

When Channel Surfers Flip to the Web: Copyright Liability for Internet Broadcasting*

Baoding Hsieh Fan**

I. INTRODUCTION.....	620
II. THE REALITY OF WEBCASTING.....	622
A. <i>Digital Streaming</i>	622
B. <i>Broadcast Interest</i>	624
C. <i>Implementation Costs</i>	626
III. HISTORY OF THE COMPULSORY COPYRIGHT	629
A. <i>Cable Systems</i>	630
B. <i>Satellite Carriers</i>	631
C. <i>Online Digital Communications Services</i>	632
IV. TWO MODELS FOR INTERNET VIDEO BROADCASTING	633
A. <i>Internet TV</i>	633
1. Suitability of the Compulsory Copyright.....	634
2. Regulatory Issues	635
a. <i>FCC Carriage Regulations</i>	635
b. <i>Application to Internet TV</i>	638
3. Royalty Rates	639
4. Reluctance to Extend the Compulsory License	640

* An earlier version of this Article was awarded First Prize in the 1998 Nathan Burkan Memorial Competition at the George Washington University Law School, sponsored by the American Society of Composers, Authors & Publishers.

** Baoding Hsieh Fan, J.D., George Washington University Law School, 1999; M.S. Massachusetts Institute of Technology, 1995; B.S. Massachusetts Institute of Technology, 1994. Ms. Fan is currently an associate in the Washington, D.C. office of Dewey Ballantine LLP.

5. Alternative Schemes	643
B. <i>Video Library</i>	643
1. Future Possibilities.....	644
2. Full Copyright Liability	644
V. CONCLUSION	645

I. INTRODUCTION

This Article argues that retransmission of video and television (TV) broadcasts on Internet Web sites should benefit from some system of compulsory (or statutory) copyrights. However, the applicability of a compulsory copyright license for Internet video will depend on what model ultimately evolves. This Article proposes two possible paradigms for the future. On one hand, “Internet TV” would provide continuous, real-time retransmission of over-the-air broadcast programming in direct competition with cable or direct broadcast satellite (DBS) systems, thus necessitating a compulsory copyright scheme. On the other hand, a pay-per-view “video library” scenario can rely solely on the market to determine appropriate royalty rates in response to consumer demand.

In the last decade, the rapid growth of cyberspace has primarily resulted from two symbiotic forces—technological advancement in multimedia capability and exploitation of the vast global marketplace made possible by such developments. Society is in the midst of what some call a “convergence,”¹ where changes in regulatory and technological environments have significantly blurred the line between traditional telecommunications services and entertainment. The most well-known illustration of this phenomenon is undoubtedly the Internet.

Digital streaming has enabled real-time transmission of audio and video over the expansive network. The technology has prompted many companies to create software to enable Internet broadcasting (also known as Webcasting). Many content providers, such as television networks and sports and entertainment programmers, have jumped on the bandwagon and expressed their support for the new method of delivery.² As a result, the cyberspace experience is becoming more and more like TV everyday,

1. See, e.g., Marla Matzer, *Broadcasters Ready for ‘Convergence’ of TVs, PCs*, L.A. TIMES, Apr. 28, 1997, at D8; Frank P. Darr, *Converging Media Technologies and Standing at the Federal Communications Commission*, 7 HARV. J.L. & TECH. 1, 3 (1993).

2. For example, through a real-time custom news service for the Internet, users can sample video and audio programs produced by ABC News, CBS, Sportsline, ESPN, Fox News, and MSNBC, to name a few. See *Daily Briefing Delivers First Customized Video and Audio Newscasts over the Internet Using RealVideo*, PR NEWSWIRE, June 16, 1997, available in WESTLAW, ALLNEWSPLUS.

but with one major advantage: each viewer can potentially custom tailor what he sees and when he sees it.³

Furthermore, streaming video has the potential to “open up telecasting beyond the large corporations normally associated with broadcasting.”⁴ Anyone with a media server and a fast connection theoretically can set up his own Web site from which he can broadcast original programming or retransmit network favorites. The potential for a far greater number and diversity of participants sets the Internet broadcasting industry apart from the cable and satellite industries—each with relatively few providers.

How should such Internet broadcasts be treated in the legal world? Should the current copyright regime be modified to handle this new medium? Currently, retransmission capabilities for cable and satellite systems are secured through compulsory copyrights, as granted through legislation.⁵ In 1997, the Copyright Office issued a comprehensive review of the copyright licensing regimes governing the retransmission of over-the-air radio and television broadcast signals by cable systems, satellite carriers, and other multichannel video providers, and it recommended against a congressional grant of compulsory licensing to Internet retransmitters.⁶ In support of this opinion, the report cited the ongoing national and international debate over the major issues posed by instantaneous worldwide dissemination of broadcast signals via the Internet.⁷ A letter dated November 10, 1999, from the Register of Copyrights to the U.S. Senate Committee on the Judiciary reaffirmed this conclusion.⁸

This Article contributes to the discussion by suggesting that online programming retransmitters should also profit from some system of

3. See David Kushner, *The Communications Decency Act and the Indecent Indecency Spectacle*, 19 HASTINGS COMM. & ENT. L.J. 87, 119 (1996).

4. John M. Moran, *The Stream Team New Technology Brings Crude TV-like Video Images to PC Screens It's Still a Bit Hazy, but 'Streaming' Is the Future of On-line [sic] Video*, HARTFORD COURANT, July 10, 1997, at E1, available at 1997 WL 10975397.

5. See 17 U.S.C. § 111 (Supp. IV 1998); 17 U.S.C.A. §§ 119, 122 (West 1999) (as enacted by § 1002(a) of the Satellite Home Viewer Improvement Act of 1999).

6. See U.S. Copyright Office, *A Review of the Copyright Licensing Regimes Covering Retransmission of Broadcast Signals*, Aug. 1, 1997 [hereinafter *Copyright Report*], available at U.S. Copyright Office, *Office Reports* (visited Mar. 31, 2000) <<http://www.loc.gov/copyright/reports>>.

7. See *id.* at 98.

8. See 145 CONG. REC. S14,990-91 (daily ed. Nov. 19, 1999) (Letter from Marybeth Peters, Register of Copyrights, to Orrin G. Hatch, Chairman, Senate Committee on the Judiciary (Nov. 10, 1999)), available at (visited Mar. 31, 2000) <<http://thomas.loc.gov/cgi-bin/query/D?r106:1:./temp/~r106BxFPF1:e30729>>.

compulsory copyrights.⁹ However, it proposes that the need for a compulsory copyright license for Internet video will depend on the nature of the model that is eventually developed. For example, if Internet TV is intended to provide continuous, real-time retransmission of over-the-air broadcast programming as an alternative to cable or DBS systems, a compulsory copyright scheme would be required. On the other hand, under a pay-per-view video library scenario—whereby viewers can choose a particular program to watch and pay accordingly—the market should be able to adequately manage royalty rates in response to consumer demand, and government intervention would be neither desired nor necessary. This Article engenders widespread interest to any practitioner whose work involves Internet-related issues, as well as mass media and broadcast communications.

II. THE REALITY OF WEBCASTING

A. *Digital Streaming*

With digital streaming, users can view information in real time without having to wait for the data to download and be saved onto their machines. “No more waiting [twenty], [thirty], even [sixty] minutes to download a video clip before playing it. With streaming video, you just click and watch.”¹⁰ Streaming software establishes a “buffer” of memory in the user’s computer random access memory to which the Internet site downloads a few seconds of video or audio.¹¹ As the video or audio is played from the buffer, the Internet site replaces the played material with the next few seconds.¹² This continuous refreshing of the buffer results in a continuous real-time playback.¹³ Supporters of Webcasting believe “that

9. Because no information is ever permanently stored, current and proposed copyright protection for digital recordings is not applicable to this analysis.

10. Moran, *supra* note 4, at E1.

11. See Revision of the Cable and Satellite Carrier Compulsory Licenses, *Comment Letter No. 18*, Copyright Office Docket No. 97-1, at 3 (Apr. 28, 1997) (statement of Mark Cuban, President, AudioNet, Inc.). AudioNet, Inc. subsequently changed its name to Broadcast.com, Inc. and, following its recent acquisition by Yahoo! Inc. is currently known as Yahoo! Broadcast Services.

12. See *id.*

13. In order for Internet TV to become successfully adopted, an industry-wide standard for media formatting and compression must be adopted. Currently, most streaming video players use proprietary schemes for compressing and decompressing the video images. “A server and a workstation using incompatible competing protocols [to support the transfer and broadcast of multimedia information] cannot communicate with each other.” Lisa C. Green & John M. Mrsich, *Terms You Need to Know: Real Time Streaming Protocol*, MULTIMEDIA STRATEGIST, Oct. 1996, at 3, available in WESTLAW, TP-ALL.

these improvements will facilitate the introduction of video and audio on-demand services across the Internet and the workstation reception of what has been referred to as TV-like broadcasts.”¹⁴

RealNetworks, Inc. (formerly Progressive Networks), based in Seattle, Washington, develops and markets software products and services designed to enable users of personal computers (PCs) and other consumer electronic devices to send and receive audio, video, and other multimedia services using the World Wide Web (Web). At the National Association of Broadcasters Convention in April 1997, the company used its RealVideo technology to demonstrate the first live video broadcast of a Major League Baseball game over the Internet.¹⁵

RealNetworks claims that its newest product, RealServer 7.0, has up to 250% more capacity and more reliable client connections to deliver VHS video quality over eight hundred kilobits-per-second connections and MPEG-1 quality video at half the data rate previously needed.¹⁶ Content creators first use RealProducer to convert content into a format accessible by RealServer, and end-users install RealPlayer clients on their PCs to view the streaming media. “In their latest quarterly filing with the Securities and Exchange Commission (SEC), RealNetworks reported over [eighty] million registered users of their RealPlayer clients.”¹⁷

Microsoft says its competing Windows Media Player (WMP) is rapidly gaining acceptance, citing a PC Data Online survey that showed sixty percent of consumers who access streaming media use WMP.¹⁸ At the Streaming Media West 1999 conference in San Jose, California, then-Microsoft Chairman Bill Gates acknowledged in his keynote address that “[s]treaming media will play an increasingly visible role in business as companies make more than text-based information available on their Web and commerce sites.”¹⁹ However, so far only about nine percent of U.S. companies use streaming media technology, and the focus is on the consumer market.²⁰

14. *Id.*

15. See *Progressive Networks and Major League Baseball Test First Live Video Broadcast of Major League Baseball Game over the Internet*, PR NEWSWIRE, Apr. 8, 1997, available in WESTLAW, ALLNEWSPLUS.

16. See Jason Meserve, *RealNetworks Goes After Broadband Users*, NETWORK WORLD, Dec. 7, 1999, available at 1999 WL 16424395.

17. *Id.*

18. See *New Media: Battle for Leadership in Streaming Media Is Heating up*, COMM. DAILY, Dec. 8, 1999, at 11-12.

19. *Streaming Media Boon*, INFO. WK., Dec. 13, 1999, at 34.

20. See *id.*

Microsoft's Windows Media Software will be integrated into General Instrument Corporation's digital set-top boxes to enable streaming of audio and video content from the Internet in addition to regular cable programming.²¹ In addition, the software giant has signed a thirty million dollar investment and product deal with Internet audio and video delivery provider InterVU, Inc. to "expand InterVU's broadband streaming media network with [Microsoft's] Windows Media platform."²² Furthermore, it has enlisted over forty-five partners in "its 'Windows Media Broadband Jumpstart' initiative, which provides consumers with high-speed connections to the Internet with access to online music videos, movie trailers, full-length feature films, and CD-quality Internet radio, among other features."²³

QuickTime TV (QTV) is Apple Computer Inc.'s Internet-based network for streaming audio and video. Macintosh and Windows users can view QTV's content—including ABCNEWS.com, ESPN.com, FOXNEWS.com, CNN.com, MTV, Nickelodeon, and HBO—using Apple's QuickTime 4 player, which can be downloaded from Apple's Web site for free.²⁴

B. Broadcast Interest

Currently, Yahoo! Broadcast Services is the largest broadcast network on the Internet. Founded in 1995 as AudioNet, Inc., it provides a medium for broadcast companies to deliver multimedia content and programming to Internet audiences around the world.²⁵ The Internet broadcast network Webcasts live signals from 420 radio stations and networks, fifty-six television stations and cable networks, and game broadcasts and other programming for more than 450 college and professional sports teams.²⁶

21. See Bob Woods, *Microsoft Banking Heavily on Streaming Media—Gates*, NEWSBYTES, Dec. 7, 1999, available at 1999 WL 29943747; Richard Tedesco, *Streaming from San Jose . . .*, BRDCST. & CABLE, Dec. 13, 1999, at 111.

22. Bob Woods, *Microsoft Furthers Broadband Streaming Strategy*, NEWSBYTES, Dec. 20, 1999, available in WESTLAW, NEWSBYTE.

23. *Id.*

24. See Ken Woo, *QuickTime Channels Include Leo DiCaprio Film Fest*, NEWSBYTES, Nov. 9, 1999, available at 1999 WL 20022123.

25. See *AudioNet to Accelerate Adoption of New Multimedia Streaming Standard*, PR NEWswire, Aug. 5, 1997, available in WESTLAW, ALLNEWSPLUS; *AudioNet to Broadcast Live Audio & Video Coverage of NAB' 97 Featuring Microsoft*, PR NEWswire, Apr. 7, 1997, available in WESTLAW, ALLNEWSPLUS.

26. See Yahoo!, *Yahoo! Broadcast* (visited Mar. 31, 2000) <<http://www.broadcast.com/>>.

Other, more traditional broadcast networks have ventured directly into Webcasting as well. For example, CNN and Fox News have several streaming-video clips for viewing on their Web sites.²⁷ ABCNews.com has archived Webcasts of the Millennium celebrations, and MSNBC.com streams news reports twenty-four hours a day. This is only a small sampling of the video content available on the Internet today. Merrill Brown, Editor-in-Chief of MSNBC.com, stated:

The leaders in Internet news will increasingly be making their offering vastly more videocentric than it is today. We're just about at the end of the first generation of Internet news, which is text- and photo-based, and we're moving very rapidly to the next few years, which will be more video-based.²⁸

According to a media analyst, "as the quality of video streaming through the Internet and the quality of content each advance, AOL could as readily deliver pay-per-view movies, sitcoms[,] and news as it delivers online stock quotes."²⁹ Panelists at the October 1999 DTV Summit/Digital Hollywood conference urged attendees to "begin production, archiving[,] and streaming of video over [the] Web now, and scale up as [the] Internet pipe widens."³⁰

Not everyone, however, is excited about the prospect of streaming video on the Internet—an ironic indication of the technology's future economic viability. At the September 1999 National Association of Telecom Officers & Advisers conference, Comcast Cable President Stephen Burch said that Comcast is "taking very seriously [the] threat from streaming video, which he said could allow major networks, such as ESPN, to 'completely bypass cable' by showing events such as football games only over [the] Internet."³¹ Cable operators Excite@Home and Road Runner insist that their policies of preventing subscribers from downloading more than ten minutes worth of broadcast-quality streaming video prevents drag on server capacity bandwidth; but critics charge that they simply do not want subscribers "to be able someday to get A&E or

27. See Fox, *FoxNews.Com* (visited Mar. 31, 2000) <<http://www.foxnews.com/>>; CNN, *CNN.com* (visited Mar. 31, 2000) <<http://www.cnn.com/>>.

28. Karissa S. Wang, *Will Local News Rule the Next Millennium? In the Digital Future, Local 24-hour News Could Be the Norm*, ELECTRONIC MEDIA, Dec. 20, 1999, at 18 (quoting Merrill Brown).

29. John M. Higgins, *'Net Pulls Tighter Around Cable: Operators Warned that 'Forced Access' Jeopardizes Their Video and Phone Services*, BRDCST. & CABLE, Dec. 20, 1999, at 4.

30. *Online Video's Potential Debated at L.A. Summit*, CONSUMER MULTIMEDIA REP., Oct. 18, 1999.

31. *Comcast Says Franchise Swaps Will Quiet After Next Year*, WARREN'S CABLE REG. MONITOR, Sept. 20, 1999, available at 1999 WL 6826149.

CNN cable over the Internet and drop their basic cable subscriptions.”³² Speaking at the December 1999 Western Cable Show, Leo Hindery, then-Chairman of Global Crossing’s GlobalCenter Internet services unit and ex-AT&T Broadband & Internet Services President, described streaming as a “grave threat;” therefore, restrictions on access to cable systems are “important to the lifeblood of the [cable] industry.”³³

C. Implementation Costs

Unlike cable and satellite, the Internet is not constrained by limitations on channel capacity in the case of cable or frequency spectrum in the case of satellite communications.³⁴ Because it is essentially a vast interconnected network, the Internet can potentially carry an infinite number of Web sites. Furthermore, although an individual Web server may be able to carry only a certain maximum number of video channels, a Webcaster could employ multiple Web servers to achieve, in theory, limitless capacity.

Despite the developments toward TV-quality pictures on the Web, however, Internet TV is still in the future. The arrival of true Internet video broadcasting will depend on other factors, including “higher-bandwidth access to the Internet from the home; improvements to the Internet network and equipment; new techniques and standards for reducing the vast amount of data that video entails; business and revenue models to justify the enormous spending; and reaching enough customers to achieve economies of scale.”³⁵

Nonetheless, bandwidth limitations and connectivity issues will cease to be significant concerns as communications technology, processing speed, and physical hardware improve to increase transmission rates and reduce the likelihood of bottlenecks and delays.³⁶ Squeezing a video stream and the accompanying soundtrack through a 28.8 Kbps modem connection is a formidable challenge, but innovations such as the cable modem and digital telephone lines will ameliorate bandwidth problems.³⁷ An industry analyst is optimistic that the “cable industry can offer high-speed Internet

32. Higgins, *supra* note 29, at 4.

33. *Id.*

34. *Cf.* Turner Brdcst. Sys., Inc. v. FCC, 512 U.S. 622, 639 (1994) (finding that cable television does not “suffer from the inherent limitations that characterize the broadcast medium”).

35. Joan Van Tassel, *Countdown to 2006: PC to TV, BRDCST. & CABLE*, Aug. 11, 1997, at 48.

36. *See* Moran, *supra* note 4, at E1.

37. *See id.*

service to [ninety percent] of the population by 2006.”³⁸ Copper-wire telephone networks may provide another solution through digital subscriber line technologies, as well as wireless local multipoint distribution service operators in areas with large populations.³⁹ Further advances in digital compression also will reduce the bandwidth required.

iBeam Broadcasting uses a satellite to deliver its signals to approximately sixty competitive local exchange carriers and Internet service providers around the country to ensure signal clarity for the end users viewing the Webcasts.⁴⁰ Similarly, RealNetworks has partnered with Loral Cyberstar to launch a trial offering of satellite-based audio and video-streaming media services to customers of European Internet service providers.⁴¹

Future HomeRF-based products will likely facilitate broadband Internet access as well. “The HomeRF standard is an open specification supported by more than [one hundred] member companies to deliver a broad spectrum of affordable, interoperable consumer devices capable of both toll-quality voice and high-speed data networking.”⁴²

The multicast protocol can speed up transmission by using dedicated backbone networks.⁴³ In this point-to-multipoint distribution method, the video is broadcast once on the dedicated backbone to the lowest level server possible—typically, the local server where the user has dialed.⁴⁴ Streams are then dispersed to individual PCs. “While multicast [will not] relieve the demand in the local loop, it will reduce congestion on the backbone and intermediate links.”⁴⁵ iBeam claimed its multicasting model for Internet video could deliver up to three hundred thousand simultaneous video streams (at 28.8 Kbps) for its inaugural Chris Isaak concert in October 1999.⁴⁶

38. Van Tassel, *supra* note 35, at 48. Cable systems, however, have been largely resistant to government-mandated access to their networks for Internet providers. *See, e.g.*, Bill McConnell, *Kennard Fires Shot at Cable: Warns that Consumers Could Rebel over Broadband Access Issue—Recalls Boston Tea Party*, BRDCST. & CABLE, Dec. 20, 1999, at 5. The debate over such so-called “open access” is beyond the scope of this Article.

39. *See* Van Tassel, *supra* note 35, at 48.

40. *See* Richard Tedesco, *iBeam Net Streams*, BRDCST. & CABLE, Oct. 11, 1999, at 90.

41. *See* RealNetworks, *Loral Cyberstar Join Forces on Internet Effort*, SATELLITE TODAY, Dec. 17, 1999, available at 1999 WL 14640020.

42. *Proxim and Next Level Communications to Deliver High-speed Wireless Services to Consumers Via HomeRF Industry Standard*, CAMBRIDGE TELECOM REP., Dec. 20, 1999, available at 1999 WL 8104923.

43. *See* Van Tassel, *supra* note 35, at 48.

44. *See id.*

45. *Id.*

46. *See* Tedesco, *supra* note 40, at 90.

RealNetworks's approach to broadband has been to provide developers with the ability to deliver the same file at four different access rates, ranging from twenty-eight kilobits per second to a few hundred kilobits per second. In this way, "content suppliers can serve the mass market of dial-up users, while offering a higher-quality audio/video feed to those with high-speed access."⁴⁷

Streaming video technology additionally has spurred a new breed of companies offering Internet caching or content-delivery services. Putting copies of the content in caching devices that are close to the end users improves the performance of Web sites because "[t]he end user calls up the local copy rather than pulling the information from the originating server located somewhere across the Internet."⁴⁸ Another alternative is to use "private networks and various proprietary systems to distribute the data directly to server computers close to consumers, avoiding most of the Internet itself."⁴⁹ Akamai, Digital Island, Mirror Image, Microcast, and Sandpiper Networks are just a few of the streaming video companies competing for content providers.⁵⁰

Furthermore, improvements in computer hardware and set-top devices will be needed to handle multimedia applications. For example, Intel's Pentium processor chip with MMX technology was specifically designed to enable improved decompression and display of video and audio clips by PCs. According to a Pentium products manager for Intel, "[t]he basic computing power is now in the processor to allow a mainstream computer to do this."⁵¹

Finally, upgrading the complex public Internet infrastructure will require significant investment by Internet service providers who, with limited budgets, are buying routers and "servers that will support large numbers of users receiving audio and video streams."⁵² Residential service will likely come piecemeal—first to densely populated areas and

47. Fred Dawson, *RealNetworks Beefs up to Stave Off Competitors*, MULTICHANNEL NEWS, Nov. 15, 1999, at 55.

48. Carolyn Duffy Marsan, *Cashing in on Internet Caching Services Sandpiper, Akamai, Digital Island and the Like Speed Web Content Delivery*, NETWORK WORLD, Oct. 25, 1999, at 40, available at 1999 WL 11620713.

49. Joel Brown, *Log-on Logjam: With Streaming Media's Success Comes Traffic*, ELECTRONIC MEDIA, Dec. 6, 1999, at 36.

50. *See id.*; see also Karissa S. Wang, *Streaming into NATPE*, ELECTRONIC MEDIA, Jan. 3, 2000, at 42-43.

51. Moran, *supra* note 4, at E1.

52. Van Tassel, *supra* note 35, at 48.

communities with a high penetration of PCs, and then gradually across the United States.⁵³

III. HISTORY OF THE COMPULSORY COPYRIGHT

In response to two Supreme Court decisions that had held that cable retransmission of broadcast signals did not constitute copyright infringement under the 1909 Copyright Act,⁵⁴ Congress amended the Copyright Act in 1976 to specify that retransmissions of broadcast signals—either local or distant, network or independent—are public performances and, therefore, fall within the exclusive rights granted by copyright protection. Section 111⁵⁵ subjects secondary transmissions by cable systems to copyright liability by means of a compulsory license⁵⁶ and payment of statutory license fees for certain retransmissions.⁵⁷ Later, in order to facilitate the home satellite dish business, Congress passed the Satellite Home Viewer Act of 1988, which created the satellite carrier compulsory license.⁵⁸

A fundamental principle of copyright is that copyrighted works should not be exploited without the consent of the copyright owners.⁵⁹ The cable and satellite compulsory licenses are exceptions to this principle.⁶⁰ A compulsory license “represents a derogation from the basic copyright principles embodied in the Copyright Act that ensure to copyright owners the right to control the use of their creations.”⁶¹ The cable and satellite compulsory licenses comprise a statutory copyright licensing scheme

53. *See id.*

54. *See* *Fortnightly Corp. v. United Artists TV, Inc.*, 392 U.S. 390 (1968) (holding community antenna television systems (CATV), which convert signals from television stations and retransmit them to subscribers, fall within the category of viewers and do not infringe the copyright); *Teleprompter Corp. v. CBS, Inc.*, 415 U.S. 394 (1974) (holding that reception and retransmission of nondistant signals does not constitute copyright infringement by CATV, cable’s predecessor).

55. *See* 17 U.S.C. § 111 (Supp. IV 1998).

56. On November 29, 1999, Congress enacted the Satellite Home Viewer Improvement Act of 1999 (SHVIA) as Title I of the Intellectual Property and Communications Omnibus Reform Act of 1999, which Congress enacted as part of the District of Columbia Appropriations Act 2000. Pub. L. No. 106-113 (113 Stat. 1501, 1536). Section 1011 of the SHVIA struck all references to “compulsory” in section 111 and replaced them with “statutory.” This Article uses the terms interchangeably.

57. In general, Congress limited the copyright liability of cable television systems under the compulsory license to the retransmission of distant nonnetwork programming. Cable systems may essentially carry local signals for free.

58. *See* 17 U.S.C.A. § 119 (West 1999).

59. *See Copyright Report, supra* note 6, at 12.

60. *See id.*

61. Cable Compulsory License; Definition of Cable Systems, 56 Fed. Reg. 31,580, 31,582 (1991) (codified at 37 C.F.R. § 201.17 (1999)).

whereby copyright owners are required to license their works to cable systems and satellite carriers at a government-fixed price and under government-set terms and conditions.⁶²

Under the cable compulsory license, a cable system may “intercept over-the-air television and radio broadcast signals (comprised of copyrighted programming)” and “retransmit the signals to its subscribers who pay a fee for such service.”⁶³ The satellite carrier compulsory license allows a satellite carrier to intercept broadcast television (but not radio) signals and retransmit the signals to satellite home dish owners for their private home viewing.⁶⁴ Neither the cable compulsory license nor the satellite carrier compulsory license for local television signals has a sunset provision; however, the satellite carrier compulsory license for Public Broadcasting Service satellite feeds is scheduled to expire on January 1, 2002,⁶⁵ and the compulsory license for superstation and distant signals is scheduled to expire on December 31, 2004.⁶⁶

A. Cable Systems

In establishing the cable compulsory license in section 111, Congress noted that otherwise “it would be impractical and unduly burdensome to require every cable system to negotiate with every copyright owner whose work was retransmitted by a cable system.”⁶⁷ Congress set the payment rates at a “modest” level so as not to “retard the orderly development of the cable television industry or the service it provides to its subscribers.”⁶⁸ The D.C. Circuit Court of Appeals reiterated this in *NBC v. Copyright Royalty Tribunal*:⁶⁹ “The purpose of this regulatory structure is to facilitate the exploitation of copyrighted materials by removing the prohibitive transaction costs that would attend direct negotiations between cable operators and copyright holders, while at the same time assuring copyright holders compensation for the use of their property.”⁷⁰

Congress also made a distinction in section 111 between local and distant broadcast signals. It concluded that a cable operator’s local retransmission of local broadcast signals did not affect the value of the

62. See 17 U.S.C. § 111 (Supp. IV 1998); 17 U.S.C.A. §§ 119, 122 (West 1999) (as enacted by § 1002(a) of the SHVIA).

63. *Copyright Report*, supra note 6, at 3.

64. See *id.*

65. See 17 U.S.C.A. § 119(a)(1) (West 1999) (as amended by § 1006(a) of the SHVIA).

66. See *id.* § 119(c)(2)(D) (as amended by § 1003 of the SHVIA).

67. H.R. REP. NO. 94-1476, at 89 (1976), reprinted in 1976 U.S.C.A.N. 5659, 5704.

68. *Id.* at 91.

69. 848 F.2d 1289 (D.C. Cir. 1988).

70. *Id.* at 1291.

works transmitted because the signals were already free to the public over-the-air.⁷¹ An increase in the advertising revenue base from “expansion of the scope of the dissemination due to the retransmission” would enable copyright owners to “negotiate with the broadcaster to receive appropriate compensation.”⁷² As a result, the compulsory license essentially allows cable systems to carry local signals for a *de minimis* fee.⁷³ Similarly, retransmission of network signals causes no injury to copyright holders. Because advertisers on national network television expect to reach audiences nationwide and pay accordingly, networks will be willing and able to fully compensate the copyright holders.⁷⁴

On the other hand, retransmission of nonnetwork programming to distant audiences who would not otherwise be able to receive the broadcast signals does harm copyright owners. Because local advertisers will not pay extra to reach viewers who cannot reasonably be expected to patronize their businesses, the revenue base from which to compensate the copyright owners “understates the value of the use of the materials, and the copyright holders would, absent an adjustment mechanism, be undercompensated.”⁷⁵ Therefore, with regard to the retransmission of nonnetwork programming to distant markets, Congress requires cable systems utilizing the cable compulsory license to pay royalties for each signal they carry to distant audiences.

B. Satellite Carriers

The satellite compulsory license allows satellite carriers to retransmit a local television station’s signals into the station’s local market.⁷⁶ The license also permits superstation signals to home dish owner subscribers located anywhere in the United States⁷⁷ but limits retransmission to

71. See H.R. Rep. No. 94-1476, at 91, *reprinted in* 1976 U.S.C.C.A.N. at 5705.

72. *Cablevision Sys. Dev. Co. v. Motion Picture Ass’n of Am., Inc.*, 836 F.2d 599, 603 (D.C. Cir. 1988).

73. See H.R. Rep. No. 94-1476, at 90, *reprinted in* 1976 U.S.C.C.A.N. at 5704.

74. See *Cablevision Sys. Dev. Co.*, 836 F.2d at 603.

75. *Id.*

76. The extension of a royalty-free compulsory license for local television signals was recently added by the SHVIA. See 17 U.S.C.A. § 122(a) (West 1999) (*as enacted by* § 1002(a) of the SHVIA); *see also supra* note 56. Congress, however, severely conditioned the license by requiring satellite carriers to carry every local TV station in all the markets they serve by January 1, 2002. See 47 U.S.C.A. § 338(a)(3) (West 1999) (*as enacted by* § 1008(a) of the SHVIA). In addition, the carriers are forbidden from retransmitting any programming on a superstation that duplicates a local affiliate’s programming. See 47 U.S.C.A. § 339(b) (West 1999) (*as enacted by* § 1008(a) of the SHVIA).

77. 17 U.S.C.A. § 119(a)(1) (West 1999) (*as amended by* § 1005(e) of the SHVIA).

“unserved households” to no more than two distant network signals.⁷⁸ Unserved households are those that cannot receive an over-the-air signal of Grade B intensity (as defined by the Federal Communications Commission (FCC)) of a network station using a conventional, stationary, outdoor rooftop antenna, and that have not received the signal from a cable system within the previous ninety days.⁷⁹

After the amendment of the satellite carrier compulsory license in 1994, Congress adopted a fair market value standard for adjusting the royalty rates of the satellite license.⁸⁰ In 1999, Congress reduced the royalty fees by thirty percent for superstation signals and by forty-five percent for distant signals.⁸¹

C. *Online Digital Communications Services*

Before its eventual passage, the Satellite Home Viewer Improvement Act of 1999 (SHVIA) had carried a provision that could have summarily curtailed the Internet video streaming industry’s access to broadcast content. Language added to the Senate/House conference report would have excluded “online digital communications services” from compulsory licenses.⁸² However, a last-minute compromise agreement removed that language and used report language to indicate that nothing in the new law would affect how online communications services are treated.⁸³ Thus, the debate continues.⁸⁴

78. *Id.* § 119(a)(2)(B)(i) (as amended by § 1005(a)(2) of the SHVIA).

79. *See id.* § 119(d)(10) (as amended by § 1005(a)(1) of the SHVIA).

80. *See Copyright Report, supra* note 6, at 9; 17 U.S.C.A. § 119(c)(3)(B).

81. *See* 17 U.S.C.A. § 119(c)(4)(A)-(B).

82. Carl Weinschenk, *Streams of Dispute—Content Providers, Video Streamers Draw Sides Over Access*, TELE.COM, Dec. 6, 1999.

83. Senator Hatch stated:

I would point out that none of this [the definition of a qualifying “cable system” or a “satellite carrier”] is affected by the fact that in any earlier version of this legislation, there were technical amendments that would have affected these definitions. Those particular amendments do not appear in this legislation, and neither their inclusion in the earlier version nor their omission here has any legal significance.

....

. . . . Certainly under current law, Internet and similar digital online communications services are not, and have never been, eligible to claim the cable or satellite compulsory licenses created by sections 111 or 119 of the Copyright Act.

145 CONG. REC. S14,990 (daily ed. Nov. 19, 1999) (statement of Sen. Hatch).

84. Senate Judiciary Committee Chairman Orrin Hatch and the committee’s ranking member Patrick Leahy promised hearings in the coming year. *See* Paige Albiniak, *Copyright Fears Flourish: Broadcasters Vow to Stop Distribution of Their Signals over the Web*, BRDCST. & CABLE, Dec. 13, 1999, at 78. On February 16, 2000, W.J. (Billy) Tauzin,

IV. TWO MODELS FOR INTERNET VIDEO BROADCASTING

The technology is well under way toward realization of Internet broadcasting of video. However, notwithstanding the further advancements necessary to achieve the full capabilities of streaming media, what is missing is a business model for the residential market.⁸⁵ What will be the role of advertisers? What kind of service will be offered?

A. *Internet TV*

One model for the future of Internet video broadcasting envisions the PC as nothing more than a sophisticated TV, with the complex telecommunications network of the Internet serving up programming instead of the closed-loop wired cable system or the home satellite dish.⁸⁶ The service could be funded from subscription fees. One noticeable advantage of these passive broadcasts (Internet TV) over cable and DBS services would be the potentially infinite channel offerings to the consumer and the far more expansive reach of the Webcasters and program creators.⁸⁷

It is unlikely, however, that the average American household will gather around the home computer to watch their favorite network programs instead of simply flipping on the family room TV.⁸⁸ Granted, a PC can be used for many other—perhaps even more useful—things, but for purely passive viewing purposes, one would probably invest in the convenience

Chairman of the House Telecommunications, Trade, and Consumer Protection Subcommittee, convened a hearing, *Video on the Internet: iCrave TV.com and Other Recent Developments in Webcasting*. Appearing before the Subcommittee were representatives of broadcasting and copyright holders' interests, as well as members of the Internet industry. While lawmakers and witnesses alike agreed on the benefits and growing popularity of streaming media, the general consensus which emerged from the hearing was that legislative intervention is not currently necessary nor advised. See *Internet Companies See No Need for Compulsory License—Yet*, COMM. DAILY, Feb. 17, 2000, at 4-5.

85. Corporations, with their faster networks, are already finding uses for streaming video on their intranets, including training, employee communications, and customer support. For example, Federal Express Corp. is "implementing a system that will stream a live status report on the express-delivery company's transportation system to 1,300 sites worldwide." Justin Hibbard, *Full Stream Ahead—Streaming Video Moves to the Intranet for More Effective Training, Clearer Communication, and More-responsive Decision Making*, INFORMATION WK., Sept. 15, 1997, at 14.

86. This scenario is not to be confused with one where a tuner affixed to a PC would enable one to receive analog or digital over-the-air broadcast signals. Here, the video stream comes directly off a site on the Internet.

87. As stated earlier, because the Internet is not limited to physical constraints such as finite electromagnetic spectrum or cable bandwidth, its channel capacity is potentially unbounded. See *supra* Part II.C.

88. A senior vice-president at CBS stated: "People want to watch TV . . . in a La-Z-Boy, not in a straight-backed chair on a 14-inch workstation." Paul Davidson, *Must-see PC? Lines Blurring Between TV and Computers*, USA TODAY, Nov. 17, 1997, at 9E.

and familiarity of a big-screen TV rather than buy a souped-up computer and a large monitor for his entertainment center. Therefore, the true value of Internet TV will depend on whether or not it can spawn original programming that cannot be seen anywhere else.

Should the public embrace these online alternatives to the major networks, Webcasters may become a competitive substitute for cable/satellite by providing similarly packaged services. Given a scenario where Internet TV participates in secondary retransmissions of over-the-air signals as part of its business plan, a compulsory copyright would be necessary. Furthermore, as a matter of regulatory parity, Internet TV might then fall under the auspices of FCC restrictions such as must-carry, retransmission consent, and syndicated exclusivity rules.

1. Suitability of the Compulsory Copyright

Many of the reasons for awarding compulsory copyrights to cable and satellite apply to Internet broadcasting, and as such, the exception to copyright exclusivity should be extended to this new medium. This is an incipient industry that needs incentives to spur development. Individual negotiations with each copyright owner would be burdensome at this point. As with the cable and satellite industries, it takes time to develop the technology and to penetrate the marketplace such that a substantial number of consumers will be able to receive the broadcasts and a subscriber/advertising base can be established.

Copyright owners may want to get into the Webcasting business themselves, but they should not be allowed to hoard programming that has already been broadcast over the air with the effect of precluding only new entrants into the retransmission market. As the broadcasting industry consolidates⁸⁹ and program producers join together to extend their business reach into broadcasting on Internet systems,⁹⁰ comparatively small Internet

89. See Jim Chen, *The Last Picture Show (On the Twilight of Federal Mass Communications Regulation)*, 80 MINN. L. REV. 1415, 1420, 1458, 1489-91 (1996) (noting concentration and consolidation in mass communications and mergers involving the networks); Symposium, *Current Issues in Telecommunications Law and Cable Television*, 6 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 517, 523-24 (1996) (comments of Antoinette Cook Bush, forecasting "continued consolidation and vertical integration in the broadcast industry"); Jill Howard, Comment, *Congress Errs in Deregulating Broadcast Ownership Caps: More Monopolies, Less Localism, Decreased Diversity and Violations of Equal Protection*, 5 COMM.LAW CONSPECTUS 269, 280 (1997); Lili Levi, *Not With a Bang But a Whimper: Broadcast License Renewal and the Telecommunications Act of 1996*, 29 CONN. L. REV. 243, 270-71 (1996).

90. See, e.g., *ABC TV's Official Site* (visited Mar. 31, 2000) <<http://www.abc.com>>; *CBS's Home* (visited Mar. 31, 2000) <<http://www.cbs.com>>; *Fox News* (visited Mar. 31, 2000) <<http://www.foxnews.com>>; *MSNBC* (visited Mar. 31, 2000) <<http://www.msnbc.com>>.

broadcasters may be intentionally shut out from obtaining rights to programming. This could hamper entrepreneurship in licensing a wide variety of local programming over the Internet. Furthermore, the public benefits from having multiple and numerous other Web sites from which it can view programming. This distributes network traffic and leads to greater access and improved performance quality.

Subscription Internet TV could conceivably derive its compulsory license from the cable compulsory license. Internet-based retransmission schemes arguably fit within the expansive definition of a “cable system” under section 111(f).⁹¹ Given specific restrictions, Webcasters who want to benefit from the cable compulsory license could structure their operations to simulate a cable system’s geographical constraints in order to enforce localization of Webcasts. Internet TV could target audiences by limiting Web site subscription to those who reside in a particular geographic area. Internet TV could also be subject to 17 U.S.C. § 111(e)’s rules regarding nonsimultaneous transmissions.⁹² In fact, availability of local programming via the Internet will actually strengthen local broadcasting by making its programming available to a potentially wider audience.

2. Regulatory Issues

There is a strong relationship between copyright law and federal communications policies, and FCC regulatory requirements could be imposed on Internet broadcasting in order to ensure regulatory parity. For example, just as the cable compulsory license is conditioned on compliance with FCC carriage regulations,⁹³ the compulsory copyright license for Internet broadcasting could face similar limitations.

a. *FCC Carriage Regulations*

Congress has directed the FCC to promote “localism” in the broadcast industry to ensure that “all communities of appreciable size” have their own voices “as an outlet for local self-expression.”⁹⁴ Consequently, the

msnbc.com>.

91. Under section 111(f), a “cable system” is defined as:

a facility, located in any state . . . that in whole or in part receives signals transmitted or programs broadcast by one or more television stations licensed by the Federal Communications Commission, and makes secondary transmissions of such signals or programs by wires, cables, microwaves, or other communications channels to subscribing members of the public who pay for such service.

17 U.S.C. § 111(f) (Supp. IV 1998).

92. *See id.* § 111(e).

93. *See id.* § 111(b)(2).

94. *United States v. Southwestern Cable Co.*, 392 U.S. 157, 173-74 (1968) (footnote

FCC has structured its regulations in order to promote strong network/affiliate relationships. The broadcast networks—ABC, CBS, NBC, and FOX—have partnered with affiliated television stations in markets across the country to offer a unique mix of national programming produced by the networks, local programming produced by the stations, and syndicated programs acquired by stations from third parties.

The local network affiliates derive most of their revenue from selling local advertising time during network programs, which often command large audiences.⁹⁵ “Network programs also provide important ‘lead-in’ audiences to local news shows (such as ‘11 O’Clock News’) and other non-network [sic] programs.”⁹⁶ In order to ensure that new retransmission systems do not import duplicative network programming from distant markets, the FCC has imposed network nonduplication rules on cable systems.⁹⁷ Importing another network signal from a distant, larger market can threaten to attract the audience of the local network station and undermine the value of network programming both to the affiliate and to the network.⁹⁸

Before 1980, the FCC also restricted cable systems in the number of distant signals they could carry (the distant signal carriage rules) and required them to black-out programming on a distant signal where the local broadcaster had purchased the exclusive rights to that same programming (the syndicated exclusivity or syndex rules).⁹⁹ In 1980, however, the FCC took a decidedly deregulatory stance toward the cable industry in the interests of expanding program diversity, and it eliminated the distant signal carriage rules and the syndex rules.¹⁰⁰ Cable systems could now import as many distant signals as they desired. However, large cable operators still needed to pay an additional fee known as a syndex surcharge when the programming appearing on a distant signal imported by the cable system would have been subject to black-out protection under the FCC’s

omitted).

95. See Revision of the Cable and Satellite Carrier Compulsory Licenses, *Comment Letter No. 39*, Copyright Office Docket No. 97-1, at 20 (Apr. 28, 1997) (comments and testimony of the National Association of Broadcasters).

96. *Id.*

97. See generally 47 C.F.R. §§ 76.92-76.97 (1998) (governs nonduplication protection and syndicated exclusivity).

98. See Amendment of Parts 73 and 76 of the Comm’n’s Rules Relating to Program Exclusivity in the Cable and Brdcast. Indus., *Report and Order*, 3 F.C.C.R. 5299, 5319 (1988).

99. See *Malrite TV v. FCC*, 652 F.2d 1140 (2d Cir. 1981), *cert. denied*, *National Football League, Inc. v. FCC*, 454 U.S. 1143 (1982).

100. See *Malrite TV*, 652 F.2d at 1145.

former syndex rules.¹⁰¹ This surcharge has essentially been eliminated in recent years due to the FCC's adoption of a new set of syndicated exclusivity blackout rules for certain circumstances.¹⁰²

Furthermore, in the Cable Television Protection and Competition Act of 1992, Congress outlined reasons why cable systems must carry all qualified local commercial television stations. Among them were the government's interest in providing a fair, efficient, and equitable distribution of free broadcast services and the local origination of programming.¹⁰³ The "must-carry rules" mandate the retransmission by cable operators of local broadcast signals and are codified by the FCC in 47 C.F.R. §§ 76.55-76.64.¹⁰⁴ The Supreme Court recently found the rules constitutional in *Turner Broadcasting System, Inc. v. FCC*.¹⁰⁵

Must-carry rules are already incorporated into copyright policies. Section 111(c)(3)¹⁰⁶ conditions the availability of the compulsory license on the system's retransmitting the works transmitted by the station (along with any commercial advertising and station announcements) in their entirety, without change, deletion, or addition and on compliance with FCC rules.¹⁰⁷

The counterparts to the FCC's must-carry rules are statutory provisions governing retransmission consent. Under the retransmission consent rules, cable systems and other multichannel video programming distributors (such as satellite carriers) may not "retransmit the signal of a broadcasting station . . . except—(A) with the express authority of the originating station."¹⁰⁸ Television stations must elect between the right to grant retransmission consent and the must-carry right.¹⁰⁹ The availability of

101. See *Copyright Report*, *supra* note 6, at 8.

102. See 47 C.F.R. § 76.151 (1999).

103. See Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, § 2(a)(9), (10), (11), 106 Stat. 1460, 1461.

104. See 47 C.F.R. §§ 76.55-76.64 (1999).

105. 520 U.S. 180 (1997).

106. See 17 U.S.C. § 111(c)(3) (Supp. IV 1998).

107. The section 111 compulsory license has been extended to other competing multichannel video distributors like satellite master antenna television systems (SMATV) and multipoint multichannel distribution service (MMDS) that have not been subject to must-carry rules. These distribution systems do not generally have substantial channel capacity, nor are they backed by significant financial resources. See Revision of the Cable and Satellite Carrier Compulsory Licenses, *Comment Letter No. 12*, Copyright Office Docket No. 97-1, at 4 n.4 (Apr. 28, 1997) (testimony of Comcast Cable Communications, Inc.).

108. 47 U.S.C.A. § 325(b)(1)(A) (West 1998) (*as amended by* § 1009(a)(1) of the SHVIA).

109. See *id.* § 325(b)(3)(B) (*as amended by* § 1009(a)(2) of the SHVIA).

a choice between retransmission consent and must-carry does not modify the compulsory copyright license.¹¹⁰

In order to ensure that satellite carriers compete on a level playing field with cable systems, the recently enacted SHVIA created new sections 338 and 339 of the Communications Act of 1934, respectively entitled Carriage of Local Television Signals by Satellite Carriers and Carriage of Distant Television Stations by Satellite Carriers. The former imposes the must-carry rules,¹¹¹ and the latter directs the FCC to apply current cable rules for network nonduplication, syndicated program exclusivity, and sports blackout to satellite carriers.¹¹² The FCC has since issued a Notice of Proposed Rulemaking seeking comment on the implementation of such regulations.¹¹³

b. Application to Internet TV

Must-carry, retransmission consent, and other FCC rules on network nonduplication, sports blackout, program access, and channel set-asides for public, educational, governmental, and commercial leased access channels could be extended to Internet broadcasters in order to preserve localism and exclusivity. Local market areas could be isolated according to must-carry rules and the FCC's definition of a station's television market.¹¹⁴ There should be no physical constraints preventing Internet broadcasters from carrying all local channels in every market in which Internet access is available. In addition, such regulatory requirements should not unduly strain financial resources as long as demand exists for packaged services that include local channels.

In order to optimize transmission speed, Web servers could be distributed geographically according to the local markets served. Potential viewers could be required to view programming only after first registering on the site. Personal address information would be collected for the billing and verification of the subscriber's location. Accounts would be established and access passwords mailed to the listed address. Notwithstanding subscriber fraud, this system could be reasonably successful in limiting a particular Webcaster's audience.¹¹⁵

110. *See id.* § 325(b)(6).

111. *See id.* § 338(a)(1) (West 1999) (as enacted by § 1008(a) of the SHVIA).

112. *See id.* § 339(b) (as enacted by § 1008(a) of the SHVIA).

113. *See* Implementation of the Satellite Home Viewer Improvement Act of 1999, *Notice of Proposed Rulemaking*, CS Docket No. 00-2 (Jan. 7, 2000), available at (visited Mar. 31, 2000) <<http://www.fcc.gov/Bureaus/Cable/Notices/2000/fcc00004.txt>>.

114. *See* 17 U.S.C. § 111(f) (Supp. IV 1998).

115. The Canadian company iCraveTV.com allowed consumers to click on its Web site menu for 17 Toronto channels, including ABC, NBC, and CBS affiliates in Buffalo, New

In any case, compliance with regulatory conditions should be enforced not only by copyright owners but also by local stations in the market.¹¹⁶ By labeling retransmitters who allow program leakage as “infringers” under 17 U.S.C. § 501, Congress gave the retransmitters the burden of undertaking sufficient security measures to prevent leakage.

3. Royalty Rates

Because section 111(c)(3) subjects a cable system to full liability in the event that it willfully alters the content of a primary transmission by changing, deleting, or adding commercial advertisements,¹¹⁷ in order to benefit from a statutory copyright license, Internet TV will—like cable and satellite systems—most likely obtain revenue from subscriber fees. Current Internet broadcasters rely on advertising space on their Web pages, based on the number of anticipated hits or visits to their sites.¹¹⁸ However, it is unclear whether such Web site advertising, in addition to the already commercially packaged over-the-air broadcast transmissions, would be well received by viewers. Notwithstanding market acceptance of such a service, particular Web site advertising may constitute an “addition” that triggers full liability under section 111(c)(3).

While a customer base is being cultivated, rates should initially reflect the experimental nature of Internet video broadcasting and should be based on the value of the programming to the Internet broadcaster. Royalties for compulsory licenses could be based on a low, flat fee per “channel,” on a per-subscriber basis, or as a low percentage of gross receipts.¹¹⁹

Additionally, with regard to cable, the Copyright Act adjusts compulsory license rates in response to changes in FCC rules regarding the numbers of signals that may be carried and rules regarding syndicated and

York, as well as Canada’s CBC. Although the Web site required users to declare their computer was located in Canada where copyright laws do not require distributors to obtain retransmission consent, the entry of a Canadian area code provided no guarantee that the user was actually accessing the site from Canada. iCraveTV.com was eventually forced to terminate its rebroadcasting service as a result of “protracted multi-front litigation” with U.S. rights holders and TV networks. See *iCraveTV.com* (visited Mar. 31, 2000) <<http://www.icravetv.com/>>.

116. See 17 U.S.C. § 501(c)-(d) (1994); § 111(e) (Supp. IV 1998).

117. See 17 U.S.C. § 111(c)(3) (Supp. IV 1998).

118. See, e.g., *Yahoo! Broadcast* (visited Mar. 31, 2000) <<http://www.broadcast.com/>>.

119. The computation of the royalty fee for the cable compulsory license is based on a sliding scale of the percentage of gross receipts received by the cable system. See *id.* § 111(d)(2)(B). The 1976 Copyright Act also established the Copyright Royalty Tribunal to collect and distribute the royalty fee and readjust the rates if the FCC altered the distant signal or syndicated exclusivity rules. See 17 U.S.C.A. § 801(b)(2)(B)-(C) (West 1999).

sports program exclusivity.¹²⁰ A similar system could be applied to Internet broadcasters. Using demographic data, subscribers from distant areas could be tracked for accounting and royalty rate calculation purposes.

However, with respect to Internet retransmission of local signals, a *de minimis* fee only, much like that imposed for cable, should be collected. Mandatory carriage requirements render the “no-fee . . . compulsory license for local station retransmissions a virtual necessity, while the retransmission of distant stations, particularly regional distant stations, is a direct outgrowth of allocation policies that limited the number of local broadcast stations available in medium and smaller markets.”¹²¹

Rate determination should eventually move to a fair market value-based system. Still, there should be a sunset date to prevent the license from continuing indefinitely.

4. Reluctance to Extend the Compulsory License

In general, copyright owners should have the ability to maximize revenues from their works. They should be afforded the opportunity to develop this new market without government interference, and, ideally, rates and terms should both be negotiable. The owners further argue that a compulsory copyright license discourages private negotiation and inhibits the development of marketplace solutions.¹²²

Granted, limitations on the exclusive rights of creators and copyright owners must be narrowly construed by the Copyright Office¹²³ and the courts.¹²⁴ The Copyright Office has stated: “In our free enterprise, marketplace system, a government mandated compulsory taking of property rights is a last resort.”¹²⁵ In addition, the Copyright Office believes the existing compulsory licenses should “not be given a wide scale

120. See 17 U.S.C.A. § 801(b)(2)(B)-(C).

121. Revision of the Cable and Satellite Carrier Compulsory Licenses, *Comment Letter No. 23*, Copyright Office Docket No. 97-1, at 4-5 (Apr. 28, 1997) (written statement of Time Warner, Inc.).

122. See, e.g., Revision of the Cable and Satellite Carrier Compulsory Licenses, *Comment Letter No. 6*, Copyright Office Docket No. 97-1, at 20-25 (Apr. 28, 1997) (testimony of Ross J. Charap on behalf of the American Society of Composers, Authors and Publishers before the United States Copyright Office) [hereinafter *ASCAP Comments*].

123. “The Copyright Office is not imbued with authority to expand the compulsory license according to public policy objectives.” 57 Fed. Reg. 3284, 3292 (1992).

124. See, e.g., *Satellite Brdcast. & Comm. Ass’n v. Oman*, 17 F.3d 344, 347 (11th Cir. 1994).

125. Register of Copyrights, *Report on the Cable and Satellite Carrier Compulsory Licenses: An Overview and Analysis*, xii (Mar. 1992).

interpretation which could, or will, encompass any and all new forms of retransmission technology.”¹²⁶

Congress, however, has the last word on technologies that deserve a compulsory license. For example, in the Satellite Home Viewer Act of 1994,¹²⁷ it amended the section 111(f) definition of a “cable system” to specifically include systems which retransmit broadcast programming via microwave (e.g., wireless cable systems).¹²⁸

Fundamental to this debate has been Congress’s assessment that the transaction costs between retransmission systems and copyright owners are economically prohibitive. If accurate, the compulsory copyright licenses theoretically appear to strike a fair balance between the retransmitters’ desire to carry over-the-air programming and the copyright owners’ right to be compensated for the value derived by the retransmitters from their programming. Nonetheless, copyright owners maintain that the cable industry in particular has outgrown the need for a compulsory license and should be subject to full copyright liability at fair market rates.¹²⁹

The special circumstances of the current retransmission broadcast environment demand that Internet broadcasting, like the other delivery systems, benefit from a compulsory copyright license. Cable and satellite continue to enjoy a compulsory license, and the 1996 Telecommunications Act extended the license to other video programming distributors such as open-video systems.¹³⁰ There is no need to treat Internet retransmission differently. Problems with royalty rate determination can be solved without completely abolishing the compulsory license.

Copyright owners further contend that the potential for worldwide dissemination via the Internet suggests that they should retain exclusive rights to retransmissions over this new medium. For example, a compulsory copyright license for real-time Internet retransmission of sporting events could impact the extent to which U.S. sports leagues capitalize from the broadcast of games on a tape-delay basis to foreign markets.¹³¹ Sports programmers, however, are not necessarily precluded

126. 56 Fed. Reg. 31,580, 31,590 (1991).

127. Satellite Home Viewer Act of 1994, Pub. L. 103-369, 108 Stat 3477 (1994).

128. See 17 U.S.C. § 111(f) (Supp. IV 1998).

129. See, e.g., Revision of the Cable and Satellite Carrier Compulsory Licenses, *Comment Letter No. 27*, Copyright Office Docket No. 97-1, at 6-8 (Apr. 28, 1997) (statement of Marvin L. Berenson on behalf of Broadcast Music, Inc.).

130. See 47 U.S.C. § 573(c)(4) (Supp. IV 1998) (“Nothing in this chapter precludes a video programming provider making use of an open video system from being treated as an operator of a cable system for purposes of section 111 of Title 17.”).

131. See Revision of the Cable and Satellite Carrier Compulsory Licenses, *Comment Letter 17*, Copyright Office Docket No. 97-1, at 10-11 (Apr. 28, 1997) (comments of the

from recapturing the benefits of international exploitation of event telecasts under a controlled subscription service model subject to FCC sports blackout regulations.

In addition, the Clinton Administration's Task Force on the National Information Infrastructure (NII) has opposed compulsory licensing for the transmission of works via the Internet: "[compulsory licensing] alters the free market relationship between buyers and sellers. Moreover, transaction costs—and the attendant savings from compulsory licensing—can be minimized in a digital environment."¹³² The NII Task Force presumed that the technological nature of the Internet would permit some form of automatic payment and licensing as works are used or copied.¹³³

There is, however, no reason to believe that the transaction costs associated with negotiations still will not be high. There are also additional infrastructure investment costs, aside from transaction costs, to consider. Admittedly, the fixed capital expenditure for Internet TV is not as great as that for cable and satellite. The most expensive component transmission—communications infrastructure—already exists. Still, there are significant costs attendant to establishing the hardware needed to capture broadcast signals, to converting them to digital form for transmission over a server, and to securing and maintaining a reliable Internet connection.

The statutory scheme shifts transaction costs from the retransmitters to the copyright owners. The retransmitters simply submit a royalty to the Copyright Office every six months, and, in return, they may carry whatever programming they wish without engaging in any negotiations or incurring any other compulsory licensing-related costs. The copyright owners, on the other hand, must negotiate amongst themselves in order to determine royalty shares.¹³⁴

There has been little evidence of real harm resulting from this arrangement, and the cable and satellite compulsory licenses have proved successful so far.¹³⁵ If the current royalty rate calculation formulae are too

Office of the Commissioner of Baseball).

132. INFORMATION INFRASTRUCTURE TASK FORCE, THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS 52 (Sept. 1995).

133. See INFORMATION INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE N.I.I. PRELIMINARY DRAFT REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS 134 (1994). The Clinton Administration's Working Group on Intellectual Property found that even though Congress carefully drafted the 1976 Copyright Act to be flexible enough to apply to future innovations, technology has already outstripped the act and "alterations" are necessary.

134. See *ASCAP Comments*, *supra* note 122, at 24.

135. See Revision of the Cable and Satellite Carrier Compulsory Licenses, *Comment Letter 30*, Copyright Office Docket No. 97-1, at 7 (Apr. 28, 1997) (testimony of James J. Popham, Vice President, General Counsel, the Association of Local Television Stations,

complex, they should be simplified, but the entire compulsory copyright scheme should not be dismantled. Compulsory licensing could be eliminated for existing and established retransmission providers, such as cable and satellite services, while at the same time be extended to new technologies that are just in their incipiency. No conflict arises because compulsory copyrights do not necessarily need to be indefinite rights.

5. Alternative Schemes

The music and recording industry relies on a clearinghouse method for arranging licensing agreements. However, some criticize that collective representation/collective licensing mechanisms are “antitrust time bombs which may tend to undermine competition and the true marketplace sought by those who disfavor continuation or extension of the compulsory license.”¹³⁶ Indeed, licensing arrangements by clearinghouse systems such as the American Society for Composers and Performers (ASCAP), as well as Broadcast Music International (BMI) have led to antitrust suits by the Justice Department,¹³⁷ consent decrees,¹³⁸ permanent rate courts,¹³⁹ and years of complex and costly litigation between performing rights societies and users.¹⁴⁰

B. Video Library

In contrast to the Internet TV paradigm, a pay-per-view “video library” model would much better leverage the unique capabilities of the medium. In such case, the market can be relied on to determine the royalty rates and subscription fees. As previously stated, lifestyle preferences render it unlikely that consumers will be willing to connect their PCs to large monitors in their living rooms, at the expense of sacrificing their personal workspaces.¹⁴¹ With the advent of digital TV, interactivity will no longer be as novel a selling point for video on the Internet. Therefore, the biggest advantage Webcasting will truly have over all other forms of video

Inc.).

136. *Id.* at 9.

137. *See, e.g.*, *United States v. American Soc’y of Composers, Authors & Publishers*, 341 F.2d 1003 (2d Cir. 1965).

138. *See United States v. American Soc’y of Composers, Authors & Publishers*, 1940-1943 Trade Cas. (CCH) ¶ 56,104, at 405 (S.D.N.Y. 1941); *United States v. American Soc’y of Composers, Authors & Publishers*, 1950-1951 Trade Cas. (CCH) ¶ 62,595, at 63,755 (S.D.N.Y. 1950); *United States v. American Soc’y of Composers, Authors & Publishers*, 1960 Trade Cas. (CCH) ¶ 69,612 (S.D.N.Y. 1960).

139. *See, e.g.*, *United States v. American Soc’y of Composers, Authors & Publishers*, 981 F. Supp. 199 (S.D.N.Y. 1997).

140. *See, e.g.*, *Broadcast Music, Inc. v. CBS, Inc.*, 441 U.S. 1 (1979).

141. *See Davidson, supra* note 88, at 9E.

transmission will be the ability to watch archived broadcast TV shows whenever you want.

1. Future Possibilities

With an online video library, customers who forget to set their VCRs or who miss the first few seasons of a particular series could potentially search for and watch old episodes of their favorite TV programs. In order to preserve the postseason rerun or syndication markets, shows could be made available during a limited window after first aired and then subsequently archived for general viewing after a negotiated amount of time has passed. Consequently, instead of being constrained by broadcasting schedules, viewers would have much greater flexibility in choosing when to watch a particular show. In addition, the saved programs could be stored and viewed without the distractions of commercial advertising.

2. Full Copyright Liability

The fee-for-service video library model is more conducive than Internet TV to a free market system of negotiation between copyright holders and Internet retransmitters. The former also would be immune from FCC regulations, whereas the latter—by virtue of selling a package that includes real-time secondary broadcast programming as well as original online programming—would not. The retransmission consent rules discussed above could alone be the downfall of Internet TV. The rules provide broadcasting stations with enough power over aspiring Internet retransmitters to render such online broadcasts economically unattractive. Television stations may, for example, impose prohibitively high revenue sharing demands as part of their negotiating terms, or they may simply opt to retransmit their own broadcasts on their own Web sites.

In addition, if the success of the home video rental industry is any indication,¹⁴² customer demand for online video “rental” should be high, and the market should be more than capable of fairly compensating copyright owners. In any event, unlike Internet TV, this type of nonsimultaneous system certainly would not qualify as a “cable system”

142. A comprehensive white paper study commissioned by the Video Software Dealers Association on the future of home video entertainment concluded that, for the foreseeable future, “home video is assured of maintaining its position as America’s number one leisure time activity,’ generating \$16 billion in sales annually.” *VSDA White Paper Focuses on Future of Home Video Industry*, PR NEWSWIRE, July 10, 1996, available in WESTLAW, ALLNEWSPLUS.

under section 111, and any compulsory license would have to be granted explicitly by Congress.

Internet pay-per-view is already in its nascent stages. For example, Yahoo! Broadcast Services offers the TV series *Dick Tracy*, *Howdy Doody*, and *Dragnet* on its Web site. The economics of such repurposed content on the Internet is still being developed, as streaming media companies like Yahoo! and content providers wait to see what the market will bear. However, Yahoo! has said it is exploring a pay-per-view model.¹⁴³

In addition, at the time of this writing, Movies-Online.com, a unit of home video distributor Leo Films, planned to broadcast new independent titles online at three hundred kilobits per second for \$2.95 and fifty-six kilobits per second for free. ClickMovie.com intended to offer a tiered subscription service for mostly vintage TV shows. MeTV.com proposed to stream movies from PCs to TV screens at high speeds for five dollars apiece, following a free, six-month, introductory period.¹⁴⁴

V. CONCLUSION

The Internet epitomizes the convergence of the telecommunications, mass media, and computer industries. It is a boundless marketplace of ideas and information, and many are already beginning to capitalize on its widespread accessibility. Advances in data streaming and network communications have made possible the transmission of video signals over the Internet, and the commercialization of this technology is not far behind.

The current copyright regime for secondary transmissions of broadcast signals should be extended to Internet TV, in order to maintain competitive fairness between alternative delivery mechanisms. The motivations for granting a compulsory copyright license to cable and satellite systems similarly apply to online retransmissions, and concerns about regulatory parity can be assuaged by subjecting Internet TV systems to FCC rules to the extent that the systems can realistically accommodate such regulations. Granted, there has been a long-standing reluctance to any government regulation of the Internet, but once the network begins to approximate traditional mass media, it can no longer be immune from scrutiny. Underlying the economic success of Internet TV, however, will be the creation of original programming, to which the compulsory copyright does not apply.

143. See Kristi Nelson, *Rights Holders Repurposing Retro Hits on the Web*, ELECTRONIC MEDIA, Dec. 6, 1999, at 36.

144. See Richard Tedesco, *Long-form PPV Hits the Web*, BRDCST. & CABLE, Jan. 3, 2000, at 66.

Nonetheless, the model most likely to prove economically viable in the future is the pay-per-view video library system. Consumer demand for this unique service will suffice to fuel development of the industry, and no compulsory copyright grant is needed.