Music Information: The Need for a Central Music Licensing Database

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Abstract
Musical Digital Service Providers (DSPs), like Pandora and Spotify, rely on a patchwork of databases and services to acquire licenses for the music they play. This results in both inefficiency and an unfair advantage to parties that have the leverage to negotiate better terms than their independent counterparts. A universal music database would be a giant step toward rectifying this inequality, as well as lowering the barrier to entry for new DSPs. Here, the main obstacles for such a system are laid out, as well as a possible scheme for such a universal database that includes the most recent technological developments in this field.

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1 Introduction
There are two copyrights in every musical work, the musical composition and the sound recording. Each copyright is comprised of a “bundle” of exclusive rights that the holder is legally allowed to exercise. As the copyright system has developed in the U.S. in response to technological changes over the last one hundred years, the ways that the two copyrights are exploited falls under various sets of rules and regimes. In the digital marketplace, the governance of sound recording copyright enforcement is especially tricky. Artists and record labels struggle to find equitable ways to license their work, and Digital Service Providers interface with a complicated royalty system with the federal government mediating some components of the transactions. Here, the problems related to the system’s complexity and asymmetry will be discussed, followed by a possible solution to the current problems.

2 The Current Music Licensing Scheme
The current state of licensing for online services is complex and dynamic (Menell, 2014). The number of parties involved and the systems they use create a dizzying locus that includes Performing Rights Organizations (PROs), publishers, Digital Service Providers (DSPs), record labels, and others (see Figure 1). Although a genetic relationship exists between pre-digital distribution systems like physical media and radio, and new forms of music consumption like streaming internet radio and interactive services like Spotify and Deezer, these new modes of musical experience represent issues that disconnect previous payment schemes from a relevant modern paradigm (Handke et al., 2015). The inefficiencies in the system also lead to either significant loss of information or inaccurate payouts to the appropriate parties. Three main issues that will be discussed here are the problems with private, unregulated deals; variances in reporting standards; and some of the regulatory regime inefficiencies.

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<th>Right → Rightholder ↓</th>
<th>Composer/Lyricist</th>
<th>Performer</th>
<th>Producer</th>
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<tr>
<td>Reproduction on emission server</td>
<td>C/PC?</td>
<td>C/PC?</td>
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<td>Authorization of communication in territory of emission</td>
<td>C</td>
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<td>Communication to the public in territory of reception</td>
<td>C</td>
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Table 1. Rights Matrix to License a Point-to-Point Internet Communication of a Sound Recording Containing a Performance of a Protected Musical Work (C, Right likely administered by a collective; PC,
2.1 Private Deals
The three major record labels that control a majority of the copyrighted sound recordings that are licensed by DSPs (Waldfogel, 2013) often enter into direct deals with DSPs in order to arrive at more lucrative agreements than would be offered through a statutory license. These deals include equity in the service companies and tiered payment structures that create an unfair advantage for smaller labels that cannot leverage their catalog into such arrangements. According to various analyses (Garcia 2013) the presence of private deals both complicate the payment process for artists and new businesses trying to create innovative services (Sinnreich, 2013). One contract that was leaked between Sony Music and Spotify indicated that not only are the deals straightforward, but have an impact on other companies that deal with Spotify because of Most Favored Nations clauses.

2.2 Variance in Reporting Standards
A recent report on the state of the music industry states that rights owners often persist in defining their own standards for data reporting from digital services, meaning there is still no common output standard and dozens of different services end up reporting in multiple formats, resulting in gross inefficiencies. (Rethink Music, 2015)

Because no universal data format or platform exists for various parties to report through, information ends up being fragmented and inaccurate. Because there is no system in place for “tying usage to ownership,” artists are generally disenchanted with whatever possibilities for revenue the Internet may have offered (Swanson 2013). In Europe, where some attempts at creating a single marketplace have also resulted in a more accessible data system, some initial reports of efficiency and artist satisfaction follow after implementation (Mazziotti, 2011).

2.3 Regime Inefficiencies
In the systems that do exist for royalty payment in the digital marketplace, obfuscation is the result of incompatible information systems, as well as intermediaries between the DSP and the artist. To complicate the problem further, research shows that record labels receive seven times more from DSPs than their artists, extending the disenchantment that they feel about digital distribution (Lilly, 2015). The absence of regulation guiding how PROs and labels interact with DSPs and with their artists expose the need for regimes to be held to a standard that allows for marketplace competition and simultaneously prevents the sorts of abuse we currently see. Without a transparent information flow, it is nearly impossible to clearly identify where regime changes need to be made.

Furthermore, much of the revenue owed to rightsholders often does not make its way beyond market intermediaries. A report claims that “the major recipients can pocket unclaimed royalties and have no incentive to locate the owners of musical works” (Rethink Music, 2015, p. 27), which further exacerbates the current problems in the digital marketplace.

Another problem lies in the structural imbalances of the private direct deals that dominate the economics of digital music. In 2014, Darius Van Arman, an independent record label executive and advocate told the judges on the Copyright Royalty Board

I estimate that digital audio streaming revenues (noninteractive and interactive, combined) will exceed digital sales revenues for our labels within the next five years. If there is not a strong royalty rate for statutory webcasting … I am afraid that we will not be able to break even on most of our releases. (Copyright Royalty Board, 2014)

So, in addition to inefficient regimes, the lack of parity between how PROs and DSPs deal with major and independent record labels compounds the problem of unclear revenue streams.

3 Possible Solutions
To further identify the problem in digital music licensing, Daniel Gervais (2012) writes that “there are ways in which the situation could be simplified, notably by agreements among CMOs (collective management organizations) that allow one participating CMO to grant a worldwide license on behalf of all other
participating entities” (p. 12) Such a worldwide license would need a database of all musical works, and would need to be freely accessible to DSPs and rightsholders.

A report put out by the Rethink Music project (Rethink Music, 2015), a collaboration between The Berklee Institute for Creative Entrepreneurship and the Berkman Center for Internet and Society at Harvard University, discusses blockchain technology as a method for establishing a single database of sound recordings. Most associated with cryptocurrencies like bitcoin, blockchain is an attractive solution because it provides for a decentralized, instant method of payment. The database would include information about who should be paid (a task that is currently overly complicated and inaccurate) and would distribute funds to the appropriate parties. Some companies are already testing the possibilities of this technology and see it as a promising solution for a universal database (Holmes, 2015).

Such a database would require a considerable amount of cooperation between rightsholders, PROs, and other industry entities like record labels. Furthermore, Rethink Music suggests the formation of a nonprofit charged with acting as a hub for such a database, much in the same way that the Internet's DNS system is run by a nonprofit organizing body.

4 Conclusion

The changes that the Internet has brought to information processing does not currently include payments for the digital music marketplace, especially of the revenue generated from the sound recording copyright, even though it should. The current system of royalty payment is patchy, inefficient, and creates a high level of disenchantment amongst musical artists. A viable single database solution must be able to take into account the complex web of actors who play a part in this marketplace, and must also consider the multinational nature of associated transactions (an artist is much more likely to have listeners across the globe than they would have prior to digital distribution). Blockchain technology provides an intriguing and attractive framework for such a database, and more work must go into parsing the details of its operation, including who would organize it, the exact details of protocol, and how all parties can cooperate in order to achieve a higher efficiency.

5 References


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