

THE CASE FOR CAPSL: ARCHITECTURAL SOLUTIONS TO LICENSING AND DISTRIBUTION IN EMERGING MUSIC MARKETS

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ABSTRACT

Compulsory licensing in music has paved the way for a limited class of new noninteractive services. However, innovation and competition are stifled in the field of interactive or otherwise novel services due to high transaction costs inherent in direct licensing. While the creation of a new compulsory license available to a wider array of services may facilitate growth and diversity in new markets, it is unlikely that the legislative process can deliver a new compulsory regime in time to serve relevant interests. Furthermore, the risk exists that legislation written in response to contemporary technology will likely fail to recognize the diversity within the music industry, and therefore will underserve both artists and potential licensees. As such, this brief argues for the creation and adoption of a new standardized protocol for artists and labels to announce the availability of new content with attached standardized licensing terms for automated integration into the catalogs of new or existing digital music services. Such a protocol would allow for automated systems of pricing, distribution, and tracking to reduce transaction costs, increase market transparency, and commodify user participation.

INTRODUCTION

The internet has irrevocably changed the face of the music industry. It has also provided us with what may well prove to be the greatest tools in history, not only for creation, but also massive efficient distribution of content. At the same time, the music industry has been widely criticized for its failures to embrace and adopt the technologies that could best serve artists and consumers, to the point where political parties have formed solely as a reaction to the policies of organizations representing copyright

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holders, such as the RIAA.¹ The RIAA stopped suing individuals for file-sharing in 2008, despite the fact that music piracy continues.² Still, despite the ongoing piracy problem, a wave of legal music services such as Pandora and Spotify has arisen in the last decade, providing music to listeners for little or no fee. Furthermore, recent data suggests that the rise of these services has taken a significant bite out of music piracy.³

Compulsory licensing for noninteractive music services available under Section 114 of the Copyright Act has allowed for the creation of innumerable legal music services, most notably Pandora, by eliminating the need for lengthy negotiations for content, thereby maximizing the available catalog of music that may be provided to consumers. The category of services for which compulsory licenses are available is, however, quite narrow,⁴ and does not accommodate the potential wave of innovative interactive music services, which must negotiate for licenses directly with copyright holders, who may ask for unreasonable terms or simply refuse.

This issue brief does not argue that the legal music industry is broken, but rather that it is a shadow of what it could be.⁵ While music

¹ See Nicholas Kulish, *Direct Democracy 2.0*, N.Y. TIMES, May 6, 2012, at SR8 (discussing the Pirate Party of Germany, which seeks to strengthen online privacy and to reform copyright and patent law).

² See Elliot Van Buskirk, *RIAA to Stop Suing Music Fans, Cut Them Off Instead*, WIRED (Dec. 19, 2008), <http://www.wired.com/business/2008/12/riaa-says-it-pl/>.

³ In response to a recent survey, “[f]orty percent of respondents . . . who decreased their illegal file-sharing said they did so because of access to legal streaming services like Pandora and Spotify, which are easier to use and don’t present the threat of spyware or viruses.” Victor Luckerson, *Revenue Up, Piracy Down: Has the Music Industry Finally Turned a Corner?*, TIME (Feb. 28, 2013), <http://business.time.com/2013/02/28/revenue-up-piracy-down-has-the-music-industry-finally-turned-a-corner/>.

⁴ An “eligible nonsubscription transmission” under the Copyright Act is essentially a digital transmission that is not delivered by an “interactive service.” See 17 U.S.C. §§ 114(j)(6)-(7) (2012) (defining these terms). Importantly, a service need not be classified as strictly an interactive or noninteractive service as a whole, because “[i]f an entity offers both interactive and noninteractive services (either concurrently or at different times), the noninteractive component shall not be treated as part of an interactive service.” *Id.* at §114(j)(7). While such hybrid services may still avail themselves to compulsory licensing under Section 114, they are still subject to the full brunt of direct licensing requirements for their interactive components.

⁵ *But c.f.* Ankur Srivastava, *The Anti-Competitive Music Industry and the Case for Compulsory Licensing in the Digital Distribution of Music*, 22 *TOURO L. REV.* 375 (2006) (arguing that while technology has reduced the distribution costs in the music industry, the dominance over the industry by a small group of firms suppresses competition); W. Jonathan Cardi, *Über-Middleman: Reshaping the Broken Landscape of Music Copyright*, 92 *IOWA L. REV.* 835, 890 (2007) (arguing

industry commentators may complain about the state of copyright law with regard to new music services and seek legislative remedies,⁶ this brief argues that the solution lies not with the legislature, but in utilizing existing technological tools to facilitate a new wave of diverse, vibrant, and marketable music services.

Importantly, this brief argues not for the creation of a new music service or application, but a new protocol, a backbone of technical tools and standardized transactions which might facilitate the marketing and transmission of music online. This proposal, the Content Announcement Protocol for Standardized Licenses (CAPSL) protocol, would combine tools used across the web, such as RSS, and an expansion on standardized and machine-readable licenses, specifically those of the Creative Commons, which would allow copyright owners to announce the availability of content and attach standardized licensing terms in a format that can be searched, indexed, and licensed by automated processes.

I. CURRENT SYSTEMS OF LICENSING CONTENT INHIBIT INNOVATION AND EFFICIENCY

A. *Compulsory Licensing Under Section 114*

1. *Interactive vs. noninteractive services*

In the realm of digital music services, whether or not a service can utilize compulsory licensing under Section 114 of the Copyright Act turns on a single distinction—whether the service is interactive or noninteractive.⁷ Given the nearly infinite amount of possible configurations or combinations of services, the distinction is subject to a great degree of ambiguity.⁸

At its most basic, the distinction comes down to whether the user can actively and specifically decide which track he or she wants to hear at any time; if he or she can, the service is interactive.⁹ For example, the

the dominance of rights intermediaries in the music industry reduces market efficiency, “thwart[s] optimal public access to recorded songs[,]” and prevents the creation of new revenue streams for creators).

⁶ See *supra* note 5 and accompanying text.

⁷ See 17 U.S.C. § 114(d)(2)(A)(i) (“The performance of a sound recording . . . shall be subject to statutory licensing . . . if the transmission is not part of an interactive service . . .”).

⁸ “The statute provides little guidance as to the meaning of its operative term ‘specially created.’” *Arista Records, LLC v. Launch Media, Inc.*, 578 F.3d 148, 152 (2d Cir. 2009).

⁹ See 17 U.S.C. § 114(j)(7) (defining “interactive service” as “one that enables a member of the public to receive[,] . . . on request, a transmission of a particular sound recording . . .”).

popular service Spotify, which allows users to search its catalog for specific tracks and play the tracks on demand, is classified as an interactive service.¹⁰ If the service is more passive, mimicking terrestrial radio, and merely allows the user to specify a “station” based on genre or other categories, but does not allow the user to specifically select tracks, the service is classified as noninteractive.¹¹ Currently the most popular of such noninteractive services is Pandora, which allows users to create “stations” based on artists or combinations of artists, or genres.¹²

2. *Royalties and accounting in split copyrights*

Every piece of recorded music contains two distinct copyrights; one for the composition and lyrics, and another for the particular recording of the underlying composition.¹³ For example, the recording of Jimi Hendrix’s performance of “All Along the Watchtower” implicates the rights of Hendrix with respect to the recording of the performance itself, and the rights of Bob Dylan, who wrote the music and lyrics that Hendrix performed.

The Copyright Act requires that any person wishing to publicly perform a piece of music receive a license for both the sound recording and the underlying composition.¹⁴

Performance rights organizations (PROs), such as ASCAP, BMI, and SESAC offer blanket licenses and collect royalties on behalf of their respective members for public performances of underlying compositions.¹⁵ As a result of anti-trust consent decrees, these PROs are required by law to offer licenses to all comers, and to offer rates that are uniform for all similarly situated licensees.¹⁶ However, membership in the PROs is

¹⁰ See *supra* note 9.

¹¹ See 17 U.S.C. § 114(j)(6) (citing “eligible nonsubscription transmission” as an example of a “noninteractive . . . digital audio transmission”).

¹² The stations are curated by Pandora’s sophisticated algorithm, drawing results from the Music Genome Project. *About the Music Genome Project*, PANDORA, <http://www.pandora.com/about/mgp> (last visited Nov. 23, 2013).

¹³ 17 U.S.C. §§ 106(1), (3), (6).

¹⁴ Even where someone has received a license for a sound recording, he must still acquire a license for the underlying composition. See 17 U.S.C. 114(d)(3)(C) (“[A]n interactive service may not publicly perform a sound recording unless a license has been granted for the public performance of any copyrighted musical work *contained in* the sound recording.” (emphasis added)).

¹⁵ While these entities are commonly referred to in the industry as performance rights organizations, the Copyright Act refers to such organizations as “performance rights societies.” 17 U.S.C. § 114(d)(3)(E)(ii).

¹⁶ *Broad. Music, Inc. v. DMX, Inc.*, 726 F. Supp. 2d 355, 356 (S.D.N.Y. 2010) *aff’d*, 683 F.3d 32 (2d Cir. 2012) (“The Decree requires BMI to make licenses available for public performances of its music and to provide applicants with proposed

nonexclusive and voluntary, and as such, songwriters and music publishers may withdraw from these organizations if they decide that it is in their best interest to do so.¹⁷

There is currently no performance right for sound recordings on terrestrial radio,¹⁸ but as a result of the Digital Performance Right in Sound Recording Act of 1995 (DPRA), recording artists are entitled to royalties for the use of recordings in digital music transmissions such as streaming services or satellite radio.¹⁹ The rates for noninteractive digital transmissions are set by the Copyright Royalties Board (CRB), a division of the Library of Congress.²⁰ However, copyright owners and licensees may independently negotiate for their own rates, which may be paid in lieu of the CRB rates.²¹

license fees upon request, and prohibits BMI from ‘discriminating in rates or terms between licensees similarly situated’”).

¹⁷ However, copyright owners cannot withdraw individual rights, such as “new media rights” from the ASCAP catalog. After major labels began withdrawing such rights in an attempt to gain leverage in negotiations with Pandora, and Pandora filed suit in the Southern District of New York, the court ruled that while parties could withdraw all rights from ASCAP, such piecemeal withdrawals of individual rights were impermissible. *Pandora Media, Inc. v. Am. Soc’y of Composers, Authors, and Publr’s.*, 2013 U.S. Dist. LEXIS 133133, at *27 (S.D.N.Y. Sept. 17, 2013) (“To adopt ASCAP’s position would be to endorse the untenable proposition that [the consent decree] was intended to allow publishers to deprive certain existing licensees of individually chosen works while keeping those works in the ASCAP repertory . . .”).

¹⁸ Efforts have been made to create a performance right for sound recordings in terrestrial radio play. *See, e.g.*, Performance Rights Act, H.R. 848, 111th Cong. (2009); Free Market Royalty Act, H.R. 3219, 113th Cong. (2013). These efforts have largely been criticized based on a notion that terrestrial radio play serves as free publicity for recording artists, which compels listeners to go out and purchase the music they hear on the radio. *See Performance Rights Act: Hearing on H.R. 848 Before the H. Comm. on the Judiciary*, 111th Cong. 27-28 (2009) (statement of Rep. Daniel E. Lungren) (“I’m attracted to buying . . . what I hear on the radio. That’s where I am introduced to it and that’s what attracts me to buy something And so I can see that argument very, very strongly, the promotional feature.”). However, given the recent decline in music sales, it is worth asking whether this historical justification remains reliable.

¹⁹ Digital Performance Right in Sound Recording Act of 1995, 109 Stat. 336 (1995) (codified at 17 U.S.C §§ 106(6), 114–15 (2012)).

²⁰ *See* 17 U.S.C. §§ 801(a), (b)(1) (defining the function of the Copyright Royalty Judges, which are appointed by the Librarian of Congress, as “mak[ing] determinations and adjustments of reasonable terms and rates of royalty payments as provided in section[] . . . 114 . . .”).

²¹ *Id.* at § 114(f)(3).

Digital performance royalties for sound recordings are collected and distributed by SoundExchange, a non-profit PRO.²² Royalties collected by SoundExchange are split between the owner of the copyright (typically the record label), the featured recording artist, and the session musicians.²³ This split, when compared to many recording contracts, is more agreeable to recording artists,²⁴ as they are guaranteed forty-five percent of the royalties derived from the performance of the recording,²⁵ with the remaining five percent split between the session musicians,²⁶ and fifty percent going to the owner of the recording.²⁷

B. Acquiring Content and Licenses for New Services

Imagine the stereotypical high-tech startup-to-be. There are two students drinking Mountain Dew at their desks in a dorm room, hacking away at their keyboards, eyes on their respective screens while ranting over their shoulders about the next big breakthrough in music distribution. Theirs will not be a conversation about old business models, except in passing, to compare established industry players to dinosaurs.

The idea that will push these innovators to spend six weeks staying up all night coding before drawing enough attention and venture capital to drop out of school and pursue their work of genius is not, “let’s do the same thing as one hundred other businesses.” Unfortunately for consumers and creators, history has shown that when it comes to innovative channels of distribution or patterns of consumption, when copyright owners meet new technology, whatever the idea is, one side will presume it is illegal, and the other side will not care.²⁸

In an arena where speed matters, the dominant players code first and ask questions later. For some, that kind of attitude represents a rational

²² SOUND EXCHANGE, <http://www.soundexchange.com/about/> (last visited Oct. 18, 2013).

²³ 17 U.S.C. § 114(g)(2).

²⁴ Recording artists have, historically, often received little in the way of royalties from sound recordings, as recording contracts typically contain clauses wherein royalties are withheld until the label has recouped its losses incurred in the production and marketing of a sound recording.

²⁵ 17 U.S.C. § 114(g)(2)(d).

²⁶ *Id.* at § 114(g)(2)(b)-(c).

²⁷ *Id.* at § 114(g)(2)(a).

²⁸ The most historically important instance of this dynamic in the realm of copyright law was illustrated in *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984), in which major film studios sued Sony after it introduced the Betamax video tape recorder. History, obviously, came down on the side of Sony, ironically proving that the technology the film industry fought eventually became a major source of revenue.

risk. Developers may operate in a legal gray area for a prolonged period before growing large enough to draw the attention of the Recording Industry Association of America, or its constituent members.²⁹ They may, in some cases, count on the fact that the court systems are slow enough that if a startup grows fast enough, it may be able to raise enough money to pay for decent lawyers or create enough potential for revenue that it may gain leverage when entering into direct licensing deals with copyright holders or out of court settlements.³⁰

For many, however, the risk is more akin to a lottery than an investment strategy, and most players lose, often before the game begins.³¹ At times a site that adopts this attitude can succeed, as with YouTube,³² but other times the project collapses, and we are left with a mere tombstone of a website informing us of the results of an adverse court decision.³³

Start-ups require capital, and some venture capitalists are hesitant to engage in the online music market because the process of licensing is so complicated and costly.³⁴ Thus, to promote the legal music industry, one is

²⁹ For an example of this interplay, look to the online streaming service Grooveshark, which relied on a hybrid system of direct licenses, and reliance on a DMCA safe-harbor provision, while facing numerous lawsuits by copyright holders. Ben Sisario, *Digital Notes: Grooveshark Wins a Battle, But Can It Win the War?*, NYTIMES.COM (Jul. 11, 2012, 5:56 PM), <http://mediadecoder.blogs.nytimes.com/2012/07/11/digital-notes-grooveshark-wins-a-battle-but-can-it-win-the-war/>.

³⁰ For example, YouTube was once rife with unauthorized content. Now, due to the perceived futility and perhaps foolishness associated with trying to keep unauthorized content off of YouTube, services have arisen which allow musicians to monetize the demand for infringement by placing ads on infringing videos, and collecting revenue from those ads. *See, e.g.*, RUMBLEFISH, <http://rumblefish.com/> (last visited Nov. 20, 2013) (touting “YouTube Monetization” on its website).

³¹ For an expansive study of failures in innovative strategies in the music industry, see Michael A. Carrier, *Copyright and Innovation: The Untold Story*, 2012 WIS. L. REV. 891 (2012).

³² In response to an email between YouTube founders in 2005, regarding a copyright clip from CNN which had been uploaded to their site, Steve Chen encouraged Chad Hurley to take a lax attitude with regard to copyright enforcement, and founder Jawed Karim “agreed, indicating that ‘the CNN space shuttle clip, I like. we can remove it once we’re bigger and better known, but for now that clip is fine.’” *Viacom Int’l, Inc., v. YouTube, Inc.*, 676 F.3d 19, 34 (2d Cir. 2012).

³³ *See, e.g.*, GROKSTER, <http://www.grokster.com/> (last visited Oct. 28, 2013) (showing a message stating that the website is no longer available due to an adverse Supreme Court decision).

³⁴ *See* Randy Lewis, *Internet Radio Fairness Act Debate Opens in Washington*, L.A. TIMES (Nov. 30, 2012), <http://articles.latimes.com/2012/nov/30/entertainment/la-et-ms-internet-radio-fairness-act-pandora-congress-hearings-20121129> (“[David] Pakman said his venture firm is staying out of the field

left with a choice: either change the laws regarding how music is licensed or create tools to simplify and expedite the process without the need for copyright reform.

II. THE LICENSING PROBLEM IS BETTER SERVED WITH CODE

A. *Legislative Inertia and Established Interests*

Often, in response to a perceived market failure or limit on technology or expression, scholars and industry commentators call for the creation of a new compulsory license.³⁵ Powerful parties in the music industry, however, are reluctant to create new compulsory licenses, despite the apparent increases in market efficiencies they may offer.³⁶ As related to the possibility of a compulsory license for music sampling, entertainment lawyer Andrew Bart, explained in an interview:

[T]he policy behind a compulsory license leads to more efficiency because the use cannot be vetoed and a price cap has been set. “Sample licensing doesn’t have that right now, and so there’s inefficiency,” he says. But he also notes that “efficiency, to a certain degree, reduces discretion.” Copyright holders lose discretion—the right to deny permission—under a compulsory license. Permission has an economic dimension; it facilitates a higher price for licensors.”³⁷

Numerous attempts have been made to reform music licensing in relation to digital technology through legislation. The Music Online Competition Act of 2001 (MOCA),³⁸ sought to increase competition in the interactive streaming market by limiting copyright owners’ ability to license

³⁴because of the current licensing regime – it virtually prevents success. The failure rate of digital music companies is among the highest of all fields Venrock looks at, making them non-investable businesses.”).

³⁵ See, e.g., Robert M. Vrana, Note, *The Remix Artist’s Catch-22: A Proposal for Compulsory Licensing for Transformative, Sampling-Based Music*, 68 WASH. & LEE L. REV. 811, 847 (2011) (calling for licensing compelled by statute).

³⁶ National Music Publishers Association President David Israelite recently complained about compulsory licensing for mechanical licenses, stating, “We are laboring under a 100-plus-year-old law that says we have a compulsory license with regard to our mechanical rights. We have no negotiating power. We must license it. And we’ve seen what that’s done in the marketplace.” David Israelite, *David Israelite, NMPA President’s Guest Post: Why Music Publishers Must Adopt Blanket Licensing*, BILLBOARD (Jun. 24, 2011 1:19 PM), <http://www.billboard.com/biz/articles/news/publishing/1177339/david-israelite-nmpa-presidents-guest-post-why-music-publishers>.

³⁷ KEMBREW MCLEOD & PETER DICOLA, CREATIVE LICENSE: THE LAW AND CULTURE OF DIGITAL SAMPLING 228 (2011).

³⁸ H.R. 2724, 107th Cong. (2001).

with affiliated services on discriminatory terms.³⁹ The Section 115 Reform Act of 2006 (SIRA) sought to streamline the process of licensing music for digital services by creating Music Rights Organizations (MROs) to replace the fragmented system of licensing through Performance Rights Organizations (PROs).⁴⁰ The Internet Radio Fairness Act of 2012 (IRFA) was designed to “adopt fair standards and procedures” for setting licensing rates for webcasters.⁴¹ Congressman Jerrold Nadler, responding to IRFA, announced another bill, The Interim Fairness in Radio Starts Today Act of 2012 (Interim FIRST), seeking to address many of the same concerns with regard to a disparity in how license rates are set for simultaneous streams of terrestrial broadcasts.⁴² MOCA and IRFA died in committee,⁴³ and Interim FIRST never developed past the commentary drafting stage.

These attempts to change the processes and terms by which digital music services acquire and pay for music have been met with uncertainty and hostility, from both copyright holders and licensees.⁴⁴ While their approach, ideologies, visions of the music industry, and constituent backing vary greatly, these recent attempts to change the way music is licensed in online services have one thing in common: they did not pass.⁴⁵

³⁹ Alexander Davie & Christine Soares, Note, *The Music Online Competition Act of 2001: Moderate Change or Radical Reform?*, 2001 DUKE L. & TECH. REV. 0031, ¶ 7 (2001).

⁴⁰ Section 115 Reform Act of 2006, H.R. 5553, 109th Cong. (2006).

⁴¹ Internet Radio Fairness Act of 2012, H.R. 6480, 112th Cong. (2012).

⁴² See Interim Fairness in Radio Starting Today Act of 2012, 112th Cong. § 2(11), (Discussion Draft Aug. 7, 2012), available at http://nadler.house.gov/sites/nadler.house.gov/files/documents/NADLER_153_xml.pdf (“All other radio formats, such as satellite, cable and Internet radio, compensate recording artists and copyright owners for their music.”).

⁴³ See *H.R. 6480 - Internet Radio Fairness Act of 2012*, CONGRESS.GOV, <https://www.congress.gov/bill/112th-congress/house-bill/6480/all-actions> (last visited Mar. 29, 2015) (showing no action after committee referrals).

⁴⁴ See *Behind the Deal: Music Licensing Reform & Proposed Bills*, BILLBOARD (Jul. 19, 2005 12:00 AM), <http://www.billboard.com/biz/articles/news/1409203/behind-the-deal-music-licensing-reform-proposed-bills> (“Nine music and digital-media trade groups with a wide range of ideas about music licensing voiced a single opinion . . . to a House subcommittee. . . . [T]hey trashed the U.S. Copyright Office’s proposed bill that would abolish the compulsory mechanical license and form music rights organizations, or MROs.”).

⁴⁵ The list of bills modifying music licensing is, of course, far from exhaustive. While not implementing sweeping reforms to music licensing, smaller measures adjusting royalty rates for specific classes of services have consistently passed both houses of Congress. See, e.g., Webcaster Settlement Act of 2009, H.R. 2344, 111th Cong. (2009); Webcaster Settlement Act of 2008, H.R. 7084, 110th Cong. (2008); Small Webcaster Settlement Act of 2002, H.R. 5469, 107th Cong. (2002).

The problem of legislative inertia becomes all the more hazardous when new industries or new business models stand to replace old and powerful institutions.⁴⁶ This is especially true of media institutions with very vocal and well-funded lobbies like the RIAA or the National Association of Broadcasters.⁴⁷ When compared to the lobbies associated with music and broadcasting, the lobby for nineteen-year-olds in hoodies and flip-flop sandals is considerably smaller. Thus, we should not be surprised that when someone proposes the creation of a new compulsory license which may threaten the role of intermediaries like the RIAA, ASCAP, BMI, or the National Music Publishers Association, if only in a small corner of the market, the proposed legislation will be met with considerable opposition.⁴⁸

The DPRA was passed in 1995, and nearly twenty years later both sides of the debate surrounding licensing of content believe the current system leaves much to be desired.⁴⁹ For example, in the debates surrounding the IRFA, webcasting giant Pandora complained that it pays too much in royalties (when compared to satellite radio), the PROs disagreed, and musicians and Representative John Conyers opined that recording artists are receiving unfair treatment across the board.⁵⁰

There is something to be taken away from the debates, however. Nearly twenty years after the DPRA, only the scofflaws are happy. There is no shortage of music, there is no shortage of technical expertise, and no shortage of demand. Consumers, musicians, and engineers cannot wait another twenty years for a statutory overhaul.

⁴⁶ See W. Jonathan Cardi, *Über-Middleman: Reshaping the Broken Landscape of Music Copyright*, 92 IOWA L. REV. 835, 890 (2007) (“Congress perhaps should take seriously the Register of Copyrights’ rather diplomatic counsel that ‘in order for such a solution [to the crisis in music licensing] to be accomplished, it may be necessary for Congress to make some important decisions notwithstanding the lack of consensus among all affected parties.’”) (quoting *Music Licensing Reform: Hearing Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary*, 109th Cong. (2005) (statement of Marybeth Peters, Register of Copyrights)).

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ See *supra* note 36.

⁵⁰ See Lewis, *supra* note 34 (“A more appropriate [bill] title might be the paycheck reduction act, because what it would do is lower the royalties that Internet radio pays by more than 85%. I want to make a prediction: This bill may well be the catalyst to advancing an AM/FM music performance royalty.” (quoting Rep. Conyers)).

B. Code is Faster Than Legislation

There are obvious benefits to changing laws. Most notably, of course, when the process is successful, the new rules will have the force of the government behind them. Furthermore, the stability of the law may foster investment by making engagement with the system more predictable. However, like drafting a bill, writing an app also takes time—sometimes lots of time, depending on the complexity of the job that each seeks to accomplish. The key difference between the two is what governs the success of a program or a law. If a substantial group of people, or a small group with deep pockets, disagrees with a bill, it will not work, because it will not pass.⁵¹

The problems of code are different. Success or failure in developing an app often has more to do with the availability of caffeine than strict social consensus. A measure of consensus is, however, vital to the success of a large service that must capture the necessary network effects for the service to be successful. If code has problems, fewer people will want to use it, and the service will suffer due to their absence, either through a lack of nodes in a network, a lack of user generated content, or a lack of a user base to attract advertisers. However, code can often be patched after launch, and customer demands can be met relatively quickly. This is typically untrue in the case of amending laws.

Even assuming, however, that the problems of licensing gaps, disparities in rates for similar services, and the problems of inaccessible content in large services can be solved with code rather than law, it is unlikely that such a problem can be solved with the introduction of some new lone service. This is, quite simply, because the next Spotify will not and should not be the last Spotify. Evolution in an industry requires diverse business approaches, and experimentation, but behemoths have little incentive to experiment once their revenue streams are established. Barring the introduction of some benevolent monopoly force into the music industry, looking out for the interests of songwriters, record labels, recording artists, retailers, and customers alike, these problems are unlikely to be addressed by any specific product.

Instead, for a deeply rooted digital problem, the remedy must be a deeply rooted digital solution. Such a solution needs to address not just a particular program, but must provide a backbone for a class of programs, and leave open the opportunity for new classes to arise. It must create a way for multiple services and players throughout the music market to communicate, negotiate, exchange products, and utilize diverse strategies to

⁵¹ See *supra* note 46.

capitalize on talent and consumer base. We need not just a program, but a protocol.

C. Standardized Protocols Promote Positive Externalities

The development of open underlying protocols such as TCP/IP, HTTP, or on the more radical edge, the BitTorrent protocol, has allowed multiple developers at higher layers to create and profit from diverse services.⁵² Similarly, the development of an underlying protocol for licensing and distributing content would facilitate the creation of a diverse class of music services.⁵³

There are instances where the adoption of an open protocol would hurt a business, particularly when a business has invested a significant amount of money into establishing itself as a dominant player. The Internet telephone brand Skype is a prime example of this. It is in Skype's interest to use a proprietary protocol, thus channeling huge numbers of users to use its service exclusively. Any work developing an open protocol would only harm its business, as free-riders could capitalize on Skype's labor to develop a competing interoperable service.

By comparison, the BitTorrent protocol functions as a single open-source protocol and has allowed for the creation of innumerable BitTorrent 'clients,' which offer diverse features, but are all nonetheless interoperable. In this way, the users of one client are able to benefit from the work of the developers of that particular client, as well as the other BitTorrent clients, and the developers and distributors of each client benefit from the user base of every other client.

The adoption of a standardized protocol in music licensing and delivery stands to benefit users, developers, and copyright owners alike, precisely because there are so many interdependent players within the industry. By and large, record labels are not in the business of streaming

⁵² For a detailed account of the importance of the layered architecture of the Internet, see Tim Wu, *Application-Centered Internet Analysis*, 85 VA. L. REV. 1163, 1164-64 (1999) ("The monumental choice . . . was to make the basic Internet protocols simple, general, and open, leaving the power and functionality in the hands of the application.").

⁵³ Interestingly, while not open-source itself, the developers of Spotify have arguably benefitted from the development of BitTorrent and other peer-to-peer networks, as Spotify relies on a peer-to-peer network to supplement server capacity. See Joel Rose, *How Spotify Works: Pay the Majors, Use P2P Technology*, NPR (Nov. 9, 2011 3:00 PM), <http://www.npr.org/blogs/therecord/2011/11/09/141594727/how-spotify-works-pay-the-majors-use-p2p-technology> ("Behind the scenes while the music is playing, we're grabbing it from wherever we can,' says [Spotify's VP of Engineering]. 'You can't interact with the P2P network, it's just a little facility that we use to move things along very quickly.'").

music, and thus have no reason to adopt their own proprietary protocol for transmission.

Streaming services may simply send out their own one-size-fits all licensing contracts to record labels, but unless the service can promise copyright owners significant volume, the service has no guarantee that it will reach an agreement with labels, particularly as such agreements often contain non-disclosure agreements preventing other parties from knowing where to start negotiating.⁵⁴

Transparency in the terms of the agreement would benefit copyright owners and streaming services alike, which may base their decision on whether or not to develop or pursue a particular venture on the availability of standard favorable terms. Furthermore, services, particularly new services, could benefit from a standard protocol for content delivery from copyright holders to transmission services, as it would allow them to draw from a larger pool of content, and standardized licensing terms would cut down on their startup expenses by reducing transaction costs.

Musicians stand to benefit from both content delivery and licensing standardization for one simple reason: in order to tap into the mainstream, there must be a mainstream, and the current fragmentation of the market, particularly among independent artists, makes reaching all but the most engaged consumers difficult.⁵⁵

III. HOW CAPSL MIGHT WORK

First, it must be said that protocols for standardized licensing and content distribution are nothing new. Much of what will be described in

⁵⁴ Apple recently demanded that a music industry news site remove a copy of the contract it had sent to independent record labels leading up to the launch of iTunes Radio, claiming that its demands were based on the copyright of the contract itself, but more likely based on its desire that the terms of the agreement not be made public. Greg Sandoval, *Apple Demands News Site Pull Copy of iTunes Radio Contract, Claims Copyright Infringement*, THE VERGE (Oct. 11, 2013), <http://www.theverge.com/2013/10/11/4829116/apple-demands-news-site-pull-copy-of-itunes-radio-contract-claims>.

⁵⁵ Chris Anderson, in *The Long Tail*, WIRED, archive.wired.com/wired/archive/12.10/tail.html (last visited Mar. 26, 2015), argues that the shape of mainstream consumption will be dramatically different in the 21st Century—that suddenly what is profitable extends well beyond “the mainstream.” His argument, however, is more directed at specific content, while what is relevant here is the existence of mainstream *channels* of distribution.

terms of standardized licensing here is based upon methods adopted by the Creative Commons.⁵⁶

The key difference between Creative Commons licenses and CAPSL is in its focus. Creative Commons licenses are intended to facilitate the promotion of a common pool of content for creators of all types of media to contribute to and pull from in the creation of their respective content by relaxing certain reserved rights.⁵⁷ By comparison, CAPSL licenses will permit copyright owners to retain all of their rights under copyright except, in a functional sense, the ability to scrutinize a firm before choosing to enter into licensing negotiations. Most simply, Creative Commons licenses are intended to promote the creation of content, while CAPSL is aimed at distributing content.

A. Announcing New Content

In order for a service to distribute content, it must know about the content. As such, a copyright owner who seeks to distribute her music must have some way of announcing to potential customers, whether they are music services or individual listeners, that some music is available. A system of content announcement must accomplish at least two tasks. First, it must clearly define a list of content to be distributed in a standardized and machine-readable way. Second, it must allow for new content to be categorically linked with other content for purposes of subscriptions, attribution, and payment.

Creative Commons licenses have made use of a machine readable “layer,” which allows search services to locate websites that have Creative Commons licenses embedded into their code, so as to index such content and allow creators to quickly find material to build upon.⁵⁸ A similar method may be adopted to allow music services to find content to distribute. The key difference is that Creative Commons licenses are used by individual artists aimed at other individual artists. In order to be successfully deployed in a music service market, the machine readable layer must facilitate massive “scraping,” automated indexing and data extraction. This has been accomplished by limited non-commercial web radio projects using music marked with Creative Commons licenses.⁵⁹

⁵⁶ See *About the Licenses*, CREATIVE COMMONS, <http://creativecommons.org/licenses/> (last visited Oct. 23, 2013) (describing the licenses).

⁵⁷ *Id.*

⁵⁸ See *id.* (“The final layer of the license design recognizes that software, from search engines to office productivity to music editing, plays an enormous role in the creation, copying, discovery, and distribution of works.”).

⁵⁹ See, e.g., THERADIO.CC, <http://theradio.cc/> (last visited Nov. 1, 2013).

A key aspect of content announcement is the ability of a protocol to facilitate easy subscription to and aggregation of content from a wide array of sources automatically. Currently, websites have accomplished this through the use of RSS, even in the case of rich content like music.⁶⁰ RSS, which stands for “Really Simple Syndication” is a light-weight system which allows content creators to define content into “feeds” for syndication. These are tucked into the metadata of a website so that aggregators of content can check the site automatically and notify users when something new appears.⁶¹ RSS is widely used by BitTorrent clients to allow users to automatically download files matching certain search criteria on a scheduled basis.⁶²

Where RSS, on its own, falls short of serving the commercial market is in attaching license terms specifically aimed at categories of licensees to the same tools that allow the content to be searched, aggregated, and syndicated. A music service cannot rely on searchable RSS feeds or rich metadata describing the content of a site if there is no implication that it is permitted to use that content, or that the terms match the intended use.⁶³

B. Creating Standard Licenses

The many uses of music require different types of licenses, so in order to facilitate an efficient licensing scheme, a system of standardized licenses must account for these different types of uses with terms that are appropriate for each. It is vital that the terms are standardized to allow automated services to search for the licenses, and to utilize that content where they find recognized licensing terms.

The Creative Commons uses six pre-defined licenses that licensors may choose from in defining the scope of uses he or she wishes to permit.⁶⁴ The fact that the licenses are predefined is vital, as it allows for the use of

⁶⁰ See, e.g., *Pandora 2.1: RSS Feeds (Beta)*, PANDORA BLOG (Feb. 2, 2006), http://blog.pandora.com/2006/02/02/pandora_21_rss/.

⁶¹ *Introduction to RSS*, W3SCHOOLS.COM, http://www.w3schools.com/rss/rss_intro.asp (last visited Nov. 21, 2013).

⁶² See Ernesto, *Top 10 RSS and BitTorrent Tips*, TORRENTFREAK (Nov. 30, 2008), <http://torrentfreak.com/top-10-bittorrent-and-rss-tips-081130/> (“RSS can be a real time saver for BitTorrent enthusiasts. Rather than manually trawling many torrent sites hunting for material, most will agree it’s much more convenient for the content to come to the user.”).

⁶³ Creative Commons has developed a module for including licensing information into an RSS feed, *RSS 2.0*, CREATIVE COMMONS, http://wiki.creativecommons.org/RSS_2.0 (last visited Nov. 22, 2013), but such terms are limited to those uses targeted by Creative Commons.

⁶⁴ *About the Licenses*, CREATIVE COMMONS, <http://creativecommons.org/licenses/> (last visited Oct. 23, 2013).

their “machine readable layer” of the license, which allows search engines and other services to index available content.⁶⁵ This layer uses the Creative Commons Rights Expression Language, a standard developed by the Creative Commons,⁶⁶ with a recommendation that publishers utilize “‘default’ syntaxes and embedding schemes for content creators and publishers who want to use Creative Commons licenses without needing to be concerned about extraction mechanisms.”⁶⁷

Machines cannot understand subtle differences in contracts in a meaningful way so as to serve as an effective agent of a music service. More importantly, developers are simply not talented enough to anticipate the infinite possible variations in language or descriptions of possible uses. As such, the language must be consistent, based in a categorical list of pre-approved uses. However, while the language defining the uses must be standardized, the same is not true for prices.

C. Tracking the Market

While in many ways CAPSL is a market solution to a licensing problem, it may be difficult to see why it may not fall prey to the same problems of traditional direct licensing practices. The answer is rather simple: efficient markets require good information, and CAPSL provides plenty of that, while current practices provide very little.⁶⁸

Where terms of use, specific transactions, prices, and volume of content available are all open and available to index, search, and process, the market dynamics of music licensing may change dramatically. The implications of such open pricing systems, coupled with the possibility of automated pricing and negotiation are discussed in the next section.

IV. NEW POSSIBILITIES IN MUSIC MARKET

A. Market Transparency and Dynamic Pricing

Automation in the digital era is *fast*, and when applied to principles of economics the results can be staggering. Where prices are available, and importantly, organized in such a fashion so as to be readily indexed, market data becomes simpler to generate. This allows for the appearance of information services catering to music services, providing independent market data that is accurate up to the minute. With this market-wide data,

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *ccREL: The Creative Commons Rights Expression Language*, CREATIVE COMMONS (Mar. 3, 2008), <http://wiki.creativecommons.org/images/d/d6/Ccrel-1.0.pdf>.

⁶⁸ *See supra* note 54 and accompanying text.

copyright owners will themselves be able to price their content based on current data, to remain competitive, and importantly, dynamic.

By making reference to independent sources of pricing data, licensors may define their prices not just in blunt numbers, but as algorithmic expressions referring to external variables. For example, a single play may cost, as a fixed price, \$0.0019 per play. Or in a dynamic system where x is the reported average price of a play for a track in a particular genre, a CAPSL license may offer the use of the track for x , or if the owner should feel his track is worth more than the average, $1.2x$, or if he wants to consistently undercut the market $0.8x$. These are simple examples, but there is no limit to the sophistication of such schemes. Similarly, licensees may design algorithms that will only accept licensing terms within a set range of prices, and may prioritize licenses with better prices for particular genres.⁶⁹

Consider a hypothetical musician, Lady Googoo, who is about to release a new dance track. She may consider, as a pricing strategy, offering her track for a slightly reduced price, just below the market average, upon its release to incentivize music services to play it more in the first days of its release. Then, once it is established as a genuine ear-worm, to the point that listeners are demanding the track and failure to provide the hit could threaten the licensee's user base, she may leverage her current value by pricing the track just above the market average for similar tracks.

Such changes in the ability to automate buying and selling have not arisen without controversy. Recently high-frequency trading has shaken the stock market, at one point accounting for sixty percent of U.S. stock trades in 2009.⁷⁰ The speed at which stocks could be traded placed traditional traders at a disadvantage when an algorithm could detect and leverage a desire to buy: “[i]ndeed, certain high-frequency traders were forcing long-term investors, including those who managed funds that held ordinary people's retirement accounts, to constantly buy higher and sell lower. The game seemed rigged.”⁷¹ Similarly, absurdities arising in the independent seller market on Amazon.com showed that algorithmic pricing could, at

⁶⁹ Categorical pricing, when compared to “per track” licensing, may be more difficult to implement by a service, but will offer a significant advantage when seeking advertisers, due to the fact that certain demographics are worth more to advertisers. Thus when balancing the costs of transmitting music against the revenue generated by advertising, it may be worthwhile to pay different rates for different genres.

⁷⁰ Jacob Goldstein, *Putting a Speed Limit on the Stock Market*, N.Y. TIMES MAGAZINE (Oct. 8, 2013), <http://www.nytimes.com/2013/10/13/magazine/high-frequency-traders.html>.

⁷¹ *Id.*

times, deliver absurd results.⁷² However, a notable difference between stocks and music licenses is that music licenses are typically non-transferrable, and thus not subject to greedy algorithms looking to step ahead in line and resell to willing buyers at a higher price.

B. Incentivizing Promotion and Curation

The online music industry has lost an important class of players who were, while perhaps not vital, still quite important to music sales and the listener experience. Record shop owners, at least the romanticized version, once provided a significant service to both record companies and customers. Good salesmanship required a shopkeeper to be a skilled curator, able to identify the underlying desires of the customer, to give the customer what he wanted, and what he did not know he wanted when he walked in. This is what the industry today calls, in simple terms, “discovery,” that is, helping users find new artists. In the days of shops, it resulted in the sales of more records and customers with expanding taste. Today, it results in more playlists on Spotify, more blog posts, and with its semi-algorithmic curation, more channels on Pandora.

Unfortunately, much of that curatorial skill is being wasted and is resulting, quite simply, in large archives of unauthorized content. Operators of music blogs can garner large followings, but because of the difficulty in licensing content, they often cannot sell downloads directly or effectively capture advertising revenue. Existing music services offer affiliate programs by which a blogger could refer a user to buy a track through iTunes,⁷³ but that simply introduces another intermediary. Additionally, without a standard protocol for buying content, the affiliates must post multiple links to various music vendors and maintain separate affiliate accounts for each, in hopes of catching, not just a user’s taste in music, but in vendors. Most importantly, the practice forces users to leave their site. This is the equivalent of a shop owner saying, “You will love this record! Now go buy it at the shop down the street.”

Record store owners could rely on the right of resale to distribute music.⁷⁴ Online, however, it is not so simple. A standardized protocol

⁷² Mike Masnick, *The Infinite Loop of Algorithmic Pricing on Amazon... Or How a Book on Flies Cost \$23,698,655.93*, TECHDIRT (Apr. 25, 2011, 12:13 PM), <http://www.techdirt.com/articles/20110425/03522114026/infinite-loop-algorithmic-pricing-amazon-how-book-flies-cost-2369865593.shtml>.

⁷³ *The Affiliate Program*, APPLE, <http://www.apple.com/itunes/affiliates/> (last visited Nov. 1, 2013).

⁷⁴ See 17 U.S.C. § 109(a) (“[T]he owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.”).

lowers the barriers of entry into the market so that even the smallest operator can sell or stream *any* music (which adopts the protocol) in his own “shop” at any price he wants (as long as he pays the copyright owner what she asks). This allows the curator to capitalize on his own added value and incentivizes him to promote music, which benefits everyone.

C. Transcending One-Size-Fits-All Solutions

¶1 As a final matter, dramatically reducing transaction costs, across the board, in music licensing overcomes problems arising from the fact that copyright law, and compulsory licenses in particular, treat all music alike.⁷⁵ Debates surrounding copyright law in music today suffer from implicit (and often dated) assumptions about how music is created, what musicians are like, and how music is sold.⁷⁶ Regardless of whether a person is a composer for film scores, a retired blues singer, or a seasoned touring drummer in his fifth band, copyright law as it relates to performance royalties treats all musicians like they are nineteen-year-old singer-songwriters who are just about to *make it*.

The current inability of copyright owners to account for their own specific investments, in that they are subjected to compulsory licensing rates or blanket licensing rates through membership in ASCAP, does little to promote a diverse music industry. It is as if we are pricing Coca-Cola, coffee, and Dom Perignon as though the differences between them are simply in the volume of the containers, and scratching our heads as to why the market seems distorted. Creating underlying protocols and leaving the decisions about how to market and distribute content to users at a higher level may help alleviate some of this tension

CONCLUSION

The problems of the music industry, and copyright law, are many. However, gains have been made in utilizing technology to better serve both customers and copyright holders. The development and adoption of CAPSL would go further, using technology to provide the backbone upon which creators and innovators can efficiently trade, and help each other grow.

⁷⁵ This is true, except as music is categorized as either dramatic or nondramatic, or as created as a work for hire. *Id.* §§ 115, 201(b). Additionally, royalties for performance rights for sound recordings in web streaming account for studio musicians. *Id.* § 114(g)(2).

⁷⁶ Ongoing research by the Future of Music Coalition may shed some light on the different revenue streams relied on by musicians in the current industry, which may enlighten future debates about how to shape copyright law. *See Artist Revenue Streams*, THE FUTURE OF MUSIC COALITION, <http://money.futureofmusic.org/> (last visited Nov. 23, 2013) (compiling data on musician revenue streams).