Moving Music Licensing Into the Digital Era:
More Competition and Less Regulation

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Thomas M. Lenard and Lawrence J. White
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Thomas M. Lenard#
Lawrence J. White+

“...the time is ripe to question the existing paradigm for the licensing of musical works and sound recordings and consider meaningful change. There is a widespread perception that our licensing system is broken.”

Abstract

The system for licensing music in the United States for public performances through radio, television, digital services and other distribution media is complicated, arcane and heavily regulated. Its basic structure is oriented toward transmitting music through analog channels. Although much of the pricing of music rights is supposed to be based on competitive prices, the current interdependent system of collective licensing of performing rights and widespread regulation of music prices (royalties) is inconsistent with the development of a competitive market and the associated efficiencies. Collective licensing by a handful of performing rights organizations (PROs) provides the major rationale for price regulation. However, the existence of price regulation has entrenched collective licensing and the position of those PROs. A more competitive system entails moving away from collective licensing.

In this paper we review the current structure of the music licensing system and suggest ways of making it more competitive and less reliant on regulation. Central to our proposals are: a) a comprehensive, standardized database of musical compositions (including the specific sound recording version, where relevant) and their owners so that distributors and users can readily identify from whom they need to license rights, along with a “safe harbor” provision that would provide the appropriate incentives for rights owners to contribute their information to the database; b) a greater ability of intermediaries to aggregate the various categories of music ownership rights; and c) the consequent development of more competitive negotiations and transactions between music rights holders and music distributors.

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# President, Technology Policy Institute
+ Professor of Economics, Stern School of Business, New York University

Introduction

The system for licensing music in the United States for public performances through radio, television, digital services and other transmission media is complicated, arcane and heavily regulated. Its basic structure is oriented toward transmitting music through analog channels.1 Although much of the pricing of music rights is supposed to be based on competitive prices, the current interdependent system of collective licensing of performing rights and widespread regulation of music prices (royalties) is inconsistent with the development of a competitive market and the associated efficiencies.

Collective licensing by a handful of performing rights organizations (PROs) provides the major rationale for price regulation. However, the existence of price regulation has entrenched collective licensing and the position of those PROs. A more competitive system entails moving away from collective licensing.

The current licensing system is also cumbersome, with distributors, such as the new streaming services, needing to obtain multiple licenses from multiple sources for even a single piece of music. A more competitive system would permit the emergence of more efficient bundles of licenses.

Digitization is important not only for how music is distributed, but also for how the contracting and monitoring that are essential components of the licensing process can occur. In fact, we already are starting to see licensing occur outside of the centralized performing rights and regulatory institutions. The changes that we suggest in this essay would reinforce the tentative steps that are already being taken and would offer the prospect for a simpler, more competitive, and therefore more efficient marketplace.

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1 The Copyright Office Report (p.1) describes it as follows: “… much of the legal framework for licensing of music dates back to the early part of the twentieth century, long before the digital revolution in music.”
Some Background

The idea of a “copyright” is reasonably straightforward: The creator of an original artistic work—including music—obtains a property right in that creation for a limited time period. The property right gives the creator the ability to limit who can “copy” the artistic work (hence the name that is usually attached to this form of property) and also the ability to authorize, and thus license, whatever copying the creator chooses to allow.

The basic notion underlying the property right is that creators need to be able to earn a return on their creation in order to encourage their creative efforts, and that unrestricted copying would erode the creator’s ability to capture that return. The limited “life” of the property right (as compared to the unlimited term of most other forms of property) is a recognition of the “public good” nature of the creation itself, with the implication that (at some point) that creation should be freely available to all users (i.e., it should be in the public domain).

The framers of the U.S. Constitution considered such property rights sufficiently important that a clause in the Constitution specifically authorizes the Congress to draft legislation to establish such rights for “authors” and for “inventors” (whose ideas are protected through patents). The Congress promptly complied and passed the first federal copyright law in 1790. However, this law did not explicitly cover musical compositions until 1831.

For music creations, the initial idea of copyright was that it protected the composers (including songwriters) and/or the publishers of the sheet music that embodied the composers’

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2 Under current law, which was last revised with respect to the length of copyright in 1998, a copyright lasts for the life of the creator plus 70 years or, if the copyright is owned by a corporation, 95 years after publication. After the term of the copyright expires, the creation enters the public domain, and anyone can freely copy it.
3 Article 1, Section 8, Clause 8, states that Congress shall have the power to “promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.”
creation against the copying of that sheet music. The extension of copyright to cover public performances of music occurred in 1897.

As the physical (and then electrical) recording of music became a reality toward the end of the nineteenth century (and supplemented the earlier development of player piano rolls), the “mechanical rights” to the physical reproduction of copies of recorded music became important and were formally recognized in the 1909 Copyright Act. The Harry Fox Agency (HFA) was formed as a subsidiary of the National Music Publishers Association in 1927 to be the collective agent for the major publishers (and their composers) in collecting royalties from record companies for the physical reproduction of musical compositions. The HFA’s role continues today, and the notion of “mechanical” rights has evolved to include digital downloads of various kinds of music, including ringtones.

Further, as the importance of public performances grew, and as over-the-air local broadcasting of music became widespread in the 1920s, the issue of how composers/songwriters and music publishers could best enforce their rights with respect to public performances came to the fore. In 1915, the American Society of Composers, Authors, and Publishers (ASCAP) was formed as a one-stop shop that provided the following services with respect to public performances for its members: licensing of music; enforcement against infringers; monitoring the frequency of play; and distributing royalties to rights holders. In 1939, an additional agency

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4 In light of the discussion below with respect to the regulatory determination of copyright royalty rates, it is worth noting that the 1909 Act also established – in the statute – an explicit royalty rate per physical reproduction. In connection with the latter, the Act established a compulsory licensing regime (which persists to the present day), whereby any party that meets a modest set of qualifications and is willing to pay the statutory royalty rate must be granted a license for this reproduction.

5 See the “Abbreviations” list at the end of this paper for a complete list of all of the abbreviations that are mentioned in this paper.

6 In addition to the HFA, there are a number of smaller agencies that provide a similar service, including Music Reports Inc. (MRI), LOUDR, Easy Song Licensing, The Music Bridge, and the American Music Rights Association (AMRA, which was formerly the American Mechanical Rights Agency).
that performed similar functions—Broadcast Music Inc. (BMI)—was formed. There are also
two smaller agencies that perform these functions: the Society of European Stage Authors and
Composers (SESAC),7 established in 1930, and Global Music Rights (GMR), started in 2013.

Such agencies have come to be described as “performing rights organizations” (PROs).
It is important to keep in mind that the two dominant PROs for protecting composition
performance rights—ASCAP and BMI—were formed and developed their standard operating
procedures in the analog era. These procedures included the granting of “blanket licenses,”
which cover the entire catalogue of the granting agency, to radio stations and other public
“broadcasters” of music, such as bars and restaurants. In the analog era, the difficulties of
contracting, enforcing against infringers, monitoring frequency of use, and distributing royalties
(which we henceforth refer to as performance rights functions) between the many thousands of
composers and music publishers that owned the copyrights and the many radio stations and other
performance venues that wanted to play the music meant that centralizing functions in a few
large PROs made sense from a perspective of reducing transactions costs.8

But centralizing the performance rights functions led to the accretion of market power.
In essence, by becoming the common agent for thousands of otherwise competing
composers/songwriters and music publishers, ASCAP became a locus of market power for the
selling of music performance rights vis-à-vis the broadcasters/users of the music.9 Recognizing
this market power, the Antitrust Division of the U.S. Department of Justice (DOJ) sued ASCAP

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7 In July 2015, SESAC acquired the Harry Fox agency, giving it a major role in the licensing of mechanical rights.
8 The same argument applied to centralizing the enforcement of mechanical rights through the HFA.
9 Indeed, it was the radio broadcasters’ unhappiness with an increase in ASCAP’s royalty rates in 1939 that led their
trade association (the National Association of Broadcasters) to form BMI.
in 1934 and again in 1941, charging that ASCAP’s collective setting of royalty rates for its thousands of (otherwise competing) members constituted a violation of the Sherman Act.\(^{10}\)

That suit was eventually settled with a consent decree in 1941 that allowed ASCAP to continue to function as a collective licensor for its members; the consent decree was thus an implicit recognition of the role of the PRO in reducing the contracting and monitoring transactions costs for its members. However, the decree (including subsequent modifications\(^{11}\)) places restraints on ASCAP’s actions\(^{12}\) and specified that the Federal District Court for the Southern District of New York would arbitrate disputes when prospective licensees and ASCAP could not agree on terms. A similar suit against BMI in the early 1940s was settled with a similar consent decree. As a result, that specific court (which is often described as the “rate court”) has become the *de facto* regulator of these license terms, including pricing, for musical compositions.

In an attempt to bring music licensing into the digital age, Congress enacted the Digital Performance Right in Sound Recordings Act (DPRA) of 1995, and the Digital Millennium Copyright Act (DMCA) of 1998, which expanded copyright protection to public performances of sound recordings through certain digital audio transmissions.\(^{13}\) This included the then-emerging satellite services that were predecessors to Sirius XM as well as subsequent Internet-based

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\(^{11}\) The terms of the ASCAP consent decree and of a similar consent decree with BMI have been revised a number of times since the early 1940s. As of late 2015, the DOJ is continuing to undertake a fresh review of the decrees.

\(^{12}\) For example, the members of ASCAP are free to license their works outside of the ASCAP framework (i.e., ASCAP cannot demand exclusivity from its members), and prospective licensees must have the option of licensing individual pieces of music from ASCAP (rather than being required to take a blanket license).

\(^{13}\) This created a property right for the copyright owners who released to the public sound recordings of musical works.
streaming services such as Pandora and Spotify. This legislation also mandated compulsory licensing for non-interactive digital services.\textsuperscript{14}

The rates that most digital services pay for sound recording performance rights under the compulsory license are determined by the Copyright Royalty Board (CRB).\textsuperscript{15} Royalties are collected and distributed by a new PRO, SoundExchange.\textsuperscript{16} SoundExchange also participates in CRB proceedings on behalf of the copyright holders.

The CRB applies different standards in determining rates for different categories of digital services. Interactive digital services (e.g., Spotify) are exempted from the CRB process (which means that these services negotiate directly with the performing artists and labels). Terrestrial radio broadcasting is free of the necessity to seek such licenses at all.\textsuperscript{17}

**The Licensing Market**

As of 2015, the market for music rights has developed largely into three regulated markets: one for musical composition “public performance” rights, a second for sound recording performance rights; and a third for mechanical reproduction rights.\textsuperscript{18} In the absence of negotiated license agreements, rates are established through adversarial administrative proceedings: before the U.S. District Court for the Southern District of New York for rates that

\textsuperscript{14} Because of a quirk in the copyright laws, virtually all sound recordings that were made before 1972 are not included.
\textsuperscript{15} The CRB was created in 2004. Prior to that, royalty rates were set by Copyright Arbitration Royalty Panels (CARP).
\textsuperscript{16} SoundExchange was established in 2000 as a division of the Recording Industry Association of America (RIAA); it was spun off as a separate non-profit organization in 2003. The RIAA is the trade association of the recording industry (record labels) in the U.S.
\textsuperscript{17} The argument for exempting terrestrial broadcast radio from paying this category of royalties was that the playing of music on terrestrial radio was a form of free promotion for the records and their artists (and/or the record labels that had assembled and paid them), and thus the latter group(s) were already being compensated by the broadcasters.
\textsuperscript{18} There are also “synchronization” rights, which apply to the use of music in movies and television programs and are largely unregulated. And, as we discuss below, the sound recording performance rights for interactive digital media services (e.g., Spotify) are unregulated.
are charged by ASCAP and BMI (on behalf of songwriters and publishers); and before the CRB for rates that are paid for the performances of sound recordings to SoundExchange (on behalf of performing artists and their record labels) and also for the physical and digital reproduction of musical works to HFA, publishers, and other administrators. The prospect of such proceedings presumably also affects negotiated agreements.

Distributors that publicly perform music, regardless of the method of delivery, must obtain licenses for musical composition performance rights, which compensate songwriters and publishers (see Figure 1). Distributors typically obtain blanket licenses for the entire catalogue of works from the two major U.S. PROs—ASCAP and BMI—which account for most of the titles, and from the two smaller PROs: SESAC and GMR. Royalty rates for the ASCAP and BMI catalogues can be negotiated with users/distributors, subject to the provisions of their respective antitrust consent decrees. If negotiations are unsuccessful, the parties can go to the District Court, which attempts to determine what a “market” rate would be. Royalty rates for the music that is in the SESAC and GMR catalogues are negotiated directly with users. There are no government consent decrees for these latter two PROs that apply when the parties fail to agree on terms.

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19 As was noted above, the HFA is the dominant PRO for collecting royalties for mechanical rights. (The “PRO” designation is not often used in connection with the HFA; however, its function/activities are generally consistent with what PROs do.) Although these royalty rates were initially specified explicitly in statute, they are now reviewed and re-set every five years by the CRB.

20 Although SESAC was founded in the U.S. in 1930 to help European music publishers enforce their performance rights in the U.S., it has remained considerably smaller than the two major PROs. It is currently owned by a private equity firm: Rizvi Traverse. GMR was founded in 2013.
Sound recording rights were introduced by the DPRA in 1995, with categories of rates established by the DMCA in 1998. These rights are intended to compensate artists and record labels for the public performance of music by satellite and web-based services, and most such rates are subject to a category of “statutory rates” (see Figure 2). Statutory rates” refers to the fact that the statute specifies the criteria that the CRB should use in its determination of the specific rates that should apply to a specific category of music service. Royalty rates for non-interactive services often are negotiated collectively with and paid to SoundExchange, which is the PRO for these rights. In the absence of negotiated rates, the CRB is tasked with establishing statutory royalty rates. Interactive services, such as Spotify, negotiate directly with the sound recording copyright owners (typically the record labels), without the intermediation of the CRB.
For statutory sound recording rights, depending on the identity of the licensee and the technology used, rates are determined under either the “801(b)” standard, which takes into account the “public interest” in a wide dissemination of music and applies to pre-1998 non-interactive digital services, or the “willing buyer/willing seller” standard, which applies to post-1998 non-interactive digital services. The willing buyer/willing seller standard is intended to approximate a market rate and is generally higher than the 801(b) standard, as the latter incorporates other objectives.

**Regulatory Issues**

The determination of market-rate benchmarks for both music composition and sound recording performance rights is obviously problematic in an environment where rates are often determined administratively or by a rate court. Music composition performance rights for 95 percent of music (i.e., for the ASCAP and BMI catalogues) have been under the jurisdiction of
the antitrust rate court (the NY District Court) for more than 70 years, making it difficult to know what rates parties would voluntarily adopt in a competitive market. Royalty rates for the more-recent sound recording performance rights have always been determined either by, or against the backdrop of, the CRB (or its predecessor), with the exception of rates for interactive services.

Moreover, in contrast to more traditional “public utility” rate-regulated industries, it is probably not possible to base royalty rates on costs, and neither the antitrust rate court nor the CRB appear to try to do so. Musical works are classic examples of “information goods.” Such goods are characterized by large (and sunk) “first-copy” costs and very low—even zero—costs of reproduction. This suggests that optimal prices would not be based on costs anyway, but instead would be based on demand characteristics.

Rather than using costs or demand characteristics, however, the antitrust court and the CRB make their determinations based on other rates, both contemporaneous and historic. These rates, in turn, are influenced by the regulated rates and the prospect of a court or CRB proceeding if negotiations fail. It is thus unlikely that the regulatory processes of the antitrust rate court and the CRB have yielded the efficient results that a competitive marketplace would be expected to achieve.

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22 In the recent Pandora case, the court used the EMI-negotiated rate with Pandora as a benchmark. Opinion & Order, In Re Petition of Pandora Media, Inc.: Related to United States of America v. American Society of Composers, Authors, and Publishers, 12 Civ. 8035 (DLC) 41 Civ. 1395 (DLC), 6 F.Supp.3d 317 (S.D.N.Y. Mar. 18, 2014) Pg. 90-91. Hereafter “Pandora Rate Case.” However, a rate that is negotiated with the backstop of a rate court proceeding should not be considered to be a market rate.
24 If fixed costs are non-trivial and if marginal costs are constant with respect to the volume of output, then the “first-best” system of pricing from a social efficiency perspective – prices should be equal to marginal costs – will not allow the sales revenues to cover those fixed costs. A “second-best” alternative to cover those fixed costs, with the least distortion of social efficiency, should be sought. If those costs are to be covered solely from sales revenues, then some prices will have to exceed marginal costs; and the (second-best) optimum is achieved by charging higher prices to customer segments that are less price-responsive. This principle is frequently described as “Ramsey pricing”; see, for example, William J. Baumol and David F. Bradford, “Optimal Departures from Marginal Cost Pricing, American Economic Review, 60 (June 1970), pp. 265-283.
This conclusion is strengthened by the experience of rates for sound recording performance rights, as specified by the DPRA and DMCA. At least four different rates for these rights apply to the various categories of music distribution services:

- those to whom the CRB applies the “801(b)” statutory standard (e.g., Sirius XM);
- those to whom the CRB applies the “willing buyer/willing seller” statutory standard (e.g., Pandora);
- those who negotiate for their licenses directly with the copyright holders without the intermediation of the CRB (e.g., Spotify); and
- those who are not required to seek such licenses and thus “pay” a rate of zero (i.e., terrestrial radio broadcasters).

**The Transactions Cost Rationale**

Music licensing potentially involves tens or even hundreds of thousands of transactions between copyright holders and licensees. Licenses have to be negotiated; performances monitored for frequency of licensed use; royalties collected and distributed; and infringing uses challenged. A system in which this is done collectively—through PROs and blanket licenses—can be an efficient way of reducing transactions costs. Kobayashi suggests that “PROs are arguably the quintessential example of a Coasian organization—i.e., an organization whose existence is based on the mitigation of transactions costs that would be generated by the use of market transactions to license, price, collect and distribute performance right royalties.”

In the absence of PROs, publishers and other copyright owners would have to interact directly with users and distributors such as bars and restaurants, radio stations, and digital

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services. The number of transactions would be enormous. With PROs in the middle, each of the entities (and both sides of the transaction) only has to deal with the two organizations—ASCAP and BMI—for the composition rights for most music (and with SESAC and GMR for a much smaller amount) and, for non-interactive digital services, with SoundExchange for the administration of sound recording rights. The PROs themselves are able to take advantage of economies of scale in negotiating licenses, monitoring licensees, and collecting and distributing royalties. Transactions costs are further minimized through the use of the blanket license.

The collective negotiation of rights, however, creates market power issues: ASCAP and BMI, for example, control the overwhelming majority of music composition performance rights in the United States. This market power is (in principle) limited by the consent decrees (as modified over the years) and the antitrust rate court, which determines rates if negotiations fail. Similarly, SoundExchange has antitrust immunity, which enables it to represent the record labels with respect to sound recording rights. By setting rates for statutory licenses, the CRB is a check on the actual or potential market power of copyright owners.

Some licenses are negotiated without the benefit of a PRO intermediary, which suggests that the severity of the transactions cost issue differs depending on the license and on the parties that are involved. Interactive digital services, such as Spotify, are not covered by the CRB rate-determination process and negotiate directly with the record labels. Interactive services also pay royalties for mechanical rights (that non-interactive services are not required to pay), which reflects the belief that interactive services are a substitute for the actual purchase of the

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26 However, the terrestrial broadcast radio industry bargains collectively with ASCAP and BMI through the Radio Music License Committee (RMLC). Similar collective negotiation occurs between the Television Music Licensing Committee (TMLC) and the PROs.
Increasingly, as discussed below, distributors that would be covered by a statutory license, such as non-interactive services, are negotiating directly with record labels and publishers.

The transactions costs for licensing rights for digital distribution services—satellite radio, web-based radio and interactive services—are different than for the traditional distribution channels. The most important difference is that, partly because the services—e.g., Sirius XM, Pandora, and Spotify—are national or even global, there are far fewer of them.\(^{28}\) In addition, monitoring is simpler because the digital technology can presumably compile automatically a record of songs that are played and their frequency of play. As Kobayashi has suggested, the new technologies are more conducive to direct negotiation between users/distributors and publishers, which lessens the need for the PRO intermediary.

**Partial Withdrawal from PROs under the Current System**

Kobayashi indicates that the new technologies that are associated with digital distribution or “new media” have changed transactions costs in a way that diminishes the usefulness of the PROs. He suggests that this explains, consistent with a Coasian analysis, why some of the major music publishers (which now are often owned by the major record labels) withdrew music composition licensing rights for new media from ASCAP in 2011 and from BMI in 2013. The antitrust rate court subsequently ruled that this was not consistent with the antitrust decree—that the publishers could not selectively withdraw licensing rights, but instead had to be either all in

\(^{27}\) The interactive digital streaming service Spotify pays approximately 70% of its revenue to rights owners, while the non-interactive digital streaming service Pandora pays only about 50% of gross revenue to rights owners. http://www.digitalmusiclaw.org/digital-performance-royalties-for-sound-recordings-spotify-vs-pandora/

\(^{28}\) Although traditional radio is increasingly national, too, because of syndication.
or all out of the PROs. Kobayashi concluded that this created a “Hobson’s choice” for the publishers: They could either withdraw their licensing rights entirely, thereby losing the transaction cost efficiencies for traditional media; or they could stay in the PROs, thereby losing the ability to negotiate directly with the digital distributors.

There is, however, in addition to the transactions cost rationale, a strategic aspect to the publishers’ withdrawal from the PROs, as is explained in the rate court’s decision in the 2014 Pandora rate case.

In April 2011, ASCAP modified its rules to permit a publisher to withdraw the rights to license music to new media outlets from ASCAP while ASCAP retained the rights to license those works to everyone else. New media outlets were defined as outlets whose transmissions were to the public in exchange for a fee exclusively via the Internet, a wireless mobile telecommunications network, and/or a computer network. The new rule allowed the publisher to rejoin ASCAP at any point. It also required ASCAP to create a directory of the affected works no later than 90 days before the effective date of the withdrawal, so that both ASCAP and the publisher would have an accurate list of the affected works prior to the withdrawal. ASCAP was to continue to provide administrative services for any withdrawing publisher.

In December 2012 the rules were further changed to allow publishers to target individual large licensees and to withdraw rights solely with respect to those licensees. Effective January 1, 2013, Sony/ATV—the largest publisher—partially withdrew new media rights from ASCAP.

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30 Pandora Rate Case, 46 etc.

31 EMI was the first publisher to exercise this option by negotiating licensing directly with new media outlets in May 2011. ASCAP continued to administrate these new media directly negotiated rates for EMI. See Pandora Rate Case, 49.

32 Pandora Rate Case, 51.
in order to negotiate directly with larger digital services, such as Pandora.\textsuperscript{33} In the bargaining that ensued, Pandora requested from Sony a complete list of its catalogue in order to be prepared to take down the Sony catalogue if the negotiation failed. According to the rate court opinion, Sony chose “deliberately not to” provide a list of its works in order to keep a bargaining advantage.\textsuperscript{34} Similarly, ASCAP did not provide the list when requested to do so.\textsuperscript{35}

Without an accurate list, Pandora risked being sued for infringement, because it could not be confident that it was taking down the entire Sony catalogue. This gave Sony a substantial bargaining advantage, and Pandora ultimately signed an agreement on terms that were considered to be favorable to Sony.\textsuperscript{36} Pandora had similar difficulties with respect to the availability of a usable list in its negotiations with Universal Music Publishing Group (UMPG).\textsuperscript{37}

The rate court concluded that Sony and UMPG were coordinating their actions, rather than competing,\textsuperscript{38} and that a critical part of their strategy was to withdraw their new media rights without making available an accurate list of their works. In the words of the court, “Without that list, Pandora’s options were stark. It could shut down its service, infringe Sony’s rights, or execute an agreement with Sony on Sony’s terms.”\textsuperscript{39} In addition to simply negotiating higher royalty rates, the publishers’ goal was to create a higher benchmark if they subsequently rejoined the PRO and went through a rate court proceeding.\textsuperscript{40}

\textsuperscript{33} Ibid., 61.
\textsuperscript{34} Ibid., 66.
\textsuperscript{35} Ibid., 67.
\textsuperscript{36} Ibid., 70.
\textsuperscript{37} Ibid., 76.
\textsuperscript{38} According to the decision there was “troubling coordination.” The decision continues by noting that “the Sony and UMPG licenses were the product of, at the very least, coordination between and among these major music publishers and ASCAP.” Pandora Rate Case, 97.
\textsuperscript{39} Ibid., 98.
While Kobayashi’s Coasian analysis is reasonable as far as it goes, the desire by publishers to withdraw new media licensing rights reflected more. Clearly, at least in the court’s view, the publishers were behaving strategically and attempting to increase their market power. The court also concluded that, “Even if Sony had provided the list of its works to Pandora, Sony would have retained enormous bargaining power.”

A Limited Proposal for Reform: The Copyright Office Report

In February 2015 the U.S. Copyright Office (USCO), which is a part of the Library of Congress, issued a Report to Congress that summarizes the current forms and procedures for music copyrights and offers recommendations for change. While the Report suggests that the “time is ripe to question the existing paradigm”, it does so in only a limited manner. The Report presents the USCO’s views on how to improve the existing regulatory system, but does not examine in detail how to make the system more competitive and less reliant on statutory licenses and government ratemaking. It recommends that government should “enable voluntary transactions while still supporting collective solutions.” However, these two goals may be in conflict.

The Report essentially accepts the current system of statutory licenses while suggesting modifications around the edges: For example, all like uses of music should be treated alike; music publishers should be able to opt out from PROs for the licensing of interactive services (i.e., the same treatment as with sound recording rights); and all rate-setting should be done at

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41 Pandora Rate Case, 102.
42 Subsequent to this decision, Sony and UMPG have apparently placed their entire catalogue listings online.
44 Ibid., 1.
the CRB (i.e., none at the antitrust rate court). The Report recommends a single, market-oriented rate-setting standard for all uses that are subject to statutory licenses, but does not address the difficulty of effecting this standard in a heavily regulated environment.

The Report also recommends that there should be an authoritative database to facilitate the licensing process, but does not specify how this should be accomplished. Although the Report recommends that the government should provide incentives to the private sector for establishing this database through the statutory licensing scheme, it does not specify what those incentives should be.

The Feasibility of Competition in the Market for Music Licensing

The preceding discussion raises the questions of whether the music licensing market(s) can operate competitively and what policy measures can contribute to that goal. The emergence of elements of competition can be seen in an increasing number of negotiated contracts between streaming services and rights holders, both for composition performance rights and sound recording rights. For example, Pandora, the largest non-interactive streaming service, has negotiated contracts for composition public performance rights with the major publishers.45

With respect to sound recording rights, as discussed above, interactive services such as Spotify and Apple Music are not covered by the statutory license and thus must negotiate directly with the labels. Apple Music has recently struck deals with both major and independent labels.46

In addition, the recent CRB rate proceeding provided evidence of negotiated contracts between record labels and non-interactive services Pandora and iHeartMedia.\(^{47}\) Pandora has negotiated an agreement with Music and Entertainment Rights Licensing Independent Network ("Merlin"), which represents thousands of independent music labels.\(^{48}\) iHeartMedia has negotiated agreements with both major and independent labels.\(^{49}\) These contracts were presented to the CRB as evidence of the existence of competitive benchmarks for sound recording royalty rates for non-interactive services. Of course, the existence of such contracts that (arguably) reflect competitive prices also raises the question of whether a CRB proceeding to determine rates is generally needed.\(^{50}\)

In the recent proceeding, Pandora’s economic expert Carl Shapiro argued that the market for licenses for non-interactive services is workably competitive. The ability to steer users between different music (and thus between the sources—rights holders—of that music) implies a relatively high elasticity of demand for any individual piece of music, which gives the webcaster significant bargaining power vis-à-vis any specific record label. He contrasts this with interactive streaming services (such as Spotify), which have less ability to steer users, a lower elasticity of demand, and therefore less bargaining power with the labels.\(^{51}\)

For consumers, however, there is likely substitutability between the interactive and non-interactive services, perhaps enough that they may be in the same market.\(^{52}\) If this is the case, it

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\(^{47}\) See Testimony of Carl Shapiro (on behalf of Pandora) and testimony of Daniel Fischel and Douglas Lichtman (on behalf of iHeartMedia) in Web IV proceeding, Docket No. 14-CRB-0001-WR, October 6, 2014.

\(^{48}\) Shapiro testimony, p. 23.

\(^{49}\) Fischel-Lichtman testimony, p. 8.

\(^{50}\) However, so long as the compulsory licensing regime remains in effect, some form of back-up arbitration (in the event that negotiations fail) would still be needed.

\(^{51}\) Implicit in this argument is the belief that interactive services would not be able to charge differential fees to subscribers that were dependent on the types of music that the subscribers chose and/or that the subscribers would be insensitive to those fees.

\(^{52}\) A rise in the price of subscription services will cause at least some consumers to substitute the advertising-supported non-interactive services.
would not be logical to argue that part of the market is competitive and part is not. Moreover, because of the nature of this market—i.e., high first-copy costs and low or zero marginal costs—some form of differential pricing (i.e., price discrimination) will be efficient and necessary to cover the costs of the music production (from composers and artists through to the publishers and record labels). Therefore, it is likely efficient that the interactive services (and, ultimately, their consumers), with a less elastic demand, cover a greater portion of the costs.

Interestingly, Shapiro’s testimony also argues that the Merlin negotiated rates are below the statutory rates and are thus an important indication that the statutory rates are above competitive levels. This suggests that the CRB process may not be particularly successful in protecting the digital distributors from the exercise of market power.

Towards a More Competitive Market

The market for music licenses reflects its origins in the era when distribution meant sheet-music and player pianos. As new music delivery technologies have been introduced, *ad hoc* modifications have been introduced, reflecting political compromises. But the licensing system itself has been largely untouched by new technologies. It is doubtful that music licensing would have developed as it has if digital technologies had been available a century ago.

The current system of collective licensing of rights by the major PROs—ASCAP, BMI, and SoundExchange—and blanket licenses reduces transactions costs (although the costs of long drawn-out rate proceedings are not trivial). However, this collective licensing regime also provides the primary rationale for price regulation and is the major impediment to the emergence of a more competitive market.

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53 Shapiro testimony, p. 36.
Rate regulation by the antitrust rate court and by the CRB is viewed as a way to address the market power issues that are created by collective licensing. However, the market for music licenses is very different from other rate-regulated industries—such as water, electricity, and natural gas distribution—which arguably are natural monopolies. In general, economic studies have shown that rate regulation of an otherwise competitive industry rarely, if ever, improves economic welfare and that it should be reserved for situations where a competitive market is not possible. Indeed, as noted in the previous section, regulation at the CRB may have kept rates at supra-competitive levels. Thus, the challenge is to move away from collective licensing and toward direct bargaining between publishers and labels on the one hand, and music distribution services on the other, while retaining, to the extent possible, the transactions-cost reducing and administrative services that the PROs provide.

Identifiers

As the recent Pandora case suggests, accurate ownership data is necessary for meaningful bargaining to take place. In the absence of accurate ownership data, Pandora was unable to bargain effectively with Sony. Because it could not be confident that it could take down the entire Sony catalogue, it could not withdraw from the negotiation.

More generally, improving the functioning of the marketplace in music “properties” requires the full identification of those properties (and the associated property rights). Therefore, an important step is the development of a standardized system of unique identifiers for each

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55 Much of the discussion that follows will focus on music composition performance rights and sound recording performance rights. But the arguments generally hold equally validly for mechanical reproduction rights.
musical composition and (where relevant) the specific sound recording version, so that users and distributors can identify from whom they need to license rights in order to avoid infringement.

Systems of identifiers currently exist, but none is sufficiently complete or reliable to be the basis for an online market (see Table 1).

In one sense, a system of identifiers is like the real estate records at the county courthouse: a reliable way to identify who owns what. This analogy would seem to call for a governmental body—e.g., the Copyright Office—to be the entity that develops the standardized system of identifiers and that might even be the central repository for the database. However, in this era of widespread disillusionment with government’s capacity to function efficiently, we believe that an alternative route should be pursued.

A standardized system of identifiers for music ownership information can also be analogized to the standardized system of identifiers that apply to items that are sold at retail in the U.S.: the “barcode” system. That system was developed and is now maintained by GS1 US (formerly the Uniform Code Council). That organization coordinates product identification and transmission systems for RFID tags, as well as barcodes. It is a non-profit organization that is governed by its users, including manufacturers and retailers. It is funded by users in proportion to sales revenue and is not subject to regulatory oversight (although it is subject to the U.S. antitrust laws).56

56 For a description of how that organization was formed and operates, see, e.g., Stephen A. Brown, Revolution at the Checkout Counter: The Explosion of the Bar Code. Cambridge, MA: Harvard University Press, 1997. We suggest below that the governance structure of the GS1 US – or something similar to that structure – would be appropriate for the standardized system of music identifiers that we advocate; this does not mean that the barcode system itself would be the appropriate system for these music identifiers.
Table 1

<table>
<thead>
<tr>
<th>Standard Identifiers</th>
<th>Copyright Covered</th>
<th>Administered By</th>
<th>Organization Type</th>
<th>Strengths/Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Standard Musical Work Code</td>
<td>Musical Composition</td>
<td>ASCAP (US and Canada)</td>
<td>Performance Rights</td>
<td>S: Accuracy W: Cannot be assigned until all songwriters on a musical work are</td>
</tr>
<tr>
<td>(ISWC)</td>
<td></td>
<td></td>
<td>Organization</td>
<td>identified</td>
</tr>
<tr>
<td>International Standard Recording Code (ISRC)</td>
<td>Sound Recording</td>
<td>RIAA (US)</td>
<td>Trade Organization for</td>
<td>W: No single database (sound exchange currently compiling database with ISRCs). No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Recording Industry</td>
<td>requirement for complete list of owners before ISRC assignment.</td>
</tr>
<tr>
<td>IPI code</td>
<td>Musical Composition</td>
<td>CISAC</td>
<td>Collective Management</td>
<td>Note: Required prior to obtaining an ISWC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Organization</td>
<td></td>
</tr>
<tr>
<td>International Standard Name Identifier (ISNI)</td>
<td>All types of copyright</td>
<td>ISNI International Agency</td>
<td>Part of ISO (non-</td>
<td>W: Only one registration agency affiliate in the US. Limited use so far for music</td>
</tr>
<tr>
<td></td>
<td>(including non-musical)</td>
<td></td>
<td>governmental organization)</td>
<td></td>
</tr>
<tr>
<td>Universal Product Codes (UPC)</td>
<td>Sound Recording</td>
<td>GS1 US</td>
<td>Non Profit</td>
<td>W: need different UPC for each product/version of product (exp. Album, digital</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>single, remix)</td>
</tr>
<tr>
<td>Audio Fingerprinting</td>
<td>Sound Recording*</td>
<td></td>
<td></td>
<td>S: Can’t easily strip song of audio fingerprint without changing quality of audio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W: Some technical barriers to scaling this technology</td>
</tr>
<tr>
<td>US Copyright Public Registration System</td>
<td>All types of copyright</td>
<td>US Copyright Office</td>
<td>Government</td>
<td>W: Not mandatory therefore not comprehensive. Static record that cannot reflect</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>change in ownership unless registration is updated (again not mandatory)</td>
</tr>
<tr>
<td>Harry Fox Agency Database</td>
<td>Musical Composition</td>
<td>Harry Fox Agency</td>
<td>Rights Management Company</td>
<td>W: Songwriter and publisher data only for songs registered by member publishers</td>
</tr>
</tbody>
</table>
**Digital Data Exchange (DDEX)**  
Musical Composition and Sound Recording  
Joint Initiative (see http://www.ddex.net/current-ddex-members)  
Note: Still very early stages. Strong incentives for stakeholders to standardize music metadata.

**UMPG and Sony/ATV Online Catalogs**  
Musical Composition and Sound Recording  
Universal Music Publishing Group, Sony/ATV  
Publishers  
W: Separate catalogs where only songs published by UMPG and Sony/ATV are listed. No unique identifier attached that is compatible with other catalogs.

**MusicMark (not yet operational)**  
Musical Composition  
Joint Initiative (ASCAP, BMI, and SOCAN)  
Performance Rights Organizations  
W: Only for songs using these PROs. If publishers withdraw from PROs in favor of direct administration of their relevant rights effectiveness could be undermined. (Deterrent to leaving PROs?)

*Can only be used to identify a particular sound recording; does not provide authorship/ownership information, but could theoretically be associated with another sound recording identifier such as ISRC.*


In the music licensing context, a similar governance structure—in essence, the governing board—of the non-profit organization that would be responsible for the system of unique identifiers for musical composition and recordings might be drawn from the publishers, the record labels, the radio broadcasters, and the digital distribution services. The revenue to support the organization could come from a small levy on the revenues of the participating members (as is currently true for the revenues to support the GS1 US barcode system). The Copyright Office, which clearly has an interest in promoting a reliable system of identifiers, should also play a role in this organization.

The members of the various industry groups should collectively have an interest in making a comprehensive identifier system work within the structure of the competitive online
marketplace for licensing rights. However, under the current framework, the individual parties’ incentives are less clear. As the recent Pandora case shows, the incentives for some parties can go in the direction of withholding information.57

To strengthen the incentive of publishers and labels (as well as individual music creators) to contribute their ownership information to this database, as well as to support it financially, the copyright law should be changed to create a “safe harbor” with respect to potential infringement by distributors: If a music distributor (e.g., a terrestrial broadcaster or a digital service) could show that it had made a good faith effort to determine the ownership of a piece of music (e.g., by searching through this newly established centralized data base) and was not able to ascertain the ownership of that piece of music, it could not subsequently be sued for infringement by the owner of that copyright.58,59

Encouraging Direct Bargaining

A comprehensive system of identifiers would encourage direct bargaining without the intermediation of the PROs, but more is probably necessary to encourage the movement away from the current collective licensing regimes.

Publishers should have an incentive to withdraw or partially withdraw from the PROs. Reentry should not be permitted in the short (or even medium) term to guard against the type of strategic behavior exhibited in the Pandora case. The obvious incentive for direct bargaining

57 The Sony/ATV online database launched in July 2014, and the UMPG online database launched in September 2014. This may be in response to the Pandora Rate Case. See http://www.completemusicupdate.com/article/universal-music-publishing-to-publish-catalogue-data/

58 This “safe harbor” provision should serve to discourage the kind of strategic non-revelation of information that we noted above with respect to the antitrust rate court’s recent finding that some of the record labels had acted strategically in not revealing to Pandora their complete catalogues. Also, it appears that this type of safe harbor currently applies with respect to mechanical rights. See USCO Report, pp. 28-29.

59 Registration should not imply that the owner is willing to grant a license. The composition could be registered with the condition that the owner is unwilling to license it. In turn, this suggests that in the more competitive framework that we envision, the compulsory licensing regime for the digital distribution of recorded works should be scrapped.
would be if the rate court adopted a policy of setting royalty rates on the low side. Then publishers would have an incentive to withdraw from the collective licensing process and bargain directly with distribution services.

Similar logic does not apply on the sound recording side, because of the existence of a compulsory license. Here, the establishment of low rates by the CRB would discourage direct bargaining between the labels and the distributors because the statutory license would always be available. The existence of the statutory license, especially at a low rate, is an impediment to direct negotiation in this area.

Elimination of the statutory license would not necessarily mean that that royalty rates would rise. As discussed above, there is evidence of negotiated license deals with independent labels below the statutory rate.

Larger entities would presumably have greater bargaining leverage. Publishing and recording are each dominated by three large companies, although each sector also includes a large number of independents (see Figures 3 and 4). Moreover, the three largest labels and publishers are integrated with each other.60

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60 Universal Music Group (record label) owns Universal Music Publishing Group (publisher). Similarly, Warner Music Group (record label) owns Warner/Chappell Music (publisher). Sony owns both Sony Music Entertainment (record label) and 50% of Sony/ATV (publisher). Together the “big three” (as they are known) accounted for 73.3% of market share in the recording industry and 65% of market share in the publishing industry in 2014.
**Record Company Market Share 2014**

![Pie chart showing market share for various record companies in 2014](chart1.png)


**Publishing Company Market Share 2014**

![Pie chart showing market share for various publishing companies in 2014](chart2.png)

This is somewhat analogous to the relationship between video content owners and cable TV distributors. Owners of “must-see” content generally have substantial bargaining leverage. However, content owners incur substantial costs if they fail to strike a deal with major distributors, so distributors also have leverage; and, generally, an agreement is reached.

Similarly, owners of large catalogues of music have a strong incentive to reach a deal with large distributors. Also, it is not generally in the interest of content owners to charge prices that threaten the financial viability of their distributors. The ability of non-interactive streamers to steer their customers away from or toward specific music selections also limits the leverage of the content owner.

In addition, the new technologies and digital distribution platforms are permitting new forms of competition to emerge. For example, artists do not need an established “label” to have their songs played on some of the new streaming platforms. The existence of a comprehensive identifier system can make it easier for such platforms to identify new artists. The algorithms that the platforms use can facilitate the matching of listeners and content creators, making it easier for them to accumulate a fan base.

Nonetheless, the existence of large players argues for close antitrust scrutiny to assure that they don’t coordinate with each other.

Pricing

Licensing contracts are complex, potentially involving a large number of terms. The socially optimal licensing schemes for Pandora, Spotify, the new Apple music streaming service, and an unknown startup are likely to differ. A comprehensive database should also facilitate the formation of optimal bundles and more efficient pricing.
As indicated above, songs are information goods, with high fixed costs and low or zero marginal costs. In competitive (as well as regulated) markets, the pricing of such goods is often based on demand characteristics, where more price-sensitive consumers face lower prices than do less price-sensitive consumers.\textsuperscript{61} This pricing structure is generally efficient as long as it increases total output (as compared with the output that would result from a structure of uniform prices for all users/distributors).

In a more market-based system, rights holders would have an incentive to charge higher prices (prices here are used as a catch-all to encompass multiple contract terms) to categories of users that are less price-sensitive, while charging lower prices to those categories of users that are more price sensitive (e.g., perhaps because they can more easily switch to other music from other providers). This would be efficient to the extent that the overall amount of music that is consumed increases. Indeed, some of this is happening under the current system, with the interactive services (with lower demand elasticity) paying higher royalties than the non-interactive services (with higher demand elasticity).

In addition, in a more market-based system, a more nuanced system of differential pricing of different pieces of music—recorded by different artists, composed by different song writers—may well emerge. Under the current PRO-dominated system, all composers receive approximately the same amount per play, and all artists receive (approximately) the same (but different from and generally larger than composers) amount per play.\textsuperscript{62} More popular artists and

\textsuperscript{61} The price to each category of user at least covers the marginal costs of selling to that category, as well as making a contribution toward covering the fixed costs. The hope of the seller, of course, is that the aggregate contributions more than cover the fixed costs.

\textsuperscript{62} As is true of much else with respect to music copyright, these are generalizations, and the actual system is far more complex and arcane: The particular form of play can matter, and there can be extra amounts that accrue to especially popular pieces of music. For an explanation of ASCAP’s system of royalty payments to its members, see for example: http://www.ascap.com/members/payment/royalties.aspx ; and, for a more general explanation, see: http://entertainment.howstuffworks.com/music-royalties7.htm .
composers earn more only when their songs are played more often. But specific artists and/or song writers may feel that their performances/compositions should receive a higher price per play. The more competitive framework that we envision would allow this form of differential pricing to be tried and to persist if successful.

*Blanket Licenses*

Blanket licenses play a central role in the current system. They reduce transactions costs, but at the same time confer substantial market power on license holders collectively through their PROs. This then necessitates the current use of statutory licenses and rate proceedings, which our proposal is designed to make less necessary (and, ideally, unnecessary).

With the availability of a comprehensive, electronic database, the market should be able to develop all sorts of bundles of varying sizes and characteristics to meet different needs. If this occurs, blanket licenses should become less common. If users/distributors have the option to license smaller bundles (even individual songs) and if there are a sufficient number of separate suppliers or aggregators of licenses so that significant market power is unlikely to be exercised (either individually or collectively), the availability of larger bundles—even, for example, an individual publisher’s entire catalogue—should not be a problem and, indeed, should be welfare enhancing.

*Agents*

The availability of an accurate data-base is likely to facilitate the development of institutions that would serve as “agents” for many or most—or perhaps nearly all—music creators and also as aggregators of rights. Indeed, this is happening already. For example, Merlin represents thousands of independent record labels63 and, numerous aggregators represent

63 http://www.merlinnetwork.org/
individual artists in negotiations with streaming services. For instance, Kobalt, which recently combined with AMRA, has developed a digital rights management platform that helps artists and publishers collect royalties from streaming services.\textsuperscript{64} Kobalt collects royalties directly for 8000 artists (including Paul McCartney) and 500 publishers (including Disney).\textsuperscript{65} Rdio\textsuperscript{66} publishes a list of aggregators with which the company works.\textsuperscript{67} All this suggests that the role of aggregators in the industry is growing, potentially displacing the more traditional intermediaries.

These agents would aggregate the potentially large number of licenses (from many rights holders) that would be associated with any individual piece of music. Since they would likely represent multiple creators at the same time, these agents (as we noted above) might well find it worthwhile to offer bundles or packages of creators’ licenses. These functions could be performed by publishers; they could be performed by labels (many of which are integrated with publishers); or they could be performed by PROs. It is not clear whether or why multiple layers would be needed.

As this system of agents for creators develops, vigorous antitrust scrutiny would be necessary, so as to prevent the re-creation of the current structure of a (literal) handful of dominant PROs. In the current environment, however, the growth of aggregators is surely yielding a less centralized system.

As the previous paragraphs indicate, there could well be a continuing role in this new system for the existing PROs (e.g., as monitors, enforcers, and/or royalty distributors)—although that role would not be guaranteed, since the publishers, or labels, or even new institutions that

\textsuperscript{64} https://www.kobaltmusic.com/index.php; and http://www.amra-music.com/
\textsuperscript{65} http://techcrunch.com/2015/06/08/kobalt-quietly-acquired-amra-to-launch-its-own-global-collection-group-for-digital-music/
\textsuperscript{66} Acquired by Pandora in November 2016.
\textsuperscript{67} http://help.rdio.com/customer/portal/articles/58994-getting-content-into-rdio
might arise under the new system might turn out to be better agents from the music creators’ perspective. It might even be the case that one or more of the PROs (individually or collectively) could be the operator of the online directory—although in that case they would need to shed their role as agents for the music creators.

**Conclusion**

The current system for licensing music copyrights should be seen as largely an artifact of the analog era of music distribution and performance. In that analog context, the transactions costs of licensing, monitoring performances, enforcing copyrights, and collecting and transmitting payments from users to creators were substantial, and the aggregation and centralization of these functions into a very few PROs had a strong logic.

But with that aggregation came market power; and in response to that market power, two parallel regulatory systems for the determination of royalty rates—the antitrust royalty rate court for composition royalties, and the CRB for sound recording performance royalties—have become the overwhelmingly dominant model for music pricing. These regulatory regimes have entrenched collective licensing and the position of the PROs. Market processes and rates, though starting to develop, are still relatively rare.

In the current digital era, where electronic systems can greatly reduce transactions costs, we believe that a competitive marketplace can replace much, if not all, of the current regulatory structure for music licensing and rate determination, but this requires a move away from the current reliance on collective licensing for both composition and sound recording performance licenses.

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68 As well as the CRB regulatory process for the determination of mechanical reproduction royalties.
The availability of a comprehensive database of identifiers, by itself, could introduce significant competitive pressures into the existing system. In addition, the existence of statutory licenses is an impediment to the emergence of a competitive market.

A less regulatory system would require vigorous antitrust enforcement, both during the transition from the existing system to the new system and during the evolution of the new system. This will help guard against the continuation of the existing PROs’ market power or the development of new (e.g., through subsequent consolidation) concentrations of market power.

The replacement of regulatory processes with a competitive marketplace, along the lines that we have sketched above, is feasible for the digital era. Indeed, we have mentioned in this paper some steps in this direction that are already being taken by market participants. Our proposals—especially the creation of a standardized and centralized database—would encourage more movement toward greater competition. The end result would certainly constitute the “meaningful change” that the USCO Report argues should be considered. This competitive marketplace would surely be important for maintaining the “innovative and influential music culture” in the U.S. that the Report describes.
# Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASCAP</td>
<td>American Society of Composers, Authors, and Publishers</td>
</tr>
<tr>
<td>AMRA</td>
<td>American Music Rights Association</td>
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<tr>
<td>BIEM</td>
<td>Bureau International de l’Edition Mécanique</td>
</tr>
<tr>
<td>BMI</td>
<td>Broadcast Music, Inc.</td>
</tr>
<tr>
<td>CARP</td>
<td>Copyright Arbitration Royalty Board</td>
</tr>
<tr>
<td>CISAC</td>
<td>Confédération International des Sociétés d’Auteurs et Compositeurs</td>
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<tr>
<td>CRB</td>
<td>Copyright Royalty Board</td>
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<tr>
<td>DDEX</td>
<td>Digital Data Exchange</td>
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<tr>
<td>DMCA</td>
<td>Digital Millennium Copyright Act of 1998</td>
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<tr>
<td>DOJ</td>
<td>United States Department of Justice</td>
</tr>
<tr>
<td>DPRA</td>
<td>Digital Performance Right in Sound Recordings Act of 1995</td>
</tr>
<tr>
<td>GMR</td>
<td>Global Music Rights</td>
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<tr>
<td>HFA</td>
<td>Harry Fox Agency</td>
</tr>
<tr>
<td>ISNI</td>
<td>International Standard Name Identifier</td>
</tr>
<tr>
<td>ISRC</td>
<td>International Standard Recording Code</td>
</tr>
<tr>
<td>ISWC</td>
<td>International Standard Musical Work Code</td>
</tr>
<tr>
<td>PRO</td>
<td>Performance rights organization</td>
</tr>
<tr>
<td>RIAA</td>
<td>Recording Industry Association of America</td>
</tr>
<tr>
<td>RMLC</td>
<td>Radio Music Licensing Committee</td>
</tr>
<tr>
<td>SESAC</td>
<td>Society of European Stage Authors and Composers</td>
</tr>
<tr>
<td>SME</td>
<td>Sony Music Entertainment, Inc.</td>
</tr>
<tr>
<td>TMLC</td>
<td>Television Music Licensing Committee</td>
</tr>
<tr>
<td>UMG</td>
<td>Universal Music Group</td>
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<tr>
<td>UMPG</td>
<td>Universal Music Publishing Group</td>
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<tr>
<td>UPC</td>
<td>Universal Product Codes</td>
</tr>
<tr>
<td>USCO</td>
<td>United States Copyright Office</td>
</tr>
<tr>
<td>WMG</td>
<td>Warner Music Group</td>
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</table>