unauthorized copies of software on the Internet, he did not violate the wire fraud statute.[152] Because no criminal sanctions were available to prevent such copyright violations,

148. The White Paper acknowledges that the visually impaired were the only individuals who sought such special status. White Paper, *supra* note 5, at 228 n.562. The White Paper leaves the door open for additional social tinkering with the Copyright Act with the statement that "the Working Group does not intend to dismiss the possibility that other disabled users may have needs of which it has not been made aware and, therefore, has not considered." *Id.*

149. *Id.* at 227.

150. 871 F. Supp. 535 (D. Mass. 1994).

151. *Id.* at 536.

152. *Id.* at 545.

the court held that "[i]t is the legislature, not the Court which is to define a crime, and ordain its punishment."[153]

Following the lead of the LaMacchia court, United States Senators Patrick Leahy and Steve Feingold introduced the Criminal Copyright Improvement Act of 1995.[154] This legislation proposes to criminalize the willful distribution over the information superhighway of unauthorized copies of a copyrighted work with a cumulative value of at least five thousand dollars.[155] The White Paper endorses passage of this bill and believes that requiring a minimum monetary value, as well as an element of willfulness, will ensure that "merely casual or careless conduct resulting in distribution of only a few copies will not be subject to criminal prosecution."[156]

Although the Criminal Copyright Improvement Act was introduced to overturn the injustice of future LaMacchia-type situations, it does not go far enough in assessing criminal penalties. How effective would a law be at discouraging and punishing larceny if it allowed individuals to steal from others and not be criminally liable until a five thousand dollar limit had been reached? Yet, this is what the proposed Senate bill would allow. For example, if a person were to intentionally send a two hundred dollar software program over the information superhighway to twenty friends, no criminal sanctions would attach because the magical five thousand dollar limit would not have been reached.[157]

Society, on the other hand, would never allow individuals to steal up to five thousand dollars of software from a software manufacturer, distribute the programs to others, and not be punished for their actions. Theft of computer software directly from a manufacturer or on the information superhighway is wrong, and both should be treated

153. *Id.* The court, however, was sympathetic to the plight of prosecutors in this case: "Criminal as well as civil penalties should probably attach to willful, multiple infringements of copyrighted software even absent a commercial motive on the part of the infringer." *Id.*

154. S. 1122, 104th Cong., 1st Sess. (1995), 141 Cong. Rec. S11, 452-54.

155. White Paper, *supra* note 5, at 229.

156. *Id.*

157. The White Paper states that "criminal charges will not be brought unless there is a significant level of harm to the copyright owner's rights." *Id.*

similarly. Until Congress views theft on the information superhighway as a serious crime and provides adequate sanctions, some individuals will be encouraged to act with impunity.[158]

F. Technological Protection

Copyright owners are generally responsible for policing their works and enforcing copyright laws. While criminal penalties are available against copyright infringers, only the federal government may initiate such actions, and usually does so only for its own reasons.[159] It is important for owners to be able to identify copyright infringers so that appropriate steps can be taken. The ease of infringing copyrighted materials in a digital environment, however, makes it very difficult to monitor such activities.[160] This difficulty is compounded on the information superhighway because the opportunity to infringe copyrighted works is greatly increased due to the connection of computers to a communications system.

The White Paper acknowledges that "[t]he ease of infringement and the difficulty of detection and enforcement" will cause many copyright owners to seek additional protection from technology.[161] Although technology can protect such property rights, the White

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158. In 1993, software publishers lost an estimated $1.9 billion due to illegal copying of software. *Losses Persist as a Result of Illegally Copied Software*, 5 No. 8 J. PROPRIETARY RTS. 28 (1993).

159. PHILIP BACZEWSKI ET AL., THE INTERNET UNLEASHED 1084 (1994).

160. *Id.* Lance Rose states:

> Copyrights are easier to infringe and more difficult to enforce on the computer networks than in the past. Infringing an older non-network item like a book or a CD requires a large investment in copying equipment that is hard to move and easy to find, and usually results in substantial revenues to the infringer. Such infringements are hard to perform, easy to trace, and attractive to enforce, since copyright owners can take the infringer to court and obtain the illicit revenues for themselves. In contrast, anyone with Internet access can easily perform a mass infringement of any data or file available in digital form. The infringer can easily hide his or her identity. And such infringements often do not result in any revenues to the infringer, who can be a person of little means.

Id.

161. White Paper, *supra* note 5, at 230.

Paper also states that "technology can be used to defeat any protection that technology may provide."[162] The White Paper argues, therefore, that if the technology for defeating protection is prohibited, then technology for safeguarding intellectual property will become more reliable because of the lack of infringing devices.

The Copyright Act does not ban technological devices that defeat protection for unauthorized access. The most closely related provision bans only those devices designed to defeat a serial copy management system.[163] While this section of the Copyright Act provides protection for sound recordings and musical works, there is no similar section for the protection of other types of works. Realizing that this void exists in copyright law, the White Paper states that the prohibition of devices that defeat anti-copying systems is in the public interest.[164]

In order to enforce this prohibition, the White Paper recommends that a new section be added to the Copyright Act that would ban the manufacture of anti-copying devices.[165] Since copyright owners may want to use this technology for security purposes, the amendment would only prohibit devices whose "primary purpose or effect" is to

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162. *Id.*

163. The Audio Home Recording Act of 1992 states that "[n]o person shall import, manufacture, or distribute any digital audio recording device or digital audio interface device that does not conform to [the Serial Copy Management System or a similar system]." 17 U.S.C. § 1002(a) (1994).

164. White Paper, *supra* note 5, at 230. The White Paper finds that not only is preventing infringement in the public interest, but it also furthers the purpose of the copyright laws. *Id.* The two main public interest arguments the White Paper advances are that consumers ultimately pay for infringements and that more works will be available on the information superhighway "if they are not vulnerable to the defeat of protection systems." *Id.*

165. The White Paper suggests that the following new section be added to the Copyright Act:

> § 1201. Circumvention of Copyright Protection Systems
>
> No person shall import, manufacture or distribute any device, product, or component incorporated into a device or product, or offer or perform any service, the primary purpose or effect of which is to avoid, bypass, remove, deactivate, or otherwise circumvent, without the authority of the copyright owner or the law, any process, treatment, mechanism or system which prevents or inhibits the violation of any of the exclusive rights of the copyright owner under section 106.

White Paper, *supra* note 5, app. 1 at 6.

circumvent safeguarding technology *without authority*.[166] The White Paper states that this amendment "will not eliminate the risk that protection systems will be defeated, but it will reduce it."[167]

One criticism of the White Paper's proposal to amend the Copyright Act to ban technological devices is that it is contrary to current case law.[168] In Sony Corp. of America v. Universal City Studios, Inc.,[169] a manufacturer of video cassette recorders was sued for contributory copyright infringement because its customers used the devices to copy television programs without the permission of the copyright owner. The United States Supreme Court held that "the sale of copyright equipment, like the sale of other articles of commerce, does not constitute contributory infringement if the product is widely used for legitimate, unobjectionable purposes."[170] The Court stated that such devices must only be "capable of substantial noninfringing uses."[171] The primary purpose and effect language in the proposed amendment, however, is not equivalent to the "capable of substantial noninfringing uses" language. Devices capable of substantial noninfringing uses under the Sony test may nevertheless constitute contributory infringement under the proposed amendment.[172]

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166. *Id.* at 231.

167. *Id.* at 230.

168. Letter from the American Committee for Interoperable Systems to the Working Group on Intellectual Property Rights 6 (Sept. 1994) (providing comments on the Green Paper) (on file at the U.S. Patent and Trademark Office).

169. 464 U.S. 417 (1984).

170. *Id.* at 442.

171. *Id.*

172. The White Paper states that for manufacturers that

> find themselves liable for devices which they intended for legal purposes, but which have the incidental effect of circumventing copyright protection systems, . . . the device would have to fail to be used primarily for the purpose for which it was sold, and be primarily used . . . for defeating protection systems.

White Paper, *supra* note 5, at 233 n.569. The White Paper states that while this would "occur rarely, if ever," the provision for innocent violation would possibly eliminate any damages. *Id.* The problem is that an innocent manufacturer may indeed be sued for contributory infringement. Relying on the court's discretion to "reduce or eliminate" damages does not address the more costly items of litigation expenses, time spent on

Additionally, the White Paper's proposed amendment is also overinclusive and may have adverse, unintended consequences on other devices.[173] Broadly phrased prohibitions may interfere with legitimate behavior and hamstring technology in unanticipated ways.[174]

This proposed ban could probably even prevent the sale of digital photocopying machines. The amendment "should be drafted so as to prohibit unlawful piratical activities while not deterring lawful changes in technology such as those that occur daily in the telecommunications and computer industries."[175]

Finally, copyright law may not be the proper method to use to ban technology.[176] The White Paper provides three statutory analogies in support of amending the Copyright Act to ban the manufacture of circumvention devices.[177] Not one of the statutory analogies,

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litigation matters rather than on business concerns, and lost business as a result of the litigation.

173. *See* Letter from the Broadcast Music, Incorporated to the Working Group on Intellectual Property Rights, at 31 (Sept. 1994) (providing comments on the Green Paper) (on file at the U.S. Patent and Trademark Office) [hereinafter Comments from BMI].

174. *See id.*

175. *Id.*

176. Comments from IIA, *supra* note 112, at 13.

177. The White Paper first suggests that the Copyright Act already provides similar protection. Section 1002 provides that

> [n]o person shall import, manufacture, or distribute any device, or offer or perform any service, the primary purpose or effect of which is to avoid, bypass, remove, deactivate, or otherwise circumvent any program or circuit which implements, in whole or in part, a [serial copy management system or similar system].

White Paper, *supra* note 5, at 233 (quoting 17 U.S.C. § 1002(c) (Supp. V 1993)). The second analogy is drawn from the Communications Act and provides:

> Any person who manufactures, assembles, modifies, imports, exports, sells, or distributes any electronic, mechanical, or other device or equipment, knowing or having reason to know that the device or equipment is primarily of assistance in the unauthorized decryption of satellite cable programming, or is intended for any other activity prohibited by [Section 605(a)] shall be fined not more than $500,000 for each violation, or imprisoned for not more than 5 years for each violation, or both.

Id. at 234 (quoting 47 U.S.C. § 605(e)(4) (1988)). The final analogy comes from the North American Free Trade Act (NAFTA) which provides criminal penalties to those who "manufacture, import, sell, lease or otherwise make available a device or system that is

however, uses copyright infringement to protect other safeguarding technology.[178] The White Paper should determine whether the Copyright Clause in the Constitution supports the proposed amendment before suggesting such unprecedented action.[179]

G. Copyright Management Information

The White Paper states that the use of copyright management information may be critical to the success of the information superhighway.[180] Copyright management information is information that includes the identification of the copyright owner, along with terms and conditions for using the work.[181] For digital works on the information superhighway, it is similar to an electronic "license plate."[182] The White Paper argues that copyright management information will be necessary to reduce the transaction costs for licensable uses of works.[183] Because it is anticipated that users and creators will rely on copyright management information for licensing purposes, the White Paper contends that it is vitally important to maintain the integrity of this system of information.

To protect copyright management information, the White Paper recommends that a new section be added to the Copyright Act.[184]

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primarily of assistance in decoding an encrypted program-carrying satellite signal without the authorization of the lawful distributor of such signal." *Id.* (quoting NAFTA, H.R. Doc. No. 159, 103d Cong., 1st Sess. (1993) at art. 1707(a)).

178. Comments from IIA, *supra* note 112, at 13.

179. Comments from BMI, *supra* note 171, at 31.

180. White Paper, *supra* note 5, at 235.

181. *Id.*

182. *Id.*

183. *Id.*

184. The White Paper suggests that the following new amendment be added to the Copyright Act:

> § 1202. Integrity of Copyright Management Information
>
> (a) FALSE COPYRIGHT MANAGEMENT INFORMATION.--No person shall knowingly provide copyright management information that is false, or knowingly publicly distribute or import for public distribution copyright management information that is false.
>
> (b) REMOVAL OR ALTERATION OF COPYRIGHT MANAGEMENT INFORMATION.--No person shall, without authority of the copyright owner or the law, (i) knowingly

Proposed Section 1202(c) defines "copyright management information" as any information that identifies the author, the copyright owner, and conditions for use of the work.[185] Sections 1202(a) and (b) state that no person shall provide false copyright information or remove or alter such information without authorization from the copyright owner.[186] The proposed amendment also provides for civil and criminal penalties against infringers of Section 1202.[187]

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remove or alter any copyright management information, (ii) knowingly distribute or import for distribution copyright management information that has been altered without authority of the copyright owner or the law, or (iii) knowingly distribute or import for distribution copies or phonorecords from which copyright management information has been removed without authority of the copyright owner or the law.

(c) DEFINITION.–As used in this chapter, "copyright management information" means the name and other identifying information of the author of a work, the name and other identifying information of the copyright owner, terms and conditions for uses of the work, and such other information as the Register of Copyrights may prescribe by regulation.

White Paper, *supra* note 5, app. 1 at 7.

185. *Id.* at 7.

186. *Id.* at 6-7.

187. The White Paper suggests that the Copyright Act be amended to include the following two new sections:

§1203. Civil Remedies

(a) CIVIL ACTIONS.–Any person injured by a violation of Sec. 1201 or 1202 may bring a civil action in an appropriate United States district court for such violation.

(b) POWERS OF THE COURT.–In an action brought under subsection (a), the court–

(1) may grant temporary and permanent injunctions on such terms as it deems reasonable to prevent or restrain a violation;

(2) at any time while an action is pending, may order the impounding, on such terms as it deems reasonable, of any device or product that is in the custody or control of the alleged violator and that the court has reasonable cause to believe was involved in a violation;

(3) may award damages under subsection (c);

(4) in its discretion may allow the recovery of costs by or against any party other than the United States or an officer thereof;

(5) in its discretion may award reasonable attorney's fees to the prevailing party; and

(6) may, as part of a final judgment or decree finding a violation, order the remedial modification or the destruction of any device or product involved in the violation that is in the custody or control of the violator or has been impounded under subsection (2).

In response to the White Paper's recommendation, the Copyright Office suggests that it may be premature to amend the Copyright Act to provide criminal penalties for tampering with copyright management information.[188] The development of copyright management systems is still in the planning stage and it is uncertain what form such systems will take.[189] Indeed, the White Paper states that "the copyright

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(c) AWARD OF DAMAGES.–

(1) IN GENERAL.–Except as otherwise provided in this chapter, a violator is liable for either (i) the actual damages and any additional profits of the violator, as provided by subsection (2) or (ii) statutory damages, as provided by subsection (3).

(2) ACTUAL DAMAGES.–The court shall award to the complaining party the actual damages suffered by him or her as a result of the violation, and any profits of the violator that are attributable to the violation and are not taken into account in computing the actual damages, if the complaining party elects such damages at any time before final judgment is entered.

(3) STATUTORY DAMAGES.–

(A) At any time before final judgment is entered, a complaining party may elect to recover an award of statutory damages for each violation of section 1201 in the sum of not less than $200 or more than $2,500 per device, product, offer or performance of service, as the court considers just.

(B) At any time before final judgment is entered, a complaining party may elect to recover an award of statutory damages for each violation of section 1202 in the sum of not less than $2,500 or more than $25,000.

(4) REPEATED VIOLATIONS.–In any case in which the injured party sustains the burden of proving, and the court finds, that a person has violated section 1201 or 1202 within three years after a final judgment was entered against that person for another such violation, the court may increase the award of damages up to triple the amount that would otherwise be awarded, as the court considers just.

(5) INNOCENT VIOLATIONS.–The court in its discretion may reduce or remit altogether the total award of damages in any case in which the violator sustains the burden of proving, and the court finds, that the violator was not aware and had no reason to believe that its acts constituted a violation.

§ 1204. Criminal Offenses and Penalties

Any person who violates section 1202 with intent to defraud shall be fined not more than $500,000 or imprisoned for not more than 5 years, or both.

Id. at 8-11.

188. Comments from USCO, *supra* note 60, at 18.

189. *Id.* Indeed, there are many copyright management systems under development that utilize different aspects of the digital information superhighway. *See* JOSEPH L. EBERSOLE, PROTECTING INTELLECTUAL PROPERTY RIGHTS ON THE INFORMATION SUPERHIGHWAYS, Mar. 1994, at 61-72. The American Film Marketing Association contends that the Working Group's emphasis on copyright management information is misplaced because "electronic header information on digital copies will not be sufficient to

management information associated with a work . . . may be critical to the efficient operation and success of the [information superhighway]."[190] Any amendment in this area should be withheld until a copyright management information system is firmly established.

III. CONCLUSION

In the past, copyright law was amended to offer protection to new methods of creative expression and to rectify imbalances between the interests of authors and society created by technological advances. Some argue that current copyright law is insufficient to protect works transmitted on the information superhighway. These individuals look to Congress to amend the Copyright Act to maintain the proper balance between the public's interest in free access to information and copyright owners' interests in controlling the use of their works.

The White Paper addresses potential copyright problems presented by the information superhighway by recommending certain amendments be added to the Copyright Act. Although these amendments are written concisely with specific goals in mind, there are unintended and adverse consequences that would arise from these proposals. In addition, some of the proposed amendments are unnecessary since copyright statutes, case law, and legislative history provide clear evidence of copyright protection for works on the information superhighway. As the 105th Congress considers the

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manage completely the licensing of rights on the [information superhighway]." Letter from the American Film Marketing Association to the Working Group on Intellectual Property Rights 15 (September 1994) (providing comments on the Green Paper) (on file at the U.S. Patent and Trademark Office).

190. White Paper, *supra* note 5, at 235 (emphasis added). Ironically, the White Paper later states that "[t]he accuracy of such [copyright management] information will be crucial to the ability of consumers to find and make authorized uses of copyrighted works on the [information superhighway]." *Id.*

proposed amendments to the Copyright Act, it should thoroughly analyze these changes in light of the aforementioned criticisms before enacting new legislation.

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