Pay To Play: Enacting a Performance Right in Sound Recordings in the Age of Digital Audio Broadcasting

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PAY TO PLAY: ENACTING A PERFORMANCE RIGHT IN SOUND RECORDINGS IN THE AGE OF DIGITAL AUDIO BROADCASTING

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I. INTRODUCTION

John Lennon's and Paul McCartney's "Yesterday" is the most recorded song in history.1 However, the Beatles' version of "Yesterday" is actually two separate copyrighted works: a song written by John Lennon and Paul McCartney, and a recording of the song performed by all four of the Beatles. Every time a copy of "Yesterday" is sold, no matter who performs it, Lennon, McCartney, and the music publisher receive a royalty payment.2 In addition, every

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1. Linda Stasi, Inside New York, NEWSDAY, Sept. 24, 1992, at 13. Over 2,500 performers other than the Beatles have recorded the song "Yesterday." "Yesterday" has been publicly performed more than any other song, over five million times. J. Randy Taraborrelli, Michael's Moonwalk over McCartney, NEWSDAY, May 13, 1991, at 44, citing J. RANDY TARABORRELLI, MICHAEL JACKSON: THE MAGIC AND THE MADNESS (1991). "Paul McCartney reportedly earns more than $40 million a year from record and song royalties." Id.

2. One popular misconception about the Beatles music is that McCartney and the Lennon Estate no longer collect on the songs. They, in fact, split the songwriting revenue with the publisher.

If, for instance, "Yesterday" earns $100,000 a year in royalties from record sales, airplay and live performances (it probably earns more), the Lennon Estate and McCartney - as co-writers - divide about 50% of that income, around $25,000 each.

The publisher - now Michael Jackson - collects the other 50%. If Lennon and McCartney had retained their own publishing, they would receive the entire $100,000, though they would have to pay someone to administer the publishing duties.

time "Yesterday" is performed, either in a live performance or by playing a sound recording, Lennon and McCartney receive royalties because there is a public performance right in musical compositions. For every copy of the Beatles' version of "Yesterday" that is sold, all four Beatles, as the performers of the recording, receive a royalty based on the terms of their recording contract. But, because the United States does not grant any public performance right in sound recordings, the Beatles, as performers, do not receive any royalties when their recordings are played in public. In the case of the Beatles' version of "Yesterday," George Harrison and Ringo Starr receive compensation when the record is sold, but not when it is played on the radio.

This article argues that the United States should enact a performance right in sound recordings to properly compensate performers for lost sales due to the advent of digital audio broadcasting ("DAB"). A performance right in sound recordings would provide royalties to a performer whenever his recording is played in public, such as in a club or on radio or television. Although the impetus for copyright law is the "encouragement of individual effort by personal gain," so far Congress has not found the economic rationale for creating a performance right in sound recordings compelling, in part due to political pressures. However, there is a per-

6. Several fine articles have advocated the creation of a performance right in sound recordings on constitutional, economic, and equitable grounds. Steven J. D'Onofrio, In Support of Performance Rights in Sound Recordings, 29 UCLA L. REV. 168 (1981); H. Craig Hayes, Performance Rights in Sound Recordings: How Far to the Horizon?, 27 COPYRIGHT L. SYMP. (ASCAP) 113 (1982); Linda A. Newmark, Performance Rights in Sound Recordings: An Analysis of the Constitutional, Economic, and Equitable Issues, 38 COPYRIGHT L. SYMP. (ASCAP) 141 (1991). However, these articles have not considered the increased importance of a performance right given the advent of a new form of high-quality broadcasting.
7. Digital audio broadcasting is a new form of transmitting sound of significantly higher quality and over a greater distance than current, analog transmission.

The legislation has been opposed by several interest groups, including the National As-
formance right in musical compositions through which both the songwriter and the publisher of a piece of copyrighted music receive performance-based royalties. Without an equivalent right in sound recordings, the performers will lose the royalties from declining record sales without a new source of income to compensate them for their performance.

Digital audio broadcasts, unlike current analog AM and FM broadcasts, will have compact disc quality sound with no static or fading. Due to this technological change, listeners may turn to radio as a replacement for buying prerecorded sound recordings. Two aspects of DAB distinguish it from analog broadcasting: digital signals can be duplicated without a loss in quality, and digital audio broadcasts have a greater potential broadcast range.

Although these distinctions may seem minor, they will have a great effect on the potential for digital radio to replace individually purchased recordings as the primary source of music in daily life. For the performer, the economic effect of refusing to grant a performance right in sound recordings in the age of DAB is significant: because digital audio transmissions are of a higher quality than analog broadcasts, more transmitted works will be duplica-

11. These royalties are channelled through collecting societies that collect the licensing fees from product users such as radio stations, television stations, and dance clubs. Those fees, less overhead, are distributed to the licensors, songwriters and music publishers. Due to the number of licensors and licensees, collecting societies facilitate the transaction by granting licenses “blanket licenses” to publicly perform all works in the collecting societies repertoire. There are three collecting societies: the American Society of Composers, Authors, and Performers (ASCAP), Broadcast Music, Inc. (BMI), and the Society of European Stage Authors and Composers (SESAC). For a fine discussion of the underpinnings of the collective system, see Stanley M. Besen, Sheila N. Kirby, and Steven C. Salop, An Economic Analysis of Copyright Collectives, 78 Va. L. Rev. 383 (1992).


cated and distributed, thereby obviating the need for individuals to purchase the commercially available recording.\textsuperscript{16} Furthermore, DAB's greater broadcast range will saturate a significantly larger geographic area than current analog broadcasts,\textsuperscript{17} instantly distributing the high quality reproduction to a vast audience of potential buyers,\textsuperscript{18} and thus eliminating a significant portion of the commercial demand for the manufactured sound recording.\textsuperscript{19} Performers should be compensated for public performances of sound recordings due to the probable decrease in sales of sound recordings in the age of DAB.\textsuperscript{20}

The direct loss of royalties is only the simplest example of a performers' injury due to widespread duplication of digital audio broadcasts. Even if the performer does not receive royalties, a decrease in the sales of prerecorded music due to duplication from another source without compensation will indirectly hurt performers. For example, lower prerecorded music sales may lead to industry losses, causing record companies to offer fewer contracts to new performers. Even if the indirect injuries are not so drastic, record producers may pay the performers a lower fee based on lower estimated returns.

In order to understand why a performance right in sound re-

\begin{footnotesize}
\begin{enumerate}
\item Although an analog duplicate does not precisely replicate the original, a digital duplicate is virtually identical to the original. Josh Hyatt, \textit{Sound of Music; Now Hear This: Marketers Are Out To Make Your Audiocassettes Obsolete}, \textit{BOSTON GLOBE}, Nov. 1, 1992, at 93. An analog recording can be analogized to a making a photocopy: as each progressive photocopy of a photocopy is made, the quality of the resulting product becomes more and more illegible. By contrast, digital duplication is analogous to copying a document to another disk: no matter how many times the duplicate file is copied, it will always look the same as the original when it is printed. Because the sound quality of subsequent digital recordings does not diminish, only one digital copy is required to make an infinite number of identical copies.
\item For the purposes of this Article, the digital age began in 1992 with the availability of the home-use digital audio recording devices and cable or wireless DAB. Although there are several possible dates for the advent of digital audio broadcasting, the global nature of the enterprise suggests that the World Administrative Radio Conference of 1992 (WARC-92) is the appropriate event. The Conference was held in Torremolinos, Spain during February and March of 1992, and it was at that conference that all but three countries agreed to reserve for the future a specific wavelength for digital audio broadcasting. The United States, the Commonwealth of Independent States, and India were the three holdouts. Laurent Belsie, \textit{Digital Audio Broadcasting Plays to a Global Audience}, \textit{CHRISTIAN SCI. MONITOR}, Mar. 9, 1992, at 9.
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cordings should be enacted now, it is important to see why such a right has not yet been granted. Section II reviews the judicial and legislative history of United States copyright law and its application to the protection of sound recordings. Section III explores the technical aspects of digital audio recording and broadcasting to suggest how these technologies will affect the demand for prerecorded sound recordings.

Section IV provides specific suggestions for adoption of a balanced performance right in sound recordings. In particular, it considers issues such as geographic proximity to the origin of the broadcast, political feasibility, and location of transmitter in determining how the rights of the various parties should be balanced. In enacting a federally-created performance right in sound recordings, it is vital to consider the international implications of such a right. Section V discusses these issues, particularly, whether the United States should join the Rome Convention, the international convention that grants performers royalties from public performances in other signatory countries.

II. THE HISTORY OF A PERFORMANCE RIGHT IN SOUND RECORDINGS

The constitutional basis for federal governmental regulation of copyright and patent arises from Article I of the Federal Constitution which grants Congress the power "[t]o promote the Progress of . . . the useful Arts, by securing for limited Times to Authors . . . the exclusive Right to their respective Writings. . . ." This is the "Copyright clause" of the Constitution, and courts have traditionally interpreted its powers broadly. In 1973, the Supreme Court ruled that the federal government has Constitutional authority to regulate sound recordings, stating that it is within the power of Congress to decide that a "particular category of 'writing[s]' is worthy of national protection."

United States copyright law is currently governed by the


23. "By Art. I, § 8, cl. 8, of the Constitution, the States granted to Congress the power to protect the 'Writings' of 'Authors.' These terms have not been construed in their narrow literal sense but, rather, with the reach necessary to reflect the broad scope of constitutional principles." Goldstein v. California, 412 U.S. 546, 561 (1973).

Copyright Act of 1976. The Act altered the copyright protection of sound recordings, granting the sound recording copyright holder limited rights including the right to prevent unauthorized duplication, distribution, or creation of derivative works, while explicitly denying a grant of a performance right in sound recordings.

In order to understand why a performance right in sound recordings was withheld from the 1976 Act, one must recount the history of copyright protection accorded to sound recordings.

A. White-Smith Music Publishing Co. v. Apollo Co. and the 1909 Copyright Act

The legal origin of the current copyright distinction between a written musical composition and a sound recording is the 1908 case White-Smith Music Publishing Co. v. Apollo Co. In White-Smith the Court ruled that perforated piano rolls, although "fixed," were not "copies" of the underlying musical composition because an individual could not "read" them and reproduce the original musical composition from the piano roll copy. The Copyright Act of 1909 implicitly adopted the White-Smith requirement that the copy must be "in a form which others can see and read." The 1909 Copyright Act adopted this "direct perception" definition of the term "copy," preventing the possibility of finding a copyright infringement in cases where the sound recording itself was duplicated or performed publicly.

31. 209 U.S. 1 (1908).
32. "A work is 'fixed' in a tangible medium of expression when its embodiment... is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration." 17 U.S.C. § 101 (1992). "Copyright protection subsists... in original works of authorship fixed in any tangible medium of expression..." 17 U.S.C. § 102(a) (1992).
33. Copyright Act of 1909, 17 U.S.C. § 1(e) (1909) (repealed 1978) (granting the right to jukebox owners to play music as long as no admission was charged).
34. White-Smith, 209 U.S. at 17; Data Cash Systems, Inc. v. JS&A Group, Inc., 480 F. Supp. 1063, 1069 (N.D. Ill. 1979), aff'd on other grounds, 628 F.2d 1038 (7th Cir. 1980).
35. The White-Smith Court held that the rolls were "parts of the machine... we cannot think that they are copies within the meaning of the copyright act." White-Smith, 209 U.S. at 18. For an example of an early case enforcing the performance right, see Irving Berlin, Inc. v. Daigle, 31 F.2d 832 (5th Cir. 1929).
B. Attempts to Invoke the Common Law of Unfair Competition

Once it was clear that there was no federal protection for sound recordings, musicians turned to state common law to protect their recordings from radio play and duplication. In *Waring v. WDAS Broadcasting Station, Inc.*, the Pennsylvania Supreme Court found a protectable state right in sound recordings that were deemed "novel and artistic." Specifically, the *Waring* court held "It thus appears that no valid reason exists why the restriction attached to the manufacture and sale of the records [placing the legend 'not licensed for radio broadcasting' on the label] in this case should not be enforced in equity." The *Waring* court appeared to give great weight to the fact that the musicians had explicitly negotiated to include the placement of the legend on any pressings of the record.

Three years later in *RCA Manufacturing Co. v. Whiteman*, Judge Learned Hand, writing for the Second Circuit Court of Appeals, reached a contrary result under New York law and declined to protect sound recordings. The court held that printing "Not Licensed for Radio Broadcast" on records was not sufficient to prevent radio stations from playing the record over the air once the record had been purchased by the station. More importantly, Judge Hand also held that the performers retained their common law copyright only if the sound recordings were neither distributed nor sold.

Soon after *Whiteman*, several New York courts effectively overruled *Whiteman* in so far as its interpretation of state law, finding a protectable right for sound recordings in state unfair competition law. Then, in *Capitol Records, Inc. v. Mercury*....

36. 194 A. 631 (1937).
38. *Id.* The restricting phrase was placed on records by the American Federation of Musicians (AFM), a trade group that was concerned that live musicians were being replaced by sound recordings. The live musicians who were members of the AFM attempted to protect their livelihood by keeping their recordings from being played publicly, while allowing their sale for home use. *Gorman, The Recording Musician and Union Power: A Case Study of the American Federation of Musicians*, 37 Sw. L.J. 697, 699 (1983).
39. 114 F.2d 86 (2d Cir. 1940), cert. denied, 311 U.S. 712 (1940).
40. *Id.*
41. *Id.* at 88.
42. *Id.* at 89-90.
Records Corp, the Second Circuit, again applying New York state law, ruled that the sale of sound recordings did not extinguish the common law copyright and that the recordings are protectable under state law. Noting that the performance was a “writing” of the author distinct from the musical composition itself, the court refused to find that federal copyright law preempted such a common law right. However, these rights were of limited value because they had to be enforced on a state-by-state basis.

C. Attempts to Find a Performance Right in Sound Recordings in the Sound Recording Act of 1971

Responding to the problem of unauthorized duplication, or record piracy, Congress enacted the Sound Recording Act of 1971. The Sound Recording Act included both enforcement and penalty provisions that were considered necessary to eradicate the economic benefits of sound recording piracy. The Act was limited

44. 221 F.2d 657 (2d Cir. 1955).
45. Capitol Records, 221 F.2d 657 (2d Cir. 1955).
46. “Our conclusion is that the quoted statement from the RCA case is not the law of the State of New York. Since its decision the New York courts have had close contact with the question in Metropolitan Opera Ass’n v Wagner-Nichols Recorder Corp., 101 N.Y.S.2d 483 (1950), aff’d, Metropolitan Opera Ass’n, Inc. v. Wagner-Nichols Recorder Corp., 279 A.D. 632, 107 N.Y.S.2d 795 (1951). We believe that the inescapable result of that case is that, where the originator, or the assignee of the originator, of records of performances by musical artists puts those records on public sale, his act does not constitute a dedication of the right to copy and sell the records.” Capitol Records, Inc. v. Mercury Records Corp., 221 F.2d 657, 663 (2d Cir. 1955).
47. “Since the Copyright Act does not deal with the protection of phonograph records of the performances of public-domain [unprotected] compositions by virtuosos, we have no basis for applying federal law.” Capitol, 221 F.2d at 662 (citing Erie R.R. Co. v. Tompkins, 304 U.S. 64 (1938)).

In a far-sighted dissent, Judge Learned Hand invoked a federal preemption argument based on the Copyright clause, stating “[N]ow that it has become possible to capture these contributions of the individual performer upon a physical object that can be made to reproduce them, there should be no doubt that this is within the Copyright Clause of the Constitution. . . . I would hold that the clause has that much effect ex proprio vigore; and that the states are not free to follow their own notions as to when an author’s right shall be unlimited both in user and in duration.” Capitol, 221 F.2d at 667.
50. Id.

While the original term of the Act was only three years, it was passed as test legislation in order to ensure the effectiveness of the Geneva Phonograms Convention of 1971, an international anti-piracy accord. Thomas P. Olson, The Iron Law of Consensus, 36 J. COPYRIGHT Soc’v 126 (1989). If it proved successful in preventing piracy, the relevant provisions were
to preventing exact duplication of a sound recording; attempts to find a federal performance right in the Sound Recording Act failed.

D. Protecting Sound Recordings Under the 1976 Copyright Act

The 1976 Copyright Act attempted to unify what had previously been disparate and disjointed federal, state, and common law copyright protections. This Act explicitly replaced the White-Smith "readability" or "direct perception" standard for protectability with a new "tangibility" requirement. Section 102(a) of the 1976 Copyright Act, in replacing this standard, explicitly provides that protectable works can be represented by any means of expression "from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device." Therefore, under the 1976 Copyright Act, if a work is readable by a machine and can be captured and remain in a fixed state over time, it is protectable.

Under the 1976 Act, sound recordings became protectable subject matter, and sound recording copyright holders were granted the right to prevent unauthorized duplication, distribution, and derivative works. But section 114(a) of the Act explicitly withheld the grant of a performance right in sound recordings. Even intended to be incorporated into the 1976 Copyright Act, the major rewrite of the copyright code that had begun before the passage of the Sound Recording Act. The Act had the additional benefit of enabling the United States to comply with the Geneva Phonograms Convention of 1971 prior to the completion of the 1976 Copyright Act. Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of their Phonograms, Geneva, Oct. 29, 1971, 25 U.S.T. 309, 88 U.N.T.S. 67 (1971) ("Geneva Phonograms Convention"). 52. PAUL GOLDSTEIN, COPYRIGHT, PATENT, TRADEMARK & RELATED STATE DOCTRINES (3d ed. 1990).
54. The House Report discussion of this section emphasizes the rejection of the White-Smith analysis: Section 102 "makes no difference [in determining the existence of the required element of fixation] what the form, manner, or medium of fixation may be — whether it is in words, numbers, notes, sounds, pictures, or any other graphic or symbol indicia. ...and whether it is capable of perception directly or by means of any machine or device 'now known or later developed.' " M. Kramer Mfg. Co. v. Andrews, 783 F.2d 421, 433 (4th Cir. 1986) (citing 1976 U.S.C.C.A.N. 5665).
56. Id.
though the 1976 Copyright Act did not create a performance right in sound recordings, individual states cannot create such a right. The Act preempts states from creating an exclusive right within the general scope of copyright. 59

Although section 114(a) withheld such a right, section 114(d) did require the Register of Copyrights submit a report to Congress evaluating the implications of adopting a performance right in sound recordings. 60 The section 114(d) report, 61 submitted in 1978, recommended "that section 114 be amended to provide a performance right, subject to compulsory licensing, in copyrighted sound recordings, and that the benefits of this right be extended to both performers (including employees for hire) and to record producers as joint authors of sound recordings." 62

In the fifteen years since publication of this report, there have been several legislative attempts to enact a performance right in sound recordings. 63 Although each of these attempts created a voluminous record for subsequent attempts, 64 they have failed to become law. Most authors have attributed this failure to the opposition of powerful lobbies including the National Association of Broadcasters (NAB), the Songwriters' Guild of America (SGA), the collecting societies, and several grassroots organizations. 65 The NAB members were concerned that the operating costs of broadcasting would increase. 66 Members of the SGA and the collecting societies were concerned that the creation of a performance right in sound recordings would decrease their royalty income distributed by the collecting societies. 67

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60. Section 114 of the 1976 Copyright Act contains four provisions. In addition to the two provisions discussed above, the Act explicitly gives no rights against an independent fixation and also exempts public broadcasting entities from prosecution for utilizing the copyrighted work in violation of §§ 106(1,3). 17 U.S.C. § 114(b) (1992). Finally, section 114 states that "[t]his section does not limit or impair the exclusive right to perform publicly, by means of a phonorecord, any of the works specified by section 106(4)." 17 U.S.C. § 114(c) (1992).


63. See supra note 10 and accompanying text.

64. House Report, supra note 61.


67. Thompson, Twenty Years of the Rome Convention: Some Personal Reflection, 17
The most recent wave of interest in creating a performance right in sound recordings was fueled by the Register of Copyright's official report, *Copyright Implications of Digital Audio Transmission Services*. In this report, the Copyright Office recommended creation of such a right, claiming that "[w]ithout a music public performance right, composers and lyricists would be severely deprived of their just compensation for their creativity. Sound recording authors and proprietors are harmed by the lack of a performance right in their works." The report concludes that the adoption of a performance right in sound recordings should occur without any diminution or limitation of a performance right in musical works. The focus of the 1991 report was broader than the 1978 report because it addressed an entire range of copyright issues, rather than just advocating the creation of a performance right in sound recordings.

III. The Nature of Digital Audio

As the above discussion indicates, it is arguable that the historical tradition of refusing to grant a performance right in sound recordings is unsound policy. These arguments have been made in the context of analog transmission, storage, and recording techniques. With the advent of digital technology, the reasons supporting adoption of such a performance right are even stronger.

In order to understand why digital recording greatly extends the need for a performance right in sound recordings, one must first understand how digital audio could limit a performer's ability to sell prerecorded music through record stores, thereby limiting her ability to gain royalties based on the number of copies sold. This section is broken into three specialized parts. The first subsection describes the differences between analog and digital signals. The second subsection describes digital audio recording, explaining why, unlike analog duplication, digital duplication creates copies that sound exactly like the original, permitting infinite duplication without a concurrent loss of quality. The third subsection addresses the various proposed schemes for digital audio transmission.
sion, highlighting radio-based and cable-based schemes. It is important to understand that these schemes for broadcasting affect the range of the broadcast transmission, which in turn affects the potential losses to performers from unauthorized duplications. This section concludes that the geographic range of the signal, as well as the nature of the transmission, affects the performer's loss of prerecorded album royalties.

A. Distinguishing Analog and Digital Storage

In an "analog" system, the transmission signal changes in proportion to the sound that is being transmitted. For example, an analog volume control works by varying the volume as the knob is turned. Theoretically, any volume is possible because the volume can be turned up or down in infinitely tiny amounts. If the volume is set to 5 and you wish to increase the volume, you could turn the knob to 5.1, 5.5, or 6. A graphical depiction of the change in volume over time as one turns an analog volume knob would look like a smooth ascending or descending line as you turn the knob.

By contrast, a digital volume system is controlled by up and down buttons rather than a knob. Unlike an analog control, a digital control is broken into distinct steps so that the precision of the control depends on how large or small the manufacturer made the steps. If the volume is set at 5 and you wish to increase the volume, but the volume could only be increased in .5 increments, then you could increase the volume to 5.5 or 6, but not to 5.1. In contrast to the smooth graph of the analog volume increase, the graph of the digital increase would look like the steps of a staircase ascending from the left to the right with a step each time the user presses the up volume button.

To make a digital recording of an analog source, the analog sound is converted into a digital form through a complex mathematical process and stored in binary form. Binary means that the information is stored in a long stream of ones and zeros. Although

73. There are two major types of analog radio broadcasts, AM and FM. AM, or amplitude modulation, means that the variations in sound are represented by changes in the amplitude of the signal. FM, or frequency modulation, means that variations are represented by changes in the frequency of the transmission signal. In a graphic representation of the two systems, if the transmission system is seen as a wave or a roller coaster, amplitude modification would mean that some hills are higher than others, while frequency modification would mean that all the hills are the same height, but the distance between neighboring hills varies.

it is not necessary to understand the specifics of the conversion process, it is important to remember that any analog sound can be replaced by a virtually identical digital stream of ones and zeros that can be perfectly duplicated time after time.

The digital recording can be played on a variety of devices including compact disc (CD) players,76 digital audio tape recorders, MiniDisc recorders, and Digital Compact Cassette recorders.76 A digital recording is converted back into an analog signal by a digital-to-analog converter and the analog signal is sent to the amplifier and then to the speakers to be converted into sound waves.77 Other than the digital to analog converter, the amplification and routing to the loudspeakers is identical to a stereo that plays analog records or cassettes.

B. Digital Audio Recording

The important difference between analog and digital recording is that the duplication of a digital signal is far more precise than the duplication of its analog equivalent. The digital stream of ones and zeros can be duplicated before it is converted to analog. Once the stream of ones and zeros is duplicated, it can be recorded multiple times without a decrease in the quality of the end recording.78 For example, the digital pattern “1101” can be copied by a digital audio tape recorder fifty times and the final copy will still look like “1101” because of the precision of the digital electronics.79 By contrast, less precise analog recording devices must record a stream of information that constantly fluctuates by variable amounts, so a signal representing “5” may be recorded as “4.9998.” Each time the copy is copied, the analog signal will fluctuate more, leading to progressively diminishing sound quality.

75. While the performance recorded on a compact disc may originally have been recorded in analog, the performance has been converted to digital form in order to be stored in the compact disc format.


78. Josh Hyatt, Sound of Music; Now Hear This: Marketers Are Out To Make Your Audiocassettes Obsolete, BOSTON GLOBE, Nov. 1, 1992, at 93.

79. Note, however, that certain members of the audio community claim that an excellent analog recording is preferable to a digital recording because some aspects of the performance are lost in the conversion to the digital format, but this loss has not yet been measured in a laboratory. 9 THE ABSOLUTE SOUND, Summer 1984, at 10.
C. Digital Audio Transmission

Just as compact discs and digital audio tapes are more recent digital media that parallel analog vinyl records and cassettes, digital audio broadcasting (DAB) is the digital version of the present AM and FM radio. Digital audio transmission includes both DAB and digital audio distributed through the cable television cables. While an analog radio station converts the digital compact disc to analog prior to transmission, the digital radio station sends the digital signal to a digital receiver and the end user converts the signal to analog. The digital copy is identical to the copy that was broadcast, so every individual with a digital receiver and recorder can make an identical copy of a radio broadcast before the signal is sent to the digital-to-analog converter for listening.

1. Wireless Digital Audio Broadcast

The primary issue facing DAB is what frequency it will use to transmit the signal. The frequency of a broadcast is the place on the electromagnetic spectrum that defines the way the station will transmit the signal so that the receiver will be able to receive it.

81. AM and FM broadcasts of music are significantly lower quality than digital broadcasts converted to analog by the receiver because analog radio broadcasts require the broadcaster to compress the signal by removing certain frequencies. Thus it is important not to equate an analog recording of an analog broadcast with an analog recording of a digital broadcast that was converted to analog by the receiver. Paul Taylor, Survey of Home Entertainment 4: Two New Formats Prepare For Battle - Audio, FIN. TIMES, Nov. 20, 1992, at 11.
82. It is important to note that cable-based digital audio broadcasts are non-commercial broadcasts that are programmed at a single location and transmitted by satellite to various cable system downlinks for distribution to that cable franchise's subscribers. The signal is transmitted through the cable system along with the television signals and a special receiver routes the digital audio signal to the subscriber's stereo system rather than the television. In its present form the cable-based system is being simultaneously broadcast across the country on a variety of local cable franchises. While current cable-based digital audio systems do not permit the digital recording of the signal, it is clear that this will be an option for future cable-based digital audio transmission systems. For examples of cable-based digital audio transmission advertising, see Oman, supra note 10, at 62-70 (Appendix, RIAA).
AM, FM, shortwave, microwave, and television are different bands of the electromagnetic spectrum. The higher the frequency, the greater the amount of power needed to reach the receiver, but also the greater the distance the signal can be successfully transmitted. A satellite-based transmitter can broadcast to an entire continent while a terrestrial tower would have the same range as a current analog station.

The issue of spectrum allocation was discussed at the World Administrative Radio Conference (WARC-92), held in Torremolinos, Spain in early 1992 under the auspices of the International Telecommunications Union (ITU). An international agreement on frequency allocation is essential because transmissions of all frequencies cross geopolitical boundaries. Allocation of a DAB frequency is made by treaty, and countries that do not wish to adhere must reserve an exception to the treaty.

At WARC, three different frequency ranges were considered for DAB: L-Band, S-Band, and In-band. L-band is a frequency range that can only be used in terrestrial transmission and has the same range as current television or FM stations. S-Band, a higher frequency range than L-Band, is more likely to be transmitted by satellite than by terrestrial towers. A single satellite could also broadcast hundreds of FM quality broadcasts concurrently through a technologically complex inaudible switching system.

87. Id.
92. 1452 to 1492 MHz. Judith Gross, DAB Issue Hot Topic At NAB, Electronic Media, Sept. 9, 1991, at 34.
94. Five digital channels could be broadcast in the same spectrum allocation as is cur-
The third band, In-band, refers to the same frequency range that is currently used for FM transmission. Broadcasting in the In-band would have the same range as analog FM, but would allow broadcasters to simultaneously broadcast analog and digital signals. In-band would thus allow broadcasters to retain listeners who own conventional radio receivers while broadcasting higher quality, digital sound for those listeners who had digital receivers.

Participating countries entered WARC-92 with differing preferences for a transmission band based on their own political and geographic needs. The United States preferred the S-Band, in part because the Department of Defense is currently using the L-band for aeronautical flight-test telemetry. The Japanese and the Europeans preferred the L-band because a terrestrial digital audio transmission system could come into service sooner and would be more economically efficient for countries of smaller geographic size. Most Asian and African countries preferred the L-band because L-band receivers would be cheaper to consumers than S-band receivers.

95. AM broadcasts at 530-1600 KHz. FM broadcasts at 88-108 MHz.
97. Edmund L. Andrews, Digital Radio: Static is Only Between Owners, N.Y. TIMES, May 6, 1992, at C18. Until recently, it was thought that digital signals would require too much electronic data to fit on the same frequency as an analog signal. But new systems that would "mask" a digital stream under the standard analog transmission are being developed. The Bush Administration's decision at WARC-92 to consider allocation of digital broadcasting only on a high-frequency L-band has encouraged the development of this technology among broadcasters opposed to L-band transmission who then must develop ways to squeeze more efficiency from existing frequencies. Id.
100. Laurent Belsie, Digital Audio Broadcasting Plays to Global Audience, CHRISTIAN SCI. MONITOR, Mar. 9, 1992, at 9.
The result of WARC-92 was that ITU recommended that the L-Band be set aside for DAB. All voting countries except the United States, the Commonwealth of Independent States, and India agreed to set aside the L-Band for digital audio broadcast. The dissenting countries reserved exceptions and have publicly decided to go ahead with S-Band satellite transmission.

Within the United States, the National Association of Broadcasters (NAB) opposed the Administration’s choice of the S-Band because they believed it would eliminate local markets, thereby injuring lower-budget regional broadcasters. NAB preferred the hybrid In-Band approach because of the ease of transition from analog to digital.

2. Cable-Based Digital Audio Transmission

Digital audio transmissions are already a commercial reality for those individuals with homes wired for cable television. Since the explosion of cable television, it has become feasible to transmit digital audio programs and television signals simultaneously. Cable-based digital audio transmissions include Digital Music Express, a subscriber-only service that provides thirty music stations with no disc jockeys, promotions, or advertisements. The song title and name of the artist can be read on a display panel on the remote control, and the signal is routed to the subscriber’s stereo by a decoding box supplied by the cable company. Although the decoder boxes do not currently have a digital output, which would permit exact digital duplication, such an addition is expected in the near future.

105. Id.
109. Paul Hertelendy, Cable Tries a Musical Change of Pace, S.J. MERC. NEWS, Apr. 9, 1992, at 7D.
111. Greg Quill, Digital “Radio” Stirs Static, TORONTO STAR, Oct. 3, 1992, at A1. The international legal implications of cable-based audio transmission may alter its success overseas. Because of Canadian performance rights, it is unclear whether DMX will be permitted in Canada. Id.
112. Id.
IV. Addressing The Threat of Digital Broadcasting To Performers

The ability to receive and duplicate a signal that is the exact same quality as the transmitted original greatly increases the desirability of duplicating a digital audio broadcast rather than purchasing a prerecorded copy.113 Given this economic savings to the consumer, it is likely that record companies, music publishers, and performers will lose revenues from the decline in sales of prerecorded music because of home copiers.114 Copyright legislation cannot mandate how much each party will actually receive because parties can give up rights in the process of contract negotiations. For example, under a controlled compositions clause, songwriters without significant leverage must license their works to the music publisher at a below market rate.115 The recently enacted digital audio tape tax may also give rise to negotiations in which proceeds from the tape tax are used to recoup recording costs.116 Since the contractual relationship between the parties is the final arbiter of how much each party receives, the money derived from a performance right in sound recordings may go to the record company to help finance the risky venture of producing a first album by an unknown group.117

By increasing the funds available to performers, record companies will have more incentive to take risks by signing recording contracts with new performers. The new pool of funds will also directly benefit successful artists who have more leverage while renegotiating their contract. Although this Article generally discusses the benefits of a performance right in sound recordings in the context of a direct royalty payment, the indirect benefits to perform-

113. Digital Audio Transmission Report, supra note 10, at 6 (Appendix, RIAA Comment). This claim is hotly disputed by the National Association of Broadcasters (NAB). Id. at 331 (Appendix, NAB Comment). Furthermore, the NAB claims, “With regard to the concern that DAB will result in increased off-the-air taping: a) there is no evidence this will happen; b) broadcasters do not benefit from such taping (and may be harmed by it); and c) copycode mechanisms are a preferred solution to home taping royalties.” Broadcast Regulation: A Review of 1991 and a Preview of 1992, NAB Legal Department 301 (1992).

114. Digital Audio Transmission Report, supra note 10, at 72, 73 (Appendix, AFL-CIO, Department of Professional Musicians).


ers cannot be overlooked in the face of the probable losses in royalties for the sale of prerecorded music. There are two primary methods of remunerating the injured performers who receive fewer royalties in the digital age: taxing the digital recording media, or requiring the broadcasters to pay a compulsory licensing fee to publicly perform the protected works. The former option has already been enacted in part in the Audio Home Recording Act of 1992.\textsuperscript{118} The latter option can be achieved by creating a performance right in sound recordings, thereby eliminating the broadcasters, free use of the sound recording itself.

This section will discuss the taxation scheme as embodied in the Audio Home Recording Act and point out some problems with this legislation. In particular, it will highlight why the creation of a performance right in sound recordings is necessary even after the passage of this Act. This section then suggests what - given political and economic considerations - is the proper scope of a performance right in sound recordings.

A. Audio Home Recording Act of 1992\textsuperscript{119}

The development of digital audio tape recorders, a technology that allows digital duplication of superior compact disc recordings, generated fear of infinite copies of compact discs with a corresponding loss of income to performers.\textsuperscript{120} The concern generated by this potential for lost income led to the passage of the Audio Home Recording Act ("AHRA").\textsuperscript{121}

AHRA responds to the new technology in two ways. First, un-

\textsuperscript{118} 17 U.S.C. § 1001-1032 (1992). This amendment to the 1976 Copyright Act was drafted to address the problem of digital home taping of protected subject matter. The Act placates the music producing industry's fears about the potentially damaging effects of digital audio tape recorders (DAT) on the sales of prerecorded music by taxing digital audio tape recorders and blank digital tapes. The Act does not address the additional damage caused by widespread digital radio and cable distribution. Nor does it consider the fairness of the tax given that the digital recording media have several legal public domain uses including recording non-copyrighted music or backing up computer storage. Jon Pareles, \textit{Grabbing for Royalties in the Digital Age}, \textit{N.Y. Times}, Apr. 12, 1992, at 26. The concerns of the music industry could better be dealt with by the creation of a performance right in sound recordings that this inequitable taxation scheme.


\textsuperscript{120} Japanese and European manufacturers first considered marketing digital audio tape (DAT) recorders in 1986. OTA Report, \textit{supra} note 77, at 3. The introduction of DAT & other digital recording media was delayed due to concerns over the potential for unlimited duplication of copyrighted materials. \textit{id.} at 18.

\textsuperscript{121} The Audio Home Recording Act of 1992 was signed into law by President Bush on October 28, 1992.
authorized copies of compact discs are prevented by the Serial Copy Management System (SCMS), an inaudible digital signal placed in protected works that allows the owner of a compact disc to make a digital tape copy while preventing a second copy from being made from the duplicate tape.122 Second, in order to compensate performers, writers, publishers and producers for lost sales, the Act places a tax on digital audio tape recorders and blank digital audio tapes.123 Two-thirds of the revenues from the collected taxes are distributed to the Sound Recordings Fund.124 From that fund, approximately forty percent will be distributed to the performers while the other roughly sixty percent will be distributed to the record companies.125

Several issues must be considered in evaluating the probable effectiveness of AHRA. In particular, this taxation scheme is only feasible if the primary use for the blank medium is the recording of music.126 However, currently most DAT cassettes are used for storage of computer data.127 Furthermore, the next generation of digital recording media, MiniDisc and Digital Compact Cassette,128 may have far broader uses than the recording of copyrighted musical compositions and sound recordings, such as storing computer data, video, unprotected audio, and recordings for the blind.129 Un-


123. Audio Home Recording Act of 1992, § 1011(A)(1) (1992). It is likely that blank media will remain less expensive than their prerecorded equivalent so the impetus to duplicate a work recorded from a digital audio broadcast will remain.

One aspect of the Audio Home Recording Act is the effect of its tape tax in minimizing the cost difference between the prerecorded medium and the blank medium by imposing a tax on the blank version. As the price of the blank version approaches the price of the prerecorded medium, one would expect the incentive to duplicate available prerecorded works would decrease. This analysis falsely assumes that the purchaser of a prerecorded series of songs desired to purchase the entire collection. If the purchaser desires just hit singles, then recording on the blank medium would be more efficient than purchasing several prerecorded works to gain access to one song on each work. Of course, if the blank medium became more expensive than the prerecorded version, an economist would predict that consumers would purchase the prerecorded version and record over it with their own programming. Id.

124. Id. at §1014(b)(1) (1992). The other 33% of the collected income goes to the Musical Works Fund, which compensates the publishers and composers of the musical works. Bill Holland, Audio Home Recording Act Passes; Next Step: Dividing the Royalty Pool, BILLBOARD, Oct. 17, 1992, at 1.

125. Id.


til recordable digital media are primarily used for the duplication of protected works, users will be continuously and unfairly taxed for their use of blank media.\footnote{The paperwork required for a thirty cent per tape refund would cost the managing organization a high overhead relative to the income raised in the early years of the tape tax. It has been estimated that it will be at least five years before wide-scale consumer audio applications of DAT are available. In those five years, enactment of the Audio Home Recording Act would raise over $100 million annually, two-thirds of which would come from computer users. Peter Newcomb, \textit{The Sound of Money}, \textit{FORBES}, May 11, 1992, at 102. Thus the taxation scheme could be repealed while retaining the requirement that all digital recorders must include a SCMS copy protection system. This would protect the duplication of prerecorded digital media.} Even with a refund system, the burden created by individuals attempting to obtain tax refunds could be greater than the benefit of the tax itself.\footnote{This critique does not even address the narrower problem of when the blank medium is used to record public domain information or the specific digital audio recording constitutes a fair use. For a summary of the vast number of resources addressing fair use and home taping, see Digital Audio Transmission Report, supra note 10, at 59-72; OTA Report, supra note 77.}

Given the problems inherent in a taxation scheme, a better solution is the enactment of a performance right in sound recordings. Because the performance right places the costs on the broadcaster rather than the end user, this scheme is more equitable than the taxation scheme: the broadcaster, who is the one profiting from the use of the performances, should bear the costs; additionally, the end user will not be unfairly taxed.

\textit{B. Enacting a Performance Right for Long Range Digital Broadcasts}

Although the Copyright Office has advocated the adoption of a performance right in sound recordings,\footnote{A second reason for adopting a performance right even after the passage of AHRA is the potential revenue gain that would result from coming into compliance with section 12 of the Rome Convention. This issue is discussed in greater detail below.} there are several ways to implement such a right. For example, a performance right could be created for all digital and analog broadcasts across the country, or it could be limited only to cable-based transmissions. This paper will now discuss why a performance right that lies somewhere between these two extremes in terms of breadth is the most responsible choice: a performance right in sound recordings should cover only broadcast methods that significantly limit the desirability of the prerecorded product by reaching a vast audience while delivering a signal quality equal to the commercially available product.

\textcopyright{} Philip Greenspan, a research assistant at the Massachusetts Institute of Technology.
1. The Collecting Society Model

The management and distribution of compulsory license fees raised by the performance right in sound recordings should be based on the current collecting society model for musical composition rights. Collecting societies exist to facilitate collection of royalties from performance rights in musical composition; they were developed to respond to the prohibitively high transaction costs of a system that would otherwise require individual licensees to negotiate with licensors.133

In this model, the licensee - the broadcaster of the musical work - pays a fixed amount to the collecting society which in turn distributes the collected funds to the licensors.134 Collecting societies are non-profit organizations that retain funds sufficient to cover the costs of allocation and redistribution of funds.135 The two standard methods of fee setting are either to let each licensor determine the cost of public performance - the Copyright Clearance Center model136 - or to set a flat rate for the performance of all sound recordings in the society's repertoire - the BMI/ASCAP model.137 Either way the entire collection of fees (less operating costs) is distributed to the performers based on the results of a survey that lists the frequency of public performances of the protected sound recordings.138

Given the vast number of licensees and the extensive use of the sound recordings, a performance rights system based on the BMI/ASCAP model would likely be more efficient than one based on the Copyright Clearance Center model.139 A system of variable

133. One could conceivably have a system in which the individual performers entered into individual contracts with broadcasters, granting them a license to broadcast her work. Of course, given the tremendous number of broadcasters in this country, one individual is incapable of entering and enforcing such a huge number of contracts.


139. Paul Goldstein, Commentary on "An Economic Analysis of Copyright Collectives," 78 VA. L. REV. 413, 414 (1992) (suggesting that permitting the licensors to set indi-
pricing would require vast additional effort because the collecting society would have to continually maintain, monitor, and collect payments on different prices that have been set for each work. Broadcasting is a volume business: so many musical works are broadcast each year that a differential scheme would incur prohibitive administrative costs.

Politically, there is likely to be some opposition to the use of this model for performance rights in sound recordings. Current members of collecting societies are concerned about the creation of a performance right in sound recordings because its implementation could decrease the funding that the publishers and writers will receive. Practically speaking, funds that currently go only to publishers and writers of musical compositions may be reallocated to the performers. Along with the collecting societies, the Songwriters Guild of America is opposed to any performance right in sound recordings that does not ensure that the portion of collected funds that go to writers would not drop or be diverted in the future. These concerns should be partially alleviated by the Audio Home Recording Act: since AHRA mandates fixed royalty divisions, the SGA should feel secure that it will not be shortchanged by the addition of another party to the division of the performance right’s pie.

2. The Scope of a Performance Right in Sound Recordings

The following sections will discuss where along the continuum of analog and digital transmissions the performance right should be implemented. This continuum reaches from the inclusion of nonbroadcast public performances on one hand, to CD quality satellite-based transmissions on the other. In particular, it considers the political feasibility of each alternative and explains why the proper balance is to implement the right for cable-based, S-Band, and L-Band digital broadcasts, and possibly in a limited fashion for In-Band broadcasts.

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a. Non-Broadcast Public Performances for Profit

The broadest possible performance right would include the collection of licensing fees from non-broadcast public performances such as dance clubs, restaurants, and concert halls. This extremely broad copyright already exists for composers and publishers: collecting societies currently require clubs and other establishments that play live or prerecorded music to pay a licensing fee for playing musical compositions.\(^1\)\(^43\) However, under the "homestyle exception," the ability of the collecting societies to collect fees from stores rebroadcasting radio programs through small speakers has been limited.\(^1\)\(^44\)

Although the creation of a performance right in sound recordings for non-radio broadcast performances is possible,\(^1\)\(^45\) such a program is neither equitable, nor politically or economically feasible. The basis of a performance right is the loss of royalties resulting from fewer sales of the original recording. However, public performances for profit do not diminish such royalties but instead increase royalties: listening to a song in a club does not supplant the desire to purchase a prerecorded version of the work, but instead might encourage the purchase of such a work. Since bars and clubs do not contribute to the decline in performer's royalties, they should not be required to compensate the performers.

Politically, such a broad performance right is unfeasible because any costs imposed on non-broadcasting public performances would likely be passed on to the public.\(^1\)\(^46\) Such price increases might be regressive and would almost certainly make the enactment of such a right unpopular among the public. Furthermore, a performance right will be easier to create if it does not affect practices that have been ongoing prior to the legislation; in other words, instituting a charge on a brand new product is far easier than suddenly charging more for something people already receive. An example of this is Sony Corp of America v. Universal City Stu-

\(^1\)\(^43\) For a recent prosecution, see Jobete Music Co., Inc. v. Massey, 788 F. Supp. 262 (M.D.N.C. 1992).


\(^1\)\(^46\) For example, if night club owners were forced to pay licensing fees, they might consider charging their customers more for drinks, or instituting or increasing a cover charge.
dios, Inc., the "VCR case," in which the Supreme Court was forced to decide whether Sony was liable for contributory infringement of protected television programs by providing videocassette recorders. Because videocassette recorders were widely used by the time the case reached the Court, it made it more difficult to find Sony liable.

Finally, and perhaps most importantly, the creation of such a broad performance right may not be economically feasible: the large number of small collections that must be made to effectively enforce this new right might cost more than the collections are worth. This is particularly true when one considers that a performance right in non-broadcast public performances for profit would be less profitable than the current collections for musical compositions because licensing fees for musical compositions are collected for both live and recorded performances while collections for sound recordings could gain licensing fees only from prerecorded music.

b. Analog Broadcasts

The second broadest performance right would include analog broadcasts. Although analog broadcasts have existed for sixty years, a performance right that encompasses analog broadcasts should not be enacted for several reasons. Under the Audio Home Recording Act, the profits from the tape and recorder tax will go to the performers regardless of whether the broadcast being taped is analog or digital. Thus performers are already receiving moderate compensation.

Secondly, a performance right for analog broadcasting is unnecessary because it is not clear that the performer's income from royalties will actually be damaged by the digital recording of analog broadcasts once digital broadcasting has begun. It is clear from the recent success of the compact disc that the public is acutely aware of the superiority of digital audio, and given the choice, would likely record a digital broadcast rather than an analog broadcast since analog broadcasts are not digital quality.

Yet another reason not to apply a performance right in sound recordings to analog broadcasts is that strong political opposition would likely doom such a proposal. Such a right would create instant resistance from the National Association of Broadcasters, the

majority of whose members are analog broadcasters, and many of whom are small local stations.\textsuperscript{150} Given that such compulsory licensing fees have not traditionally been levied, it would be far easier to implement a performance right in sound recordings if it applied to only new types of audio broadcasts, thereby gaining the support of the NAB.

c. Terrestrial In-band and L-Band Digital Broadcasts

In-band and L-Band transmission should be treated similarly in terms of the enactment of a performance right because both types of broadcasting have the same geographic range and transmitter location.\textsuperscript{151} The advantages of imposing a performance right on L-Band and In-band are evident: local digital broadcasts will result in lost royalties due to digital duplication of radio programming. Even though there is no fear of continental saturation that exists with satellite transmissions, significant economic harm could still affect performers if localized L-Band and In-Band broadcasts are duplicated and distributed.\textsuperscript{152}

While a performance right should be applied to L-Band broadcasts, the decision to impose a performance right on In-band broadcasts is more troublesome. The inclusion of In-Band would inhibit the transition from analog to digital,\textsuperscript{153} arouse the ire of the NAB, and minimize the incentive to provide localized digital radio to less commercially profitable markets. The added expense to broadcasters would generate stiff opposition from NAB because it would directly affect NAB members who plan on converting to DAB.

\textsuperscript{150} Digital Audio Transmission Report, \textit{supra} note 10, at 334-336 (Appendix, NAB Comments).

\textsuperscript{151} As noted above, both of these transmission forms are terrestrially based and thus have a smaller, more localized range than S-Band transmission. \textit{See supra} notes 92-94 and accompanying text.

This discussion has already noted that at the international WARC Conference in Spain, the United States reserved S-Band transmission for DAB. \textit{See supra} notes 98-105 and accompanying text. It is still important to consider L-Band and In-Band DAB in the United States for several reasons. First, there is significant international pressure and pressure from special interest groups to reconsider these terrestrial forms of broadcast. Furthermore, Canada and Mexico currently have reserved L-Band and In-Band, creating more incentive for possible use of these frequencies in the future. \textit{Id.}


\textsuperscript{153} As noted above, In-band transmission makes hybrid transmission possible. A broadcaster can broadcast in both analog and digital simultaneously, thus maintaining an audience among individuals with analog receivers while permitting the transition to digital. \textit{See supra} notes 95-97 and accompanying text.

http://repository.law.miami.edu/umeslr/vol10/iss1/6
Given these difficulties, a performance right in sound recordings should only apply to In-Band broadcasts once they broadcast fifty percent digital programming. Since the underlying concern generating the enactment of a performance right in sound recordings is the lost royalties of the performers, this compromise would require compensation when the programming is effectively digital, while encouraging a prompt initial transition to digital programming.

d. S-Band Satellite-Based Digital Audio Broadcasts

The real threat to performers is the broadcast of musical performances via the satellite delivery system, because a single station is capable of reaching a national market with high quality digital sound. These satellites will probably be used to broadcast numerous stations of fairly high quality. The potential to alter the sound recording market is far greater than with analog or In-band/L-Band digital audio broadcasts due to the range and uniformly high quality of the broadcast signal. If an entire album was broadcast even once, anyone who would otherwise have bought the prerecorded work would already have a perfect copy. The potential for destroying the market for a commercially available sound recording is clear and would exist from the first day the station began broadcasting. Due to this threat, a performance right in sound recordings should definitely be applied to S-Band broadcasting.

Politically, it would be feasible to adopt a performance right in sound recordings for S-Band stations. Although satellite broadcasters will clearly fight the adoption of such a right, the S-Band is not currently used to broadcast music; thus there is no tradition that would be violated by such an implementation. The NAB may even support the imposition of such a compulsory licensing fee on S-

Band broadcasts because local broadcasters would be unaffected.

Although the financial resources required by satellite broadcasters entering the field will be enormous, the compulsory license fee will only be a small part of their costs. And the satellite broadcasters' ability to diminish the royalties earned by the performers whose works they broadcast for profit cannot go unnoticed.

e. Cable-Based Digital Audio Broadcasts

Digital cable audio systems are audio signals transmitted through cable television cables. Because these systems are distributed on a subscriber basis, the profits are derived from monthly listener's fees rather than from advertising revenues. Adoption of a performance right in sound recordings for this medium is sensible for several reasons. First, because cable systems do not advertise but instead make a profit through listener subscriptions, it is difficult for these broadcasters to argue that they are providing free publicity for performers. Rather, the broadcasters are profiting from broadcasting the performances, and the payment of subscription fees by listeners may supplant the desire to purchase the original recordings. Furthermore, listeners may feel that they have a right to record the broadcasts because they are paying for the service. Since the broadcaster is making profit solely from the listeners, it makes a compelling case for adopting a performance right in sound recordings for cable-based digital audio broadcasts.

One could argue that a performance right applied to cable-based audio broadcasts should not be enacted because the cable-

160. See supra notes 108-112 and accompanying text.
162. Listeners are paying of for the station but the profits are not shared with the performers.
163. One advertisement for such a system promotes "crystal clear CD quality sound" without the "constant [disc jockey] chatter or long, loud commercials," Viacom Cable, You Haven't Heard Anything Yet. . . . The discussion of subscriber-based services centers on an encryption system that would require a decoder at the receiving end. This scrambling method is "only a stop-gap measure, and is not an appropriate long-term solution to the problem of home-taping." Digital Audio Transmission Report, supra note 10, at 135, 347-348 (Appendix, ASCAP Comment, NAB Reply).
based systems currently convert the digital signal to analog inside the conversion box so that any copies made by the listeners are analog copies. However, given the wide geographic distribution of the signal, the presence of subscriber funding, and the likely addition of a digital output to the converter box such that digital duplication will be possible in the future, the enactment of a performance right in sound recordings should include cable-based digital systems.165

3. Specific Digital Audio Broadcast Related Limitations

Although there are significant benefits to the enactment of a performance right, two major issues—that of subcode transmission and complete album broadcasts—must be resolved before a performance right in sound recordings can be enacted.

a. Digital Subcode Transmission

The digital subcode transmission is the transmission of the inaudible portion of the sound recording that contains information that can be decoded by the receiver’s electronics. There are two primary types of digital subcodes: copy protection codes such as the SCMS required by the AHRA,166 and broadcast information noting the performer’s name or the radio station call letters. Politically, requiring such a code is problematic. Broadcasters feel strongly that they should not be required to transmit all inaudible digital codes,167 because such a requirement would infringe the broadcaster’s right to select what they broadcast.168 This issue was not present under the Audio Home Recording Act because that Act requires a chip to be placed in the DAT recording device; it does not directly affect what the artist decides to store on the compact disc in the first place.169

Even with these political concerns, the broadcast of subcodes

165. Id.

166. As the earlier discussion indicates, this code allows the CD to be copied onto a digital audio tape but prevents the tapes from being copied ad infinitum. See supra note 122 and accompanying text; Audio Home Recording Act of 1992, H.R. 4567, 102d Cong., 2d Sess. §§ 1021-1022 (1992). Since SCMS is included in the Audio Home Recording Act, it may become the de facto copy protection standard before the parties can arrive at another mutually satisfactory solution.


169. OTA Report, supra note 77, at 28-29.
should be required because it is a great potential benefit to the performers, the listeners, and the station. First, it will allow the listener to more easily identify works that the individual wishes to purchase at a later date, supporting the broadcasters' argument that radio promotes performers' works. Second, subcode transmission of the works performed would allow a computerized data retrieval system to tabulate which protected works were actually performed, permitting an optimal method of remunerating performers, rather than relying on the results of a statistical survey that may under or over compensate rarely recorded works. Finally, the radio station could utilize the digital subcode process to display station identification or other promotional information including news headlines, sports scores, or other information that would revitalize the role of radio at a minimal cost.

b. Complete Album Broadcasts

One of the greatest concerns of performers, music merchandisers, and record companies is that satellite-based radio stations might supplant prerecorded music as a method of distribution. Although stations are likely to play different works from different albums, the concern of damage to the performers is far greater if a station broadcasts an entire album, thereby obviating the need for any listener who records the work to acquire the commercially available version.

Although the need for a limitation on the satellite digital broadcast of entire albums is clear, it is important that the interference in the broadcaster's programming decisions be kept to a minimum to prevent only the most likely forms of economic damage. A reasonable requirement would be to prevent broadcasters from playing any album in its entirety within a single three hour period within one year of the album's release. The three hour limitation will prevent the playing of an entire album by including another artist's work within that period. The one year limitation will prevent the playing of an entire album only within the period of its greatest commercial potential.

V. INTERNATIONAL TREATIES

Any performance right in sound recordings must be imple-

170. In cases where property rights conflict with the First Amendment, an unfair competition claim may permit a narrow limitation of the broadcasters ability to complete autonomy. See supra note 41.
mented within the context of international treaties. Two major international conventions affect the worldwide protection of sound recordings. The older convention, known as the Berne Convention for the Protection of Literary and Artistic Works, 171 was joined by the United States in 1988. 172 Although the Berne Convention does not mandate the protection of sound recordings, it does cover the international protection of musical compositions. 173 The Berne Convention limits its subject matter to "literary and artistic works," 174 and sound recordings are not included. Sound recordings are relegated to the lesser status of a "neighboring right" as covered by the Rome Convention on Neighboring Rights. 175 The United States is not currently a signatory to the Rome Convention.

A. The Rome Convention of 1961 176

The Rome Convention is the only international convention that affects the decision to enact a performance right in sound recordings in the United States. The Rome Convention is significant because it ensures a right of remuneration to creators of works, such as sound recordings, that are unprotected by the Berne Convention. These protections are the so called "neighboring rights." Specifically, Article 12 of the Rome Convention provides,

If a phonogram, published for commercial purposes, or a reproduction of such phonogram, is used directly for broadcasting or for any communication to the public, a single equitable remuneration shall be paid by the user to the performers, or to the producers of the phonograms, or to both. Domestic law may, in the absence of agreement by parties, lay down the conditions as to the sharing of this remuneration. 177

The remuneration provision of the Rome Convention is based on reciprocity, meaning that a signatory can only withdraw the funds if the withdrawing country has a performance right in sound recordings for foreign nationals. Performers in countries that export royalty-producing creations in greater quantities than they import them are remunerated, thus providing incentive for their

175. See supra note 21.
176. See supra note 21.
177. Rome Convention, art. 12.
government to join the Rome Convention.

B. The Possibility of Becoming a Signatory to the Rome Convention

Although the United States is the world leader in the export of sound recordings, it has not yet joined the Rome Convention, primarily because it does not grant performance rights in sound recordings. Therefore, the United States does not receive reciprocal performance royalties from other countries. In order to join the Rome Convention, the United States would have to either enact a performance right in sound recordings so that reciprocity would be a possibility under article 12, or the United States would have to opt-out of article 12.

There is little reason for the United States to join the Rome Convention while opting out of article 12 because it would not gain the funds already set aside by other countries for the public performance of United States produced sound recordings. The only six signatory countries that have completely opted out of article 12 are not principal sound recording exporters. Of the twenty nine countries that have adopted article 12, the greatest ideological concessions have been made by the civil law countries including France and Germany, that have allowed the rights to be held

178. House Report, supra note 61 at 151. Although the adoption of a performance right in sound recordings is undesirable to broadcasters who would have to pay the equita

179. The Rome Convention currently has thirty five signatories. Digital Audio Transmission Report, supra note 10, at 103-04. National treatment is guaranteed up to a minimum level because each signatory can opt-out of sections that conflict with preexisting neighboring rights treatment. Rome Convention, supra note 21, at article 2.2.

180. One study suggests that only 23% of the musicians who perform on a sound recording will ever see international royalties. S. Werner, An Economic Impact Analysis of a Proposed Change in the Copyright Law, reprinted in House Report, supra note 61, at 28, 62.

181. Countries opt out of article 12 of the Rome Convention by invoking article 16, the notification of article 12 opt-out.

182. For more information about France and their accession to the Rome Convention, see Digital Audio Transmission Report, supra note 10, at 110-112. For a more complete discussion, see Bonnie Teller, Towards Better Protection of Performers in the United
in the name of a corporation rather than an individual.\textsuperscript{184} Although the number of adherents to the Rome Convention is growing, many claim that since the text has never been updated, it is now outdated.\textsuperscript{185}

Although the Rome Convention does not explicitly address recent technological advances, the United States would benefit economically and politically from becoming a member. It is clear that United States performers would reap the largest share of the foreign performance rights royalties that have been set aside so far.\textsuperscript{186} Furthermore, the administration of this fund would not be particularly novel. For example, the United Kingdom, one of the six countries that originally adopted the Rome Convention, administers its article 12 funds through Phonographic Performance Limited (PPL), a conventional collecting society.\textsuperscript{187}

It is unclear whether the limited performance right proposed in this paper would be sufficient to trigger the reciprocity built into article 12 of the Rome Convention, but there is reason to think that it is sufficient.\textsuperscript{188} Due to the dated nature of the Rome Convention, it is unclear exactly what article 12 exemptions would be acceptable. The only clear guidance on this matter is that article 15 allows the signing country to provide for exceptions that are also included in its domestic laws.\textsuperscript{189} The one exception to this open-ended opt-out states that "compulsory licenses may be provided for only to the extent to which they are compatible with this convention."\textsuperscript{190} Because there is no reason to believe that a narrower compulsory licensing of performance rights in sound recordings is incompatible with the Rome Convention, it is likely that

\textsuperscript{183} Franklin: Pay To Play: Enacting a Performance Right in Sound Recordings in \textit{PERFORMANCE RIGHTS} 115

\textsuperscript{184} Digital Audio Transmission Report, supra note 10, at 113-15.

\textsuperscript{185} House Report, supra note 61, at 93 (discussing the problems of adapting to corporate authorship in the civil law countries of France, Belgium, Holland, and Switzerland).

\textsuperscript{186} Digital Audio Transmission Report, supra note 10, at 100.

\textsuperscript{187} Kim, supra note 182, at 483-484.

\textsuperscript{188} For a concise description of the system in the United Kingdom, see Digital Audio Transmission Report, supra note 10, at 130-136. For a more complete analysis, see Kim, supra note 182, at 485-88.

\textsuperscript{189} Since most of the rest of the world will be adopting L-Band DAB transmissions, it would be advisable to include L-Band performances in order to gain the performance rights royalties generated by L-Band broadcasting around the world.

\textsuperscript{190} Id.
this proposal would be sufficient to meet the reciprocity argument.

VI. CONCLUSION

In a few decades, the role of radio may merge with the role of present day record stores, supplying consumers with preselected music while immediately debiting the consumers account. Since copyright draws a distinction between performance and distribution, once DAB serves the purpose of distribution, radio stations will become the record stores of the twenty-first century, supplying audio “on demand.” Until this era arrives, the creation of a performance right in sound recordings is necessary to balance the declining sales of prerecorded music due to digital audio broadcasting.

Performers, songwriters, and music publishers should receive some remuneration from the broadcasters who will utilize their performances in novel and profitable ventures. Creating a performance right in sound recordings that covers cable-based audio transmissions, S-Band, L-Band, and some In-Band broadcasting, will fully compensate the performers without unfairly injuring the analog or digital broadcasters. By creating a limited performance right in sound recordings and joining the Rome Convention, the United States will ensure its role as a leading light in both information production and artists’ rights well into the twenty-first century.