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INSIDE THE GLOBAL DIGITAL MUSIC MARKET

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METHODOLOGY

The information provided in this report is the sole responsibility of the author. The report is not intended to reflect the views of the Member States or the WIPO Secretariat.

This report provides the results of investigative journalism by the author, consistent with journalistic standards. The goal is to provide objective facts and analysis and not recommendations or advice, proposals for change or adjudication of issues in debate.

This report represents the results of interviews of more than 85 individuals across 25 territories on six continents, together with the review of material as described throughout this report and in the appendix. The focus was on obtaining and confirming information from individuals with first-hand knowledge of the matters they discussed. Where possible, information was obtained from individuals' declarations filed with courts or judicial tribunals.

The author sought to verify second-hand information through further analysis and information from sources with first-hand knowledge, and when that was possible the information was included in the report.

Finally, when anonymity was requested, sources were not named in this report.

This report reflects the information and data available as of May 2020.

INTRODUCTION

The digital music market is evolving in every geographical region. Digital music services are continually expanding into new territories around the world. Changes that occur in every region are being spurred from both ends of the value chain, from new creative music collaborations to consumer responses. The music industry is working to support this evolution far more quickly today than ever before in the history of recorded music.

While each piece of music reflects the culture of the creators and often their homelands, and consumers will differ in preferences and digital behaviors from country to country, the business structures, operations and needs to support these creators and meet consumer expectations are strikingly similar from region to region depending on the stage of the country's digital and copyright development. From Asia to Africa, Europe to Australasia and across the Americas, the challenges and potential level of success, described in this report, in each particular country are much the same as those in other countries that are within the same stage of development, whether the countries are part of the underdeveloped markets, emerging markets or more advanced markets.

Within each category of digital market development, then, how effectively the marketplace anticipates and responds to changes depend on a number of factors, such as how well each market participant understands consumer preferences and behaviors; designs the digital music services and offerings; streamlines the operations of the music supply chain; overcomes any limited availability of mobile devices and wireless broadband access; adjusts the legal framework in each country where it fails to provide support for music and its creators; and strikes that delicate balance of sharing the current and potential financial rewards.

Many significant hurdles have been overcome by the music industry since strong competition for young consumers' attention first appeared from other forms of entertainment and the unlicensed peer-to-peer services sparked rampant digital piracy of recorded music in the late 1990s.

Still, the full transition from the sale of physical products to the consumption of recorded music through streams is not without quite sophisticated challenges. The global music network is a mix of commercial and not-for-profit entities working with performers and songwriters that must work together in ways that were never before necessary. Given its complexities and its fast-changing developments, there is a need for sharing information and improving the understanding about how the business of music operates today in a global digital music market and the new forms of remuneration.

Some of the challenges for making authorized recorded music available digitally to consumers stem from the nature of recorded music: a protectable sound recording of musical performances by musicians and often vocalists, and a separate copyrightable musical work of an arrangement of musical notes and often lyrics. Sound recordings and musical works (referred to as 'songs' in this report) each spawned entirely different business models and

industries around the globe and within each country that were developed over nearly a century. The digital music market demanded changes to long-held music business models.

Some of the challenges also come from the unique demand for recorded music and the duration of a single recorded song. The short form of this art makes it easier for individuals to listen to the same recorded music over and over again and to share the digital files of these recordings around the Internet without the permission from rightsholders, whether uploading to user-generated-content video sites or sharing on social media sites.

Finding solutions to overcome these sophisticated challenges requires expertise in a broad range of areas, including legal rights per territory, strategic business operations, commercial exploitation, rights administration, information technology ('IT') and more. Finding solutions also requires cooperation and a delicate balancing of interests.

Perhaps a most important first step to achieve a smoother and most effective transition to the continually evolving digital music market is, therefore, a better understanding of the digital music market.¹

1. OVERVIEW: A DIGITAL SHIFT IN RIGHTS AND VALUE CHAINS

The Internet was once called the information superhighway. People were grasping for a way to describe the new fast-paced way to communicate vast amounts of information and content across national borders through complex networks by using a more familiar term. A highway. But the Internet is not a highway and cannot be described accurately by comparing it to the physical world.

Likewise, the global digital music market cannot be accurately described, much less fully understood, by trying to compare digital to physical or the present to the past. Some basic structures, rights flow and value chains from the past still exist, but they are nearly all altered by digital, some more significantly than others.

Three different sectors related to the recording of musical compositions were developed in parallel over the past century and still operate in a complementary way.

The record companies (sometimes referred to as 'labels') work primarily to discover, develop, market and generate revenue for recording artists and the recordings. The foundations upon which this sector of the commercial record industry operate are the services provided by, and for, the recordings artists under contractual agreements with the companies and the legal rights in sound recordings.

Most record companies own the recordings and distribute the products globally through their subsidiaries or through other record companies in various territories around the world under contractual arrangements. Some record companies own the rights in recordings only for specific territories. Some record companies only hold a contractual right to distribute recordings of other record companies and within certain territories.

Music publishing companies ('publishers') work primarily to discover, develop, market and generate revenue for songwriters and songs as well as manage ('administer') the copyrights and related services. The foundations upon which this sector of the commercial publishing industry operate are the services provided by, and for, the songwriters under contractual agreements with the publishers and the legal rights in songs.

The music publishing industry operates within an international network. A music publisher that opens its business in one country may either enter into agreements (a 'subpublishing' agreement) with other publishers (the 'subpublisher') in several other countries or regions for local or regional representation (i.e., for the subpublisher to liaise with the local collective rights management organization ('CMO'), provide local market knowledge and have local sales and promotion personnel); open its own affiliated publishing company in one or more other countries; or a combination of both. This is the subpublishing network. As a result, the songs by songwriters who choose to enter into an agreement with a publisher may be represented by multiple publishers worldwide (unless the songwriter limits the territories represented by a particular publisher) for some specific period of time, although the cost of the subpublishers is usually borne by the original publisher.

¹ The author sincerely thanks everyone who contributed to this report.

In contrast to rights in a recording, the rights in a song are most often owned or controlled by multiple parties, especially when there are co-writers of a song. Most songs are co-written; most hip-hop and urban songs have many co-writers. A publisher and a songwriter may have entered into a publishing agreement under which the publisher owns the songwriter's fractional shares of copyrights in the songs; a co-publishing agreement under which the publisher and the songwriter (or the songwriter's own publishing company) co-own the songwriter's fractional shares of copyrights in the songs; an administration agreement under which the publisher administers the rights in the songs (e.g., controls the right to license, keeps track of monies due, and collects and distributes monies to the songwriter); or other business arrangements. Each co-writer of a song may have a different publisher than the other co-writers. Publishers compete with each other for rights commercially, often on the efficiency of their administration services.

Depending on the part of the world in which they have developed, the CMOs work to collectively manage certain rights for authors (songwriters) or for performers and/or producers (producers are typically record companies). In general, a CMO's mission is a business-oriented role for the private interests of those whom they represent. In addition to the business functions, some CMOs embrace a broader mission that includes fulfilling a cultural role, which in some countries is set forth in legislation.

The CMOs that represent performers, producers or both represent them mostly for the communication to the public, broadcast or public performance rights in recordings. To date, the CMOs that administer rights for online uses of recordings do so for solely non-interactive streaming with a couple of exceptions (noted in this report).

The CMOs that represent songwriters, or songwriters and publishers, represent certain reproduction rights (a.k.a. 'mechanical' rights) and/or performing rights or multiple rights. Typically, CMOs require the exclusive assignment of rights from members or affiliates (except in the U.S. where some CMOs hold non-exclusive rights) or receive some other type of mandate from rightsholders to represent them, such as a trust, an agency, a license and so on. The CMO membership or affiliate agreements set out the terms of these transfers, which, in some territories, are governed or guided by local laws. Most (not all) of these CMOs represent rights for online uses, although some hold the right to license rights for digital uses only within their national borders.

CMOs began as domestic entities that generally operated within their national borders with national-only copyright databases (reflecting rights as held in that country). CMOs typically have entered into bilateral, reciprocal agreements with other CMOs that represent the same or similar rights around the world ('bilateral' because each agreement is only between two CMOs; 'reciprocal' because each CMO grants the same or similar rights to each other). As a result, CMOs operating only within their own borders nevertheless usually represent rights in nearly all songs from around the world but may only license for use within that CMO's national borders.

(A) NON-DIGITAL RIGHTS AND VALUE CHAINS

In the non-digital market, past and present, the chain of rights and the value chain in each sector are fairly easily described. They essentially move in parallel like the rails along a train track.

For recordings, the rights typically flow from the recording artists (the 'featured artists' who sign a recording contract with the record company), background performers (including 'session musicians') and those individuals who contribute protectable work for the recording to a record company. Rights are retained by the record company. Products (physical copies of the recordings) are made that are shipped to a distributor (which were mostly owned by record companies in the past) to retail stores to consumers. The money paid by the consumer flows back through to the record company, which shares certain amounts as ongoing royalties (a percentage of some amount per unit) with the recording artists and sometimes the hands-on creative record producers. The money retained by the record company is used, in part, to promote and market the artists and the recordings, make and exploit the recordings and invest in more recording artists and recordings, among other services.

For songs (musical compositions), the digital market has upended the chain of rights (how rights flow) and the value chain (how money flows). How these flows occur in the non-digital market and the digital market may be more easily understood by starting from the point of view of a user/licensee of songs.

Rights for non-digital uses have been, and still are, typically licensed within one territory (except for synchronization (audiovisual) and print licenses). Licenses are obtained territory by territory. This process reflects the ways in which the publisher and the CMO networks have been set up and operated. As a result, obtaining a license for the use of songs for non-digital uses leads a licensee down a fairly well-defined path, as follows.

In most instances, a licensee secures mechanical rights from the local music publishers (or local subpublishers) and/or the local mechanical rights CMO, either of which controls rights for use of songs within that territory. For the most part, a licensee secures performing rights from the local performing rights CMO for use within that territory. These licenses would typically cover all or nearly all songs from around the world for use only within that territory.

The publishers that grant the licenses for that territory secured their rights from songwriters or from other publishers, the latter of which secured their rights from songwriters or, in the case of song catalog acquisitions, from other publishers (and so on until rights are traced back to the original publisher-songwriter agreement).

The CMO that grants the licenses for that territory secured its rights from local publishers and/or songwriters or from other CMOs under their bilateral, reciprocal agreements. The other CMOs secured their rights from local publishers and/or songwriters.

For non-digital uses, how many parties own or control the rights in a song (or a fractional share of rights in a single song) do not generally impact the licensing process in most countries because, for a single-territory license, the CMO typically represents nearly all songs for use within a single country, and any publishers that grant the licenses would control the songs for that territory.

The money also typically flows in parallel with the flow of rights. Money from the licensee that flows to the publishers then flows to the songwriters. Money from the licensee that flows to a CMO either flows to the publishers and/or songwriters that are members of that CMO or flows to one or more CMOs that then flows to the publishers and/or songwriters.

Like recordings, following the chain of rights and the value chain for songs in the non-digital market is like following the parallel rails along a train track, except there are typically multiple sets of tracks that cross one another along the way.

(B) DIGITAL CHAIN OF RIGHTS

For recordings, there are some significant differences in the flow of rights for the digital market.

One difference is that traditional record companies—those that hold some ownership interest in the recordings and then market and promote the artists and recordings—now make and deliver digital files of recordings under typically complex contractual agreements negotiated with digital music service providers ('DSPs').

Another difference is the formation of an organization, Merlin, by a group of larger independent ('indie') record companies in order to negotiate the complex contractual agreements with DSPs more effectively and with more leverage as a group of small companies.²

Still another notable difference, there is now an exponentially greater number of smaller traditional record companies, non-traditional record companies and individual artists (musicians or bands) that make recordings and deliver digital files, typically with the assistance of third parties, through any one of hundreds of aggregators or digital distributors to DSPs.

For songs, the fast-paced, digital market has demanded significant changes in the way in which rights in songs are licensed and, therefore, in the flow of rights. Many of the leading

² Merlin has over 800 members representing tens of thousands of 'labels' from 63 countries. Through this organization, DSPs can obtain a single license for rights in the recordings of Merlin members rather than licensing rights through hundreds of individual separate agreements. Members typically have the option to become a party of a Merlin-negotiated agreement or to opt out of that agreement.

DSPs are nearly global in their music offerings, and many other DSPs provide recorded music in multiple territories. Often the needs of DSPs are to license songs more easily for use in multiple territories without the requirement of obtaining a separate license from each CMO in each and every territory plus, in a few territories, each and every publisher.

Now, there are many factors connected with rights that play a very big part in the digital music market, including the number of co-songwriters, the number of publishers, which CMOs represent each of them, what fractional shares of a co-written song are controlled by each and for which territories. The answers impact how, and from whom, each license is obtained; with whom each license for each right in a song is negotiated; and how money flows from DSPs to rightsholders to creators.

Multinational DSPs now obtain multi-territorial rights in catalogs of songs from multiple CMOs, multiple publishers and other licensing hub entities (multinational DSPs often report this approach is still far less burdensome and more effective than the traditional territory-by-territory licensing process, typically resulting in faster monetary distributions to songwriters).

Given the way in which songs are licensed for multi-territory and global uses by some DSPs and licensed for local uses by many of the same and other DSPs, following the chain of rights in the digital market for songs is like tracing the threads of multiple spider webs. The chain of rights and the value chain are inextricably linked.

2. SONGS (MUSICAL COMPOSITIONS): DIGITAL CHAIN OF RIGHTS

The ways in which rights are secured by DSPs and, therefore, the ways that rights flow from songwriters to DSPs, largely depend on the country in which the song was created or a publishing agreement was entered into.³

(A) MOST COUNTRIES

In most countries, songwriters who choose to enter into agreements with publishers typically grant by contract all rights in their songs, including mechanical and performing rights, to the publisher. There are some exceptions for performing rights in some territories. The songwriters may grant these rights for the songs that they compose during a specific period of years or for past songs as well. The publisher either owns the copyrights, co-owns the copyrights with the songwriter (or songwriter's publishing company), or controls the songs (controls the right to license and to collect license fees and royalties), but generally the songwriters nevertheless collect their share of performing rights royalties directly from the performing rights CMO of their choice. Other songwriters may act as their own publishers ('self-published' songwriters).

The performing rights CMOs hold either exclusive rights or non-exclusive rights from the songwriters and publishers. When the societies hold non-exclusive rights, publishers may also license the performing rights in those songs.

In these countries, DSPs secure mechanical licenses directly from publishers or from their mechanical rights agents or CMOs mandated by the publishers.

Notably in the U.S., there is a statutory mechanical license that requires the copyright owner to license a song that has been previously recorded (an authorized recording by the songwriter/publisher) and released to the public in the U.S. as a phonorecord or a digital phonorecord delivery (i.e., an audio recording in physical or digital format) upon request and compliance with certain statutory conditions. While a license must be granted, a DSP may obtain rights directly from a publisher or other copyright owner of a song on voluntarily negotiated terms rather than statutory terms.⁴

³ This report provides a general summary and not a complete, in-depth explanation of this process or a country-by-country description.

⁴ The statutory mechanical license is mentioned because it is of high current interest internationally with the creation of the new Mechanical Licensing Collective: "Our compulsory license in the United States is also an anomaly. Virtually all other countries that at one time provided for this compulsory license have eliminated it in favor of private negotiations and collective licensing administration." Testimony of Marybeth Peters, U.S. Register of Copyrights,

In connection with this statutory license, a 2018 U.S. law (Music Modernization Act) created a new Mechanical Licensing Collective (MLC) that will license and administer mechanical rights under this statutory license for all songs used in the U.S. for digital downloads, interactive streams and any other 'digital phonorecord delivery' as defined in that law. This new collective will automatically represent all such songs unless they have been licensed directly by rightsholders to DSPs. This is somewhat akin to a new provision for CMOs in the European Union's Copyright Directive, although the European provisions are far more limited than in the U.S..⁵

Regional multi-territory licensing hubs have emerged to facilitate the licensing of mechanical rights controlled by publishers pursuant to publishing agreements; where self-published songwriters control their mechanical rights but choose to have those rights managed by a mechanical rights CMO; and where DSPs seek a license that covers multiple territories. Such hubs exist in Europe, Latin America, Africa and Australasia/Southeast Asia and can license for extended territories.⁶

In most countries, DSPs obtain performing rights licenses from performing rights CMOs. The CMOs operating the hubs aggregate the performance rights that match the songs licensed to operate as a 'one-stop shop.' If a CMO holds non-exclusive performing rights, a publisher may also license performing rights to DSPs.

(B) CONTINENTAL EUROPE AND ARGENTINA

In countries where songwriters are typically required to grant both mechanical and performing rights to the mechanical and performing rights CMOs, respectively, the mechanical rights CMOs belong to BIEM, the Paris-based group representing mechanical rights CMOs. Therefore, the way in which the music industry refers to those territories in which CMOs control mechanical rights in songs pursuant to direct grants by songwriters (rather than from publishers) are known as BIEM-member territories. They include the mechanical rights CMOs across Continental Europe and in Argentina.⁷ When songwriters in these countries sign

Before the U.S. Senate Committee of the Judiciary, July 12, 2005.

https://www.judiciary.senate.gov/imo/media/doc/peters_testimony_07_12_05.pdf

⁵ In the European Union, the Directive on Copyright and Related Rights in the Digital Single Market, which has not yet been implemented across Europe, states that Member States may provide [for] use in their territory... and subject to the safeguards provided for in this Article, that where a [CMO] ... in accordance with its mandates from rightholders, enters into a licensing agreement for the exploitation of works or other subject matter: (a) such an agreement can be extended to apply to the rights of rightholders who have not authorised that [CMO] to represent them by way of assignment, licence or any other contractual arrangement; or (b) with respect to such an agreement, the [CMO] has a legal mandate or is presumed to represent rightholders who have not authorised the [CMO] accordingly." The licensing mechanism may only be applied within well-defined areas of use "where obtaining authorisations from rightholders on an individual basis is typically onerous and impractical to a degree that makes the required licensing transaction unlikely, due to the nature of the use or of the types of works or other subject matter concerned, and shall ensure that such licensing mechanism safeguards the legitimate interests of rightholders." Safeguards include that rightsholders may withdraw their works from the licensing mechanism "easily and effectively" at any time, and that the CMO take appropriate publicity measures to inform rightsholders of this mechanism. EU Directive 2019/790 on copyright and related rights in the Digital Single Market, 17 April 2019, Article 12.

<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1588898690952&uri=CELEX:32019L0790>

⁶ The hubs formed to date are: Armonia, ICE Services, and Polaris in Europe; LatinAutor for Latin America and most Caribbean countries excluding Argentina, Brazil and Mexico; the Pan African Licensing Hub for Africa; and the APRA/AMCOS Pan Asian Licensing (PAL) hub for Australasia and Southeast Asia. Specific country-by-country licensing descriptions are beyond the scope of this report. For example, Brazil has a very complex CMO and licensing structure.

⁷ The key factor in determining whether or not mechanical rights in repertoire are controlled by publishers or by CMOs is whether or not the author/composer/songwriter is affiliated with a CMO that obtains the exclusive mechanical rights directly from songwriters. Often publishers and DSPs refer to the latter CMOs as BIEM-member societies. BIEM members include all Continental European CMOs plus SADAIC in Argentina (SADAIC, by law, controls mechanical and performing rights). Authors/composers/songwriters affiliated with a performing right CMO in a country where the mechanical right CMO does not require acquiring exclusive CMO representation of mechanical rights directly from the songwriter (which include Anglo-American and many Latin American, African and Asian CMOs) retain, and can grant, reproduction/mechanical rights to publishers. Note, however, there are additional

agreements with music publishers, the publishers typically collect a share of their songwriters' income from the CMOs as compensation for the services performed by the publishers.

In the European Union, competition law requires CMOs to permit rightsholders to withdraw their songs from collective representation entirely; to withdraw for certain categories of rights; or withdraw for certain categories of use. An explanation of the right to withdraw songs from collective representation in each country is beyond the scope of this report.⁸

After 2005 specifically for the digital music market in Continental Europe, the major music publishers (i.e., the largest multinational music publishers) and a group formed by many indie music publishers began setting up entities called Special Purpose Vehicles ('SPV') or entering into other business arrangements in order to directly license and negotiate license fees for the mechanical rights in what they referred to as their Anglo-American repertoire to DSPs for multi-territory or pan-European digital or mobile uses. Each SPV or alternative arrangement has been set up in cooperation with one or more specified CMO in Europe selected by that publisher or group of indie publishers to provide one-stop licensing solutions; the SPV works with the selected CMO to administer the licenses (process usage reports and invoice the DSPs), keeping information separate from the CMO's administration of national-only licensing for its members.

To ensure that DSPs obtain mechanical and performing rights for these multi-territory and pan-European licenses in a smooth process, arrangements were made with most of the performing rights CMOs that represent this repertoire for the license to cover mechanical and performing rights. The partner CMOs have obtained mandates from other performing rights CMOs enabling them to aggregate and contribute performing rights to match the mechanical rights contributed by the publishers.

The shift to this way of licensing songs in Europe resulted for many reasons. The general and perhaps simplest reason is that the way in which CMOs were set up throughout the collective network worldwide—to license rights territory by territory—did not allow for granting a single license for multiple territories; licensing the rights in a speedy manner; negotiating more customized royalty rates; or processing and distributing royalty collections as accurately, as often or as cost-effectively as the publishers wanted to receive those distributions.

Indeed, the European Commission recommended, and essentially encouraged, this kind of shift in order to support a faster growing digital music market throughout the European Union and to support competition in collective rights management.⁹

Today, a license for use by a DSP in multiple European territories through one of these arrangements covers the mechanical rights and corresponding performing rights of the participating publisher's repertoire from around the world excluding those songs controlled by BIEM-member societies, i.e., songs from Continental Europe and Argentina (unless the CMO facilitating the hub has managed to aggregate such rights or, is itself, contributing BIEM repertoire under the license). DSPs must license all rights in the latter from the respective BIEM CMOs. The multinational DSPs reportedly prefer this arrangement to licensing rights country by country.

Since the early formation of these SPVs/licensing partnerships in Europe and others since then, there has been a trend in Europe and other regions to better support multi-territory licensing for digital uses through the formation of other SPVs to license mechanical rights in publisher-controlled repertoire and to form licensing hubs. The hubs are created by multiple CMOs from different countries to more easily grant a DSP a multi-territory license that covers all songs and all necessary rights as represented by each CMO in a single license.

Indeed, the regional hubs established for multi-territorial licensing for digital uses in Europe, Latin America, Africa and Australasia/Southeast Asia, mentioned above, are the result of this early formation of SPVs/licensing partnerships struck in Continental Europe.

BIEM-member CMOs in territories where publishers may or may not control mechanical rights under their publishing agreements.

⁸ See footnote 6 on the European Union Directive on Copyright and Related Rights, Article 12, regarding extended rights of CMOs for licensing all works for use within the CMO's territory and the right to opt out of such licensing mechanism.

⁹ European Commission Recommendation 2005/737/EC of 18 May 2005 on collective cross-border management of copyright and related rights for legitimate online music services (Official Journal L 276 of 21 October 2005)

(C) RIGHTS ISSUES

When DSPs license rights from a multinational publisher for all rights in the repertoire controlled by that publisher, the agreements are generally for near-global use of the songs, although they only cover the rights in the repertoire that are not controlled by individual CMOs in some countries. However, these near-global license agreements often break out the repertoire for licensing via local hubs to benefit from local market expertise of partner CMOs. Depending on their needs and type of service, DSPs may also license rights for a single territory from the CMO in that territory.

Yet across the Middle East and Africa, even though there are DSPs that have launched in these territories, rightsholders view many of these countries in need of more development to support rights in songs in the digital music market. They say there are either no CMOs even where there are multiple publishers or rightsholders in songs; small CMOs that have not yet developed their song registration systems and local databases to identify songs, songwriters and rightsholders; in some countries insufficient laws that define or protect the rights of authors/songwriters; often a lack of information known by songwriters about rights in music either locally or generally; or a combination of these factors.

3. SOUND RECORDINGS: CHAIN OF RIGHTS

Understanding how rights are created, controlled or transferred in sound recordings of music around the world can be challenging. Since rights and commerce are forever interconnected in the digital music market, they should be considered from both perspectives: the legal perspective (internationally and domestically); and the commercial (in-practice) perspective.

From the legal perspective, there are multiple international conventions that grant protection to performers and phonogram producers. The ways in which the different countries (the contracting parties) enact or do not enact each provision varies.¹⁰

Also, there are differences among some countries in how economic rights of performers are framed and how performers are therefore remunerated. For example, the conventions do not distinguish between the roles of music performers¹¹, although the roles of performers recording music (such as a "featured" recording artist) may be distinguished in contractual practices, or the rights to remuneration for certain uses of recorded performances may vary from country to country.¹²

From the commercial perspective, the following describes the general custom and practice in the music industry.

When a performer enters into a contractual agreement for any one of a variety of reasons with a record company or other company as a featured performer, most commonly the worldwide rights in recordings made during the time of the agreement are owned or controlled by one company at a particular point in time (rights in recordings may be bought and sold over time).

However, there are a variety of business relationships formed to record and/or distribute recordings.

The major record companies and many indie record companies typically enter into agreements with featured artists (or the members of a band or musical group) under an exclusive services agreement. The terms of these types of agreements typically state that the artist agrees to provide recording services exclusively for the record company for a period of time and assigns all rights in the recordings made during that time to the record company.

¹⁰ The conventions include: Rome Convention for Protection of Performers, Producers of Phonograms and Broadcasting Organizations (1961); Geneva Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of their Phonograms (1971); WIPO Performances and Phonograms Treaty (1996).

¹¹ Article 2(a) WPPT: "performers" are actors, singers, musicians, dancers, and other persons who act, sing, deliver, declaim, play in, interpret, or otherwise perform literary or artistic works or expressions of folklore."

¹² U.S. Copyright Act, Chapter 1, Section 114, refers to "featured" recording artists. Also, U.S. law does not provide a remuneration right for terrestrial broadcasts to performers or producers. A full analysis of these rights is beyond the scope of this report on the digital music market.

There may also be a provision restricting the artist from re-recording a particular song for some period of time after the contract ends, but not prohibiting the artist from ever recording a particular song again. In other words, the sound recordings of songs recorded during the contractual period may be owned by the record company, but typically the artist may re-record the same song after some time has elapsed after the end of the contractual period, and that recording would not be owned by the company.

Some featured artists enter into an exclusive agreement with an indie record company, a production company or other entity, and that company may enter into an agreement with a larger company to either provide the artist's services and/or rights in the recordings to the larger company. Sometimes featured artists enter into agreements with a company but limit the territories in which the artist's recordings services are provided or the recordings may be released.

Featured artists may enter into an agreement to simply deliver a specific number of recordings to the company, either assigning all rights, a share of the rights or only licensing the rights for use to the company.

Featured artists may also produce their own recordings (as 'self-released' artists) and enter into agreements with digital aggregators or distributors to deliver those recordings to DSPs. Smaller record companies also deliver their recordings to DSPs through aggregators or digital distributors.¹³

Typically, most record companies grant DSPs worldwide rights for the use of the recordings, although there may be some territorial restrictions and music catalog restrictions depending on any contractual restrictions that may be in place for specific artists, record companies or distributors. For example, some artists may have negotiated in their agreements with record or distribution companies that the artists are entitled to first approve any, or certain, recordings to be provided for certain types of digital service offerings, although this only occurs with superstar artists. Some artists or companies that have restricted the territories in which another company may distribute the recordings may result in those recordings not being available in some territories; the other company would have to provide the recordings in its territories.

Major record companies negotiate agreements with DSPs directly. The entity formed by many indie record companies as referred to above, Merlin, negotiates agreements for the member indie labels and some aggregators directly with DSPs, and members may then choose to accept those terms or opt out of (not provide rights to its recordings under) that agreement. The larger aggregators may have direct agreements with DSPs; the contractual terms with aggregators are typically not individually negotiable because entering into that many individual agreements would be too costly and disruptive to business operations.

When multinational DSPs cannot license worldwide rights from a record company or an aggregator, the DSP may elect to not include their recordings because obtaining licenses in each territory, tracking the use in each territory and then reporting use (and paying royalties) in each territory are likely to be too costly and burdensome.

Performers (musicians and vocalists) who perform on recordings but are not parties to featured artist recording agreements with record companies are generally called background performers. The general practice in the recording industry worldwide has been obtaining an assignment of all rights they may hold in the recordings to the record company that has the featured artist under contract or to the featured artist (or artist's company).

Although with some important differences in the legal characterization of the rights to be transferred, the hands-on creative record producers, recording engineers and mixers who produce, engineer or mix the recordings, respectively, also customarily assign any and all rights they may hold in the recordings to the record company or to the featured artist (or artist's company). These parties are paid for their services in return for those agreements.

¹³ An aggregator is a company that aggregates the rights of many companies and/or individuals to deliver to DSPs, among other services. A digital distributor may be an aggregator or may simply deliver recordings in digital form to DSPs.

The role of CMOs for recordings outside of the U.S. and for the performers whom they represent is generally limited in the digital marketplace to certain types of digital offerings.¹⁴ These rights are discussed in The Digital Rights Debate in this report (section 4J).

In the U.S., there is no right of remuneration or right of performance for sound recording copyright owners or performers except for digital uses. Due in part to the size of the U.S., there is a statutory license for the non-interactive digital performance of sound recordings. These services are webcasts, satellite and cable broadcasts. The terms of the license and royalty rates for the producers (record companies) and performers are set by the Copyright Royalty Board (CRB). The CRB designated SoundExchange to be the exclusive CMO to administer these licenses and to collect and distribute these royalties.

Nevertheless, U.S. copyright law also permits non-interactive digital service providers to enter into voluntary agreements with rightsholders under negotiated terms and royalty rates. When DSPs or other companies, such as broadcasters, offer a combination of non-interactive and interactive services, they often enter into voluntary licenses that cover the entire services with those rightsholders in sound recordings that hold rights in large catalogs of music. Major record companies, larger indie record companies and the indie companies represented by Merlin have entered into such agreements.

4. THE DIGITAL VALUE CHAIN (HOW MONEY FLOWS)

A countless number of contractual agreements—easily hundreds of thousands over time—transfer or grant rights throughout the global music industry between authors, composers, performers, record producers (in this context, the hands-on producers of recordings), record companies, publishers, CMOs, aggregators and digital music distributors, DSPs, commercial users of music and myriad third parties. In addition to national legislation, the provisions or terms of these contracts, and in a few countries the orders by copyright tribunals, govern how money, and how much money, is meant to flow to music rightsholders. The parties to these contracts make up the digital music value chain.

Music streaming services have become the dominant form of digital music offerings for recorded music around the globe. The business models for streaming services are also the most complex among digital music offerings. This is an area of the market in which there is much misunderstanding, misinterpretation and a lack of information inside and outside of the music business. Therefore, this report focuses primarily on streaming services.

(A) CONFIDENTIALITY AND COMPETITION

In the global digital music market where DSPs are the link between paying consumers and music providers, the terms of the contracts that DSPs enter into with record companies and, to a lesser extent, directly with larger music publishers are often highly sought after by various industry participants and some members of the press. They are also nearly always confidential because they contain highly sensitive business information that forms the foundation of a competitive digital music market.

While record companies and music publishers in the past rarely had formal confidentiality provisions in most of their contracts, the custom and practice in the industry was for the parties to not disclose sensitive information to third parties in order to protect the privacy of the contracting parties.

In contrast, the extremely competitive computer hardware and software industries, which often experience theft of their ideas and innovations, have nearly always included confidentiality and non-disclosure ('NDA') provisions in all of their contracts, even with employees. Since most digital music service operators come from the technology sector, and the DSPs are competing with other technology innovators, the NDA practice has been carried over to the digital music industry.

¹⁴ To the extent that CMOs for recordings (performers or producers) license digital transmissions, they have been applied only to purely non-interactive uses of recordings (most commonly simulcasting where a terrestrial broadcast is simultaneously transmitted by the broadcaster in an unaltered manner online). There are exceptions at least in Spain and Hungary. See section 4(J), The Digital Rights Debate.

The purpose for defining in contracts what the parties agree will be confidential (the confidentiality provision) and then for the parties to promise not to disclose that confidential information to others (the NDA provision) is directly related to competition. If companies are acting in a non-competitive manner, they may be violating antitrust laws.

In the music industry, there are three (or four) major recorded music and music publishing groups that each control a substantial share of their music markets. The remainder of the markets are shared among dozens, hundreds or thousands of companies, depending on the territory. Among DSPs, there are less than 10 multinational companies that each represent large shares of that sector.¹⁵

In this kind of marketplace, the companies' activities are often under scrutiny by competition authorities. While respecting business secrets, the recent European Directive on the Digital Single Market includes several provisions aimed at increasing the transparency level in the copyright industries¹⁶; at the same time, competition authorities would not permit all of the pricing details, business secrets and other information that could lead to competitors harmonizing commercial terms to be shared among competing companies as it appears evident from written decisions of past competition reviews by the European Commission.

For example, the Commission in its public version of the 2012 decision approving Universal Music Holdings Ltd.'s acquisition of certain recorded music assets of EMI Group stated: "Confidentiality restraints preclude the Commission from including the terms and conditions of all of Universal's competitors in the comparison and from disclosing those details to [Universal]."¹⁷

The Commission also noted: "For confidentiality reasons, the Commission anonymized the identity of the [digital] platforms." Further, the Commission wrote: "The Commission's investigation confirmed that digital wholesale prices are negotiated with each service provider on a confidential and bilateral basis. Digital retailers do not know the licensing rates of their competitors and do not pass such information to the majors in light of their confidentiality clauses."¹⁸

When a company's proprietary, confidential or sensitive information must be shared in court proceedings, the judges typically review the information privately first to decide if it is something that should not be shared under the law. The confidential information is then usually only shared with the litigation lawyers representing the parties in the proceedings; those lawyers cannot share it with their clients (the parties) or their clients' in-house lawyers.¹⁹

As a result, there is limited accurate information, and in some cases no accurate information, available in some areas of the digital music value chain.²⁰

(B) PHYSICAL VS. STREAMING

There is often a desire and a tendency to try comparing the digital music market to the recorded music physical goods market (CDs, vinyl albums). This occurs in connection with revenues and revenue streams.

Record company revenue in the physical goods market are mostly generated from sales per unit. The primary metrics and financial criteria for measuring that market are the number of

¹⁵ The DSPs are described in part one of this report: An Introduction to the Global Digital Music Market, WIPO, prepared by Susan Butler, Oct. 9, 2019, Document SCCR 39/3, https://www.wipo.int/meetings/en/doc_details.jsp?doc_id=456065

¹⁶ Recital (68) of the 2019 Directive on Copyright in the Digital Single Market states: "Online content-sharing service providers should be transparent with rightsholders with regard to the steps taken in the context of cooperation. As various actions could be undertaken by online content-sharing service providers, they should provide rightsholders, at the request of rightsholders, with adequate information on the type of actions undertaken and the way in which they are undertaken. Such information should be sufficiently specific to provide enough transparency to rightsholders, without affecting business secrets of online content-sharing service providers."

¹⁷ European Commission, Case No COMP/M.6458 - Universal Music Group/EMI Music, Sept. 9, 2012, pg. 135.

¹⁸ *id.* pgs. 236, 189.

¹⁹ This is the approach taken by the courts assigned to determine royalty rates and license terms for U.S. performance rights CMOs ASCAP and BMI as well as the U.S. Copyright Board and other tribunals.

²⁰ There are many press reports about financial terms in the digital music industry, especially over royalty rates and per-stream royalty rates, all of which, in the authors' view, are inaccurate or misleading unless they have been provided by the party directly involved in the transaction.

units sold and the price (and royalty rate) per unit sold. The prices reflect a product sold at one point in time. The combination of an increasing number of units sold and higher prices per unit correspond to a stronger or growing business.

The streaming revenue model is significantly different. The amount of money received per stream (the per-stream rate) is not considered to be an accurate measure of revenue or potential revenue for rightsholders or of the financial strength of a streaming business.

Recall that the streaming model came about after consumers were purchasing far fewer physical units of recorded music in album format than in the past and opting to listen to individual recordings (not entire albums) of their choice for far less money (or sharing those recordings illegally over unlicensed digital sites). Younger consumers were also spending more time enjoying other forms of entertainment than recorded music (such as games). The shift to streaming was consumer driven.

The streaming model is structured to provide consumers with more music for lower prices than they paid per-recording for physical units or permanent downloads. The model also generates money for rightsholders over longer periods of time through increasing user engagement, thereby broadening and increasing the number of users and encouraging them to sign up for paid subscription services.

For this business model, when a record company or other licensor of music rights is assessing the viability of a digital streaming service or is reviewing a DSP's financial and performance reports, the company is looking at a much broader range of criteria that are more akin to metrics in the telecommunications industry, such as cable or mobile phone subscription services.

For streaming music, important criteria include: (i) The actual or projected average revenue per user (ARPU), which means the DSP's average revenue generated among the service's users within a specified category; (ii) The percentage of streams of a rightsholder's music within a category of use or during a specific time period; (iii) For a paid subscription service, the number of subscriptions sold as well as the price for those subscriptions; and (iv) For an ad-supported service, the amount of money generated from total advertising sales and the advertising 'cost per mille' (CPM), which is a digital advertising term for the price per number of impressions of the ad on a web page.

In addition, the company is looking at the number of new subscribers that the service is able to attract as well as the churn or churn rate of the service, which is the number or percentage of people leaving a service (lost customers). Like telecoms, the two most important factors for a healthy streaming business are acquiring customers/users and retaining customers/users.

If the paid streaming subscription service works well, there is little or no churn, user engagement with the service is good and users consume a lot of music. The per-stream rate (the amount of money paid or received per stream) will go down with more users, but the business is still good. It means people are really using and engaging with the service, so the number of streams is going up. If the users love the service and find music they love, more people will join, and the number of subscribers increases.

In turn, music company executives believe that the overall music business becomes healthier, more reliable and more quantifiable. In principle, these factors will allow music companies to invest more money back into artists and songwriters because there is more of an indication of what revenue will be coming back. The music industry becomes a more predictable business in which to invest.

The majority of music industry rightsholders are looking for a high-level of user engagement with paid subscription services that turns more and more subscribers into life-long customers who do not stop listening to a lot of music and who do not leave to find free unlicensed music somewhere.

(C) DSP REVENUE MODELS

A business model describes how a company expects to create, deliver, capture value and compete in a given marketplace. A company's business model typically includes a broad range of details about the core operations of the company and its targeted customers. In a

competitive marketplace like digital music, the specifics of each company's business model are sensitive, confidential business information.

Nevertheless, one aspect of DSP business models in general can be understood by observing what they offer to consumers. The variety of offerings is described in part one of this report.²¹

Another aspect is how each DSP expects to generate revenue. Some of the public activities of DSPs reveal the general categories of revenue streams that support DSP operations.

Depending on the specific territory, the activities that may generate revenue for a DSP include the following:

- Charging consumers a subscription price with
 - Additional charges for Hi-Res or other special services
 - Additional charges for family plans
 - Differentiated prices based on geographical territory
- Selling advertising against music listening
 - Using learned consumer preferences to create value
 - Analyzing consumer trend data
 - Using listening data to better target other types of ads to attract advertisers
- Forming partnerships for sales of related goods to users
 - Concert tickets
 - Merchandise
 - Fan experiences (meet and greets)
- Selling paid marketplace tools to creators and their teams
- Providing tools to artists or labels for various uses including
 - Fan data
 - Tour routing
 - Promotional placement
- Providing music as a complementary offer to sell additional goods or services
- Offering music as part of a bundle
 - Such as Amazon Prime (offered with additional services)
 - Part of a broadband bundle (e.g., triple/quadruple play) for the time of the broadband subscription or alternatively providing a number of months of free subscriptions to the service
 - Mobile phone or cable providers offering free music service or not counting music against data limits
 - Additional charges for all-inclusive service on a smart speaker
 - Devices, mobile phones, players, and other entertainment
- Selling sponsored recommendations
- Providing airline in-flight streaming services
- Acquiring complementary companies to support or expand the service offerings and data processing (e.g., Apple acquiring Shazam, which developed a song-identifying app; Spotify acquiring Seed Scientific, a data analytics firm).

How well any combination of approaches works for DSPs, rightsholders and consumers in any specific territory depends on many factors, which range from local consumer behavior and broadband or data and device availability and affordability to the stage of streaming development and consumer adoption in a market. For example, free-to-consumer, ad-supported streaming services have drawn many consumers away from unlicensed digital music sites. Still, paid subscription models have been generating the most revenues for rightsholders. Therefore, most record company executives believe that free, ad-supported streaming services

²¹ An Introduction to the Global Digital Music Market, WIPO, prepared by Susan Butler, Oct. 9, 2019, Document SCCR 39/3, https://www.wipo.int/meetings/en/doc_details.jsp?doc_id=456065

are most beneficial when the service has a solid 'up-sell' path, which means a workable plan to convert a healthy number of the free users to paying subscribers.

DSPs and groups of rightsholders continue to experiment on specific approaches to generate revenues in each territory in order to build a sustainable music market as a whole for the long term.

(D) THE ROLE OF PLAYLISTS

Most DSPs generally have the same music, so each one is constantly working on strategies to differentiate its services from competing services. Playlists, which are essentially compilations of individual recordings in varying numbers, have become an integral part of those strategies for interactive streaming services and an important part of their business models.

Webcasters that do not offer interactive streaming and smaller interactive streaming services often rely on playlists curated (i.e., selectively compiled) only by technology or by third parties rather than using their own human editors or curators. In contrast, most of the leading multinational DSPs have invested heavily in specially curating their playlists with editorial teams, proprietary computer algorithms, third parties and users and involve special algorithms that respond to user behaviors.

The variety of playlists, the variety of ways that playlists are curated (editorial teams, computer algorithms, subscribers, record companies and other third parties) that a streaming service offers and how each DSP manages those playlists are important ways for DSPs to distinguish themselves from others. Indeed, playlists are described by some record company executives as an essential, vital part of interactive streaming services and as ways in which services like Amazon Music Unlimited, Apple Music, Deezer and Spotify have developed their own editorial 'voices.'

Most (if not all) services allow third parties to offer their own curated playlists for the service. Many record companies, especially the major record companies, invest heavily in developing their own playlists to promote their artists. The catalog divisions of companies prepare and execute special marketing plans specifically tailored to these older recordings to create and tie the catalogs to playlists to reach old fans and potentially new fans. Music publishers and songwriters develop playlists. Often artists, their personal managers and record companies retain third-party companies to help develop playlists to promote their music.

When record companies develop strategies to market and promote their artists, they focus intensely on 'playlisting.' They identify appropriate playlists taking into consideration such things as the vision of the artist and the genres of the playlists. They consider how many people may follow certain playlists and whether music on that playlist may feed into larger playlists, often called 'flagship' playlists. These types of playlists may have tens of millions of followers.

Individuals at record and other companies work to build relationships with the DSPs and their label relations and editorial teams by proving over time their music credibility—working to demonstrate that the individuals' approach to identifying, marketing and promoting artists can be trusted. They pitch music in an attempt to secure placements for the music they represent on those playlists. The playlists then tie into other promotional activities off of the platforms.

The playlist editors are viewed to have significant discretion and autonomy at the streaming services. The editorial teams at the streaming services have shaped the services' brands. Some editors look for music that they believe have certain emotional connections or cultural feels. Some editors use data and analytics in their decisions.

The services' playlist ecosystem varies from digital service to digital service. Exactly how each service creates and promotes its playlists are very complex and are considered to be confidential business strategies. Record companies and others outside of the service report that they have little visibility into how interactive services program playlists. Likewise, the ways in which record companies develop their plans to market and promote their artists are generally considered to be confidential business strategies.

One of the reasons is that playlists are incredibly important. Playlists help get consumers highly engaged with the music. They have a significant influence on music consumption. They help drive revenue through discovery of music.

Placement on a popular playlist results in more listeners for that music. They drive user engagement with the service and with music that can lead, at least indirectly, to further revenues over a sustained period.

Playlists are described as critical for stream counts because of the number of playlist followers. Some playlists with millions of followers can turn relatively unknown artists into stars. Listeners will often download the track from a playlist or add it to the user's own playlist to listen to it repeatedly. Because users do not regularly refresh their own playlists and download collections, once a track is added to the personal playlist or downloaded, there is a greater likelihood that the user will stream the track for a longer period of time than just when it was first heard, which drives critical engagement and revenue over the longer period of time.

Playlists also benefit niche genres. For example, there are reportedly few large radio stations devoted to 'roots and Americana' music. These artists have faced obstacles in sharing their music or having their music discovered by mainstream audiences. Not only has this been a challenge for the artists, it has inhibited the growth of these genres of music. The sophisticated discovery opportunities through playlisting creates an opportunity to overcome these challenges.

There are playlists based on genre, culture, geographical regions, mood, time period, popularity and targeted to every size of audience from large to niche or entirely on the user's listening habits.

Since the playlists are so important to each DSP's business strategies to attract, engage and retain subscribers, the DSPs retain complete control over the playlists and what the playlist experiences look like to the consumer listening on the service.

Finally, the status of playlists is an important issue for performers' organizations particularly regarding the similarities they see between DSPs' playlists and broadcasts' playlists (or thematic broadcasts).

(E) THE ROLE OF USER ENGAGEMENT

User engagement with streaming services is viewed to be vital for the growth of the entire music ecosystem. There are various metrics that show user engagement, although most of the results are confidential business and strategic information to the individual DSPs and those rightsholders who obtain and analyze data from the DSPs and elsewhere. A service's number of subscribers is not useful without additional information. Nevertheless, there are some metrics that are occasionally released that are useful.²²

Three metrics are the number of monthly 'active' users (MAU), changes in the number of paying subscribers, and increased music listening hours. MAU figures and, to a lesser extent, growth in paid subscriptions reflect that people doing something , i.e., actively using the service and deciding to pay. These figures are occasionally released by some DSPs in more general terms.²³

As Spotify reported: "From history, we know that MAU growth tends to be a leading indicator of future subscriber additions, which is then followed by revenue gains in both

²² DSPs do not all release information about the same types of users or subscribers, so subscriber numbers cannot be accurately compared between services. Some DSPs report the number of paid subscribers; others report the number of monthly active users; still other DSPs simply report the number of subscribers. DSPs do not usually reveal how many are free promotional subscriptions. Further, free or discounted trials are not uniform in length between services or even for the same service in different markets. For example, Spotify usually offers a one-month free trial of its premium service but frequently promotes an offer of three months for US\$0.99 (or local equivalent) in some markets at different times of year; Deezer often provides a three-month free trial; Apple Music offers a one-month free trial in most countries but six months free in countries where it is newly launched; Amazon Music Unlimited is available for free for three months to those who are already Amazon Prime users in many countries.

²³ Note that publicly traded companies are required to report certain figures publicly for the benefit of investors. However, there is only one publicly traded multinational DSP and only one domestic DSP that is primarily focused on music (Spotify and SiriusXM's Pandora Media), which means that they provide more music-specific figures. Publicly traded companies that offer a digital music service as one of its products or services rarely provide much music-specific information, such as Amazon, Apple, Alphabet (YouTube) and a number of telecoms and media conglomerates.

premium and ad-supported users.²⁴ Spotify reported that for 2019, its number of MAUs worldwide were 271 million, an increase of 64 million from the prior year's 207 million. As part of that number, the monthly active users of its ad-supported service grew by 37 million from 116 million in the prior year to 153 million for 2019. Spotify reported for 2019 the number of premium (paying) subscribers were 124 million, an increase of 28 million from 96 million in 2018. By the end of the first quarter of 2020, Spotify's MAUs grew to 286 million despite the novel coronavirus pandemic.

Amazon Music reported in January 2020 that subscriptions to Amazon Music Unlimited, a paid streaming service, had grown by 50 percent in 2019. Deezer MAUs are currently 16 million, which increased from 14 million at the start of 2018. Tencent Music reported for 2019 mobile MAUs for online music across all of its services (including karaoke service WeSing) remained the same at 644 million. The number of paying users for online music increased, however, from 27 million to 39.9 million, an increase of 47.8 percent.

The number of paid subscribers has also been growing. Based on global data collected by IFPI from member record companies and DSPs, there were 255 million users of paid subscription audio services worldwide at the end of 2018. This represents an increase of 44.9 percent compared to the 176 million at the end of 2017. Based on results of a survey across 21 countries, IFPI reports a total of 341 million people used a subscription music streaming service in 2019.

Consumers are listening to music for more hours as well. A music consumer study across 19 countries found an increase in the numbers of hours of music listened to through subscription streaming between 2018 and 2019. In 2018, survey respondents listened to an average of 2.1 hours of music through paid subscriptions each week. By 2019, this had risen to 2.5 hours per week, an increase of 19.9 percent year-on-year.²⁵

Also, Spotify reported in a public filing that its ad-supported users and premium subscribers are spending more time with the service each year. Combined, its audience streamed 73 billion hours of content in 2019, an increase of 34 percent compared to the prior year (Spotify offers podcasts in addition to music).²⁶

(F) THE ROLE OF CONSUMER ACCESS

Two of the most important consumer entry points to the digital market are devices that connect to the Internet, such as smartphones, and Internet connectivity. There must be consumer options for devices and Internet connectivity that are affordable as measured by the demographics of the particular country.

India is an example of an underdeveloped music market becoming an emerging digital market based on a number of factors, especially the fast growth of devices and connectivity.

For the recorded music business, the Indian market has been ravaged with very high physical unit piracy rates for many decades. Outside of the Bollywood market, music companies were challenged to find a market in part because they were unable for their products to reach consumers at an affordable price and before the music was pirated.

Despite YouTube launching in India in 2008, and three streaming services having been available for most of the past decade (Gaana, owned by India's largest media conglomerate, The Times Group; Wynk, owned by India's largest telecom, Airtel; and JioSaavn (Saavn was owned by a New York City-based company then combined with JioMusic owned by international conglomerate Reliance Industries)), the country has not had a well-connected digital populous.

In 2014, the country had an estimated 117 million smartphone mobile subscribers, which represented only about 10 percent of mobile users, in a country of almost 1.3 billion people. In

²⁴ Spotify Technology S.A. reported financial results for the fourth fiscal quarter of 2019 ending Dec. 31, 2019. Feb. 5, 2020.

²⁵ Music Listening 2019, IFPI <https://www.ifpi.org/downloads/Music-Listening-2019.pdf>

²⁶ U.S. Securities and Exchange Commission Filing Dec. 31, 2019

2015, total recorded music revenues in India were US\$84.5 million, of which streaming accounted for US\$33.1 million.²⁷

Two developments quickly changed the country's digital market entirely during 2015 and 2016. Chinese tech company Xiaomi entered the Indian market in 2015 with low-cost smartphones. Reliance Jio in late 2016 introduced the country's first all-4G network across India offering reportedly the world's cheapest data plans with unlimited data. The coverage was available in 18,000 cities and over 200,000 remote areas. Jio also offered a smartphone priced at Rs 2,999 (US\$45).

Apple Music entered the market in 2015, and Amazon Prime Music in 2018. Spotify launched in 2019.

By the end of 2019, Jio was the largest mobile phone network in India (more than 370 million subscribers). India had over 502 million smartphone users, with over 77 percent of Indians accessing wireless broadband through smartphones. Data costs have reportedly fallen by 95 percent since 2013.²⁸

In 2019, total recorded music revenues in India reached US\$181.4 million, with streaming revenues making up \$132.8 million of that amount, more than quadrupling in four years. Paid subscriptions generated \$43.8 million, ad-supported audio streams \$51.9 million, and video streams \$37.1 million. Streaming revenues made up more than 73 percent of total recorded music revenues.²⁹

In many other countries, there have been very few digital music services available to date for consumers to make a choice, and often the reasons are unclear. For example, although Apple operates around the globe and launched Apple Music in 2015, the music streaming service is only now (early 2020) becoming available in 17 African nations (Algeria, Angola, Benin, Chad, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Namibia, Republic of the Congo, Senegal, Seychelles, Sierra Leone, Tanzania and Tunisia); Bhutan in the Asia-Pacific; three more European nations (Croatia, Iceland and North Macedonia); 10 more Latin American and Caribbean nations (Bahamas, Guyana, Jamaica, Montserrat, St. Lucia, St. Vincent and the Grenadines, Suriname, Turks and Caicos and Uruguay); three Middle Eastern nations (Kuwait, Qatar and Yemen); and the Solomon Islands.

Based on past experiences, there are multiple factors that can impact the availability of streaming services. They include restrictions or limitations on the form of payment that may work with particular services in certain countries; high taxation on consumer prices, DSP operations or telecom-partner services that would make it more difficult (or not feasible) to provide subscription services to consumers at consumer-friendly prices and be able to operate the business effectively; restrictive government regulations that make it too expensive or burdensome to operate in the country; limited broadband availability for consumers to access digital services; and limited devices or limited Internet connections that would make the potential user base too small to support the service, among other factors.

A variety of these factors have kept some African nations underdeveloped for digital music while other nations emerging and more developed. Still, it seems that much of Africa is on a path similar to Latin America.

In the past, Brazil and Mexico were the early emerging digital music markets. The remainder of Latin American countries were underdeveloped despite their consumers' love of music. Now Brazil and Mexico have more advanced digital markets. Most of the other Latin American countries have moved into the emerging markets category through a combination of relatively good local copyright protections; collective rights management; changes in some consumer payment mechanisms; expansion of smartphone device usage and Internet connectivity; and the carving out of four clear paths to licensing rights in songs across the region in Brazil, Mexico, Argentina and then the remainder of the region with the formation of

²⁷ IFPI Global Music Report 2020 (for the year 2019, which includes five-year figures). The GMR converts all currencies into U.S. dollars.

²⁸ techARC (Indian analytics firm); McKinsey Digital India, Technology to Transform a Connection Nation; Telecom Regulatory Authority of India, Feb. 25, 2020.

²⁹ IFPI Global Music Report 2020).

the digital licensing hub LatinAutor. This hub facilitates multi-territory licensing of songs in approximately 15 Latin American and Caribbean territories.

1. In Africa, South Africa is the more advanced digital music market. In countries such as Nigeria, Kenya, Ghana and Botswana, there is now more investment from multinational music companies in creators. The availability of smartphones and Internet connectivity is expanding across the continent as well as the availability of digital music services. A pan-African licensing hub for songs has been created. Music also has deep roots throughout Africa. The continent, made up of countries that are each very different from one another, like the countries in Latin America, may very well be following the same path as Latin America depending on the development of other factors related to copyright laws and collective rights management in some countries.

(G) PAYMENT MODELS

The provisions in agreements to provide music to DSPs vary depending on many factors, such as the size of the DSP in terms of its corporate structure, the territories in which the DSP is making its service available to consumers, the amount of music catalogs that the service wants to offer, and the functionality of the service, among other factors.

For example, negotiations and pricing with Amazon, Apple, Google and Tencent, which are multinational corporations offering more than just music and offer music in multiple countries under a variety of different models, will differ from the negotiations and pricing with a DSP that only wants to make classical music available to download.

(i) SMALLER, NICHE, LIMITED OFFERING DSPs

The rights to sell permanent digital downloads and master ringtones (i.e., ringtones of the recordings made by featured artists of the songs) are typically granted in return for a percentage of the download or ringtone consumer price with a minimum royalty rate, although rates change from time to time.

The rights in recordings and in songs for use by digital music services that do not provide any interactive features are often represented by the CMOs for the respective rights. This type of offering includes radio simulcasts, cable and satellite radio, and non-interactive offerings (sometimes called webcasts). The tariffs or royalty rates for these types of offerings are typically either set by the CMO governing boards or by copyright tribunals, which are generally available to the public.³⁰.

CMOs representing songs offer a variety of licenses for smaller digital offerings whether interactive or non-interactive. These service providers may qualify for certain types of customary licenses (published society licensing schemes) that are not individually negotiated agreements for limited online or digital uses. The rates or fees are based on such factors as their gross business revenues; the maximum number of downloads per year; the maximum number of streams per year; the maximum number of subscribers per month, and other factors. The fees and rates are typically published on the CMOs' websites or available upon request.

(ii) DOMESTIC AND MULTINATIONAL DSPs

When the DSP is a larger domestic or multinational DSP offering interactive streaming services, the payment model set up in the agreements to obtain rights in recordings and songs

³⁰ For example, the royalty rates for U.S. webcasts as well as certain cable and satellite services provided under a statutory license by SoundExchange are either negotiated by the digital music providers individually with SoundExchange, set by the U.S. Copyright Royalty Board (CRB), or negotiated directly between the DSPs with rightsholders. The rates set by the CRB are different for commercial webcasters, non-commercial webcasters, and other service providers. The commercial webcasters, for example, pay an annual minimum per-channel fee plus a monthly per-performance fee, with the fees published on its website SoundExchange distributions from collections are then shared (after deducting an administration fee) 50 percent to producers (record companies), 45 percent to featured performers and 5 percent to an organization that administers a fund meant to be distributed to background musicians and vocalists.

involves a complex layering of terms that vary from company to company, territory by territory. DSPs obtain rights in recordings from record companies and rights in the songs recorded from publishers and CMOs.³¹

The basic payment model for interactive streaming is currently used throughout the industry. DSPs generally offer a share of a revenue pool generated from the retail price (the price to subscribers or advertising revenues received by the DSP) to the companies (record companies or publishers) and CMOs granting rights in the music based on the pro-rata share of each company's or CMO's music that is used during a certain period of time within a specified territory. Rightsholders typically want to set their own value and not be confined by a pool.

Then there are individually negotiated provisions layered on top of this basic payment model that take into account a DSP's specific revenue model for each region or territory, including the different types of offers to subscribers (such as family plans, free promotions, student discounts, bundled content, bundled services and so on); the DSP's average revenue per user (ARPU); how many months the music may be provided to a subscriber for free or for a discounted minima before the DSP will be required to pay full value for that use; what level of discounts the DSP may provide to subscribers below which the DSP must pay the undiscounted rate; for how many months those discounts may be provided without an obligation to pay for that use undiscounted; what a DSP is responsible for if an agreed upon conversion rate of free subscribers of the ad-supported part of the service to paying subscribers is not met; what amount will be due from the DSP if a subscriber fails to pay for his/her subscription, and the DSP is unable to collect, or what amount of discount or free use will apply to a subscriber in this situation; caps on certain types of deductions; minimum rates for certain uses, and other factors.

Further, many of these terms typically include a whole algorithm that is set up to determine amounts due, using references such as greater-than, less-than, but the aggregate of X and Y, and so on. There are often multipliers used to account for myriad variances in the ways in which subscribers use a service (such as a family plan subscription counted as a negotiated multiple (e.g., 1.5) of subscriptions, and so on).³²

³¹ CMOs in this section only refer to those CMOs that represent rights in songs, not recordings.

³² For the U.S. example: "Complicated does not mean difficult, and it's not rocket science, but the calculations, and working out the value of a deal, are not straight forward," says an executive who negotiates agreements with DSPs. To grasp some of the complexity, an example that is publicly available of one of the simplest of the complex are the calculations in U.S. federal regulations for the mechanical royalties to be paid by interactive streaming services for the use of musical works (songs) during 2018-2020 under the statutory compulsory license as set by the U.S. Copyright Royalty Board. The federal regulation states in part (paraphrased): If a service includes different offerings, royalties must be calculated separately with respect to each such offering taking into consideration service revenue and expenses associated with such offering. Step 1: Calculate the All-In Royalty for the Offering, which, for each accounting period, shall be the greater of the applicable percent of revenue and the applicable percent of total cost of content (for 2018, for example, the percent of revenue was 11.4% and the percent of total cost of content was 22%). Step 2: Subtract the total amount of royalties for public performance of songs that has been or will be expensed pursuant to public performance licenses in connection with uses of songs through such offering during the accounting period that constitute licensed activity. Although this amount may be the total of the service's payments for that offering for the accounting period, it will be less than the total of such public performance payments if the service is also engaging in public performance of musical works that does not constitute licensed activity. In the case where the service is also engaging in the public performance of musical works that does not constitute licensed activity, the amount to be subtracted for public performance payments shall be the amount of such payments allocable to licensed activity uses through the relevant offering as determined in relation to all uses of musical works for which the public performance payments are made for the accounting period. Such allocation shall be made on the basis of plays of musical works or, where per-play information is unavailable due to bona fide technical limitations as described in step 3, using the same alternative methodology as provided in step 4. Step 3: Determine the Payable Royalty Pool, which is the amount payable for the reproduction and distribution of all musical works used by the service provider by virtue of its licensed activity for a particular offering during the accounting period. This amount is the greater of (i) the result determined in step 2, and (ii) The subscriber-based royalty floor (if any) resulting from the calculations described in [the following section]. Step 4: Calculate the per-work royalty allocation for each relevant work, which is the amount payable for the reproduction and distribution of each musical work used by the service provider by virtue of its licensed activity through a particular offering during the accounting period. To determine this amount, the result determined in step 3 must be allocated to each musical work used through the offering. The allocation shall be accomplished by dividing the payable royalty pool determined in step 3 for such offering by the total number of plays of all musical works through such offering during the accounting period (other than promotional

The extent to which rightsholders can negotiate all of these terms individually depends in large part on the extent to which the DSP is able to internally reconcile the payment calculations required for different business models and structures.

When the negotiating party is representing a group of record companies or publishers (other than a CMO) such as an aggregator/distributor, Merlin, or another entity, a DSP may agree to calculate minimum amounts due, different thresholds or different multiples on a label-by-label or publisher-by-publisher basis for a limited number of labels or publishers rather than as a group of labels or group of publishers. This might be done when the catalogs of music of individual labels or publishers are significantly different than the remainder of the labels or publishers in the group. For example, calculations for the group may result in an average figure for some factor that equals 11, although one label's factor is 12 and another label's factor is 10. When treated as a group, that factor may be 11 for all of the labels. When a calculation is performed on a label-by-label basis, one would have a factor of 10 and the other 12. Also, publishers are likely to work with CMOs in most territories where there is a need to aggregate the performing (or communication to the public) right to match the reproduction (mechanical) right.

For record companies, layered on top of these negotiated terms are often additional negotiated terms for marketing and promotional opportunities.

royalty rate plays) to yield a per-play allocation, and multiplying that result by the number of plays of each musical work (other than promotional royalty rate plays) through the offering during the accounting period. For purposes of determining the per-work royalty allocation in all calculations under this step 4 only (*i.e.*, after the payable royalty pool has been determined), for sound recordings of musical works with a playing time of over 5 minutes, each play shall be counted as [an overtime adjustment]. Notwithstanding the foregoing, if the service provider is not capable of tracking play information due to bona fide limitations of the available technology for services of that nature or of devices useable with the service, the per-work royalty allocation may instead be accomplished in a manner consistent with the methodology used by the service provider for making royalty payment allocations for the use of individual sound recordings. For purposes of the calculations in step 4 [for overtime adjustment] only, for sound recordings of musical works with a playing time of over 5 minutes, adjust the number of plays as follows [several figures are provided, such as 5:01 to 6:00 minutes, each play equals 1.2 plays, and so on]. For playing times of greater than 10 minutes, continue to add .2 for each additional minute or fraction thereof....The following subscriber-based royalty floors for use in step 3 of shall apply to the following types of licensed activity: standalone non-portable subscription, streaming only, in the case of a subscription service through which an end user can listen to sound recordings only in the form of interactive streams and only from a non-portable device to which such streams are originally transmitted while the device has a live network connection, the subscriber-based royalty floor is the aggregate amount of 15 cents per subscriber per month; standalone non-portable subscription, mixed, in the case of a subscription service through which an end user can listen to sound recordings either in the form of interactive streams or limited downloads but only from a non-portable device to which such streams or downloads are originally transmitted, the subscriber-based royalty floor for use in step 3 is the aggregate amount of 30 cents per subscriber per month; standalone portable subscription service, in the case of a subscription service through which an end user can listen to sound recordings in the form of interactive streams or limited downloads from a portable device, the subscriber-based royalty floor for use in step 3 is the aggregate amount of 50 cents per subscriber per month; bundled subscription services, in the case of a subscription service providing licensed activity that is made available to end users with one or more other products or services (including products or services subject to other subparts) as part of a single transaction without pricing for the subscription service providing licensed activity separate from the product(s) or service(s) with which it is made available (*e.g.*, a case in which a user can buy a portable device and one-year access to a subscription service providing licensed activity for a single price), the subscriber-based royalty floor for use in step 3 is the aggregate amount of 25 cents per month for each end user who has made at least one play of a licensed work during such month (each such end user to be considered an "active subscriber"). For the purposes of these royalty floors, the total number of subscriber-months for the accounting period, shall be calculated taking into account all end users who were subscribers for complete calendar months, prorating in the case of end users who were subscribers for only part of a calendar month, and deducting on a prorated basis for end users covered by a free trial period subject to [another part of this regulation], except that in the case of a bundled subscription service, subscriber-months shall instead be determined with respect to active subscribers as defined in [another part of this regulation]. The product of the total number of subscriber-months for the accounting period and the specified number of cents per subscriber (or active subscriber, as the case may be) shall be used as the subscriber-based component of the minimum or subscriber-based royalty floor, as applicable, for the accounting period. A Family plan shall be treated as 1.5 subscribers per month, prorated in the case of a Family plan end user who subscribed for only part of a calendar month. A Student account shall be treated as 0.50 subscribers per month, prorated in the case of a Student account end user who subscribed for only part of a calendar month. 37 CFR Section 385.21.

Some marketing opportunities may be part of an agreement granting rights in the recorded music, and other opportunities are not part of the agreement. Rightsholders partner with DSPs for a variety of marketing campaigns, which may include marketing through social media channels, promotions at an artist's concerts as well as a service's own concert series, in-app alerts, featured tracks, homepage takeovers, genre page promotions, new release sections, award shows, playlist covers and many more. The digital services also have the ability to select certain listeners for targeted marketing based on the listening data that the services are allowed to collect. There may also opportunities to feature music videos on the service or within a playlist.

Further, terms in the agreements for some parties include the delivery by DSPs of certain types of data in addition to what is essential for reporting royalties or amounts due.

Sales and related consumer information data received from interactive streaming services has been described as critical for short-term and long-term business development, marketing, A&R and countless other purposes at labels and publishers, especially major labels and publishers that are more apt to have IT and analytic systems that can process the massive amount of data. DSPs have far more data on music consumption than any single music company, and DSPs can perform even more sophisticated analysis than music companies.

The types of data that any DSP may make available to record companies and some aggregators will typically differ from the types of data available to publishers that enter into direct agreements with DSPs, which will typically differ from the types of data available to CMOs. One of the reasons is data privacy laws. Another reason is the expense of creating the technical capability of gathering that data by DSPs. Still another reason is that the data gathered and analyzed has proprietary and sensitive business characteristics.³³

Further, DSPs typically pay some type of advance payment or minimum guarantee on royalties to those companies or entities that represent large, significant catalogs of music. The terms of these advance payments vary from company to company. Some or all of the advance may be a guarantee that the DSP will pay X amount in royalties within Y period of time; if the royalties to that rightsholder do not reach that amount, a guaranteed payment would mean that the rightsholder could keep the advance payment anyway. Advance payments may be made at different points in time based on different thresholds reached. Often the share of available money a DSP has for advance payments is based on the market share of that rightholders' music catalog used by that DSP during some period of time.³⁴

Finally, when the agreements also cover rights for user-generated content ('UGC'); audiovisual material (videos); social media and other types of user sharing; lyrics; music storage; music-related podcasts; other digital music-related offerings; and multiple forms of revenue, such as advertising with a variety of direct-cost deductions (such as ad sales expenses or ad revenue attributable to non-music content), third-party sponsorships, and revenue generated from DSP partnerships (such as telcos or device manufacturers), the terms of these agreements, especially related to fees and royalty rates, become much more complex.

As a result of these complex terms of agreements, per-stream rates that individuals often try to calculate at some point in time for streaming services are misleading and relatively meaningless. The per-stream rate varies according to the popularity of the service. The more popular the service, the lower the per-stream rate even though the average revenue per user (ARPU) to the rightsholder does not change. For subscription services, negotiating only a per-stream rate would be very challenging because revenues scale with users, not streams. DSP revenues increase or decrease based on the number of subscribers, not the number of streams.

³³ There are rightsholders who desire a broader availability of data from DSPs. The availability or unavailability of the data is often not the issue, as one executive states: "It's great to have data, but data is the science. The art is in interpretation, to be able to do something with it."

³⁴ How advances and guarantees are shared with performers and songwriters is described in section 4I(i)(b), Transparency, Breakage.

(iii) THE USER CENTRIC PROPOSITION

There is a debate occurring within the music industry about a possible change to the way in which the revenue pools for streaming services are shared among rightsholders.

The current payment model is the pro-rata system. Subscriber payments or advertising revenues for a specific time period are pooled. That amount is shared pro rata among rightsholders based on the number of streams per piece of music. Under this model, it doesn't matter if one subscriber heard 5,000 streams in a month or 10 streams in a month. All users' subscription fees go into the pool, the number of streams per recording are counted, and the pro-rata share of streams to recordings determine the pro-rate share of royalties to the rightsholders of each of those recordings (and songs recorded) from the available revenue pool.

The different proposed model is the user-centric system. Each recording that each subscriber streams is counted and linked to that subscriber. Then, the subscription price paid by that subscriber would be shared pro-rata but among the rightsholders of each piece of music that specific subscriber streamed. Under this model, if a subscriber streams 500 tracks during a month, the rightsholders of those 500 tracks would share the one user's subscription fee. If a subscriber streams 10 songs during a month, the rightsholders of those 10 songs would share the one user's subscription fee.

Deezer has tested a user-centric model on data in its own system and made available some findings in 2019. The DSP claims that the high number of streams by younger users and other factors, such as how quickly they skip to the next recording rather than listening to the entire track, distorts the pro-rata sharing of the royalty pool to tilt the scale more heavily in favor of the music they stream. Deezer believes that its test demonstrates that the user-centric approach can fix the distorting impact that younger audiences have on the overall sharing of royalties.³⁵

Deezer reports that, based on its data, under the current pro-rata system: (i) The under-17 age group represents 7 percent of users, and the music they stream generates 8 percent of the royalties; (ii) The 18-25 age group represents 19 percent of users, and the music they stream generates 24 percent of the royalties; (iii) The 26-35 age group represents 22 percent of users, and the music they stream generates the same 22 percent of the royalties; (iv) The 36-45 age group represents 19 percent of users, and the music they stream generates 17 percent of the royalties; (v) The 46-55 age group represents 11 percent of users, and the music they stream generates 10 percent of the royalties; (vi) The 56 and older age group represents 7 percent of users, and the music they stream generates 4 percent of the royalties; (vii) An unknown age group of users represents 15 percent of users, and the music they stream generates 15 percent of the royalties.

It is unclear whether or not the unknown age group that represents 15 percent of users could alter any of the results significantly.

Deezer also compares results from 2018 in the three countries of Brazil, France and Germany. However, the report shows dramatically fewer total streams in Germany than in Brazil or France. Plus, the age group in Germany with the most streams of any group is an unknown category ("N/A"), which could impact the results in all of the other age groups, so only the results of Brazil and France are referenced here.

In Brazil and France, the results of switching to a user-centric approach show, in part: (i) The 26-35 age group streams the most in Brazil (over 2 billion streams) and the second most in France (2.5 billion streams). For this group, the user-centric model does not change their impact on royalty shares in either country; (ii) The 18-25 age group streams the second most in Brazil (close to 2 billion streams) and the most in France (over 2.5 billion streams). For this group, the user-centric model results in 21 percent less share of royalties for the music they stream in each country; (iii) The age groups whose music gain the most are the 56 and older age groups, who also appear to stream the least in both countries.

³⁵ "UCPS" Deezer, September 2019

Comparing the changes per music genre in France in 2018 when switching from the pro-rata to the user-centric approaches, the largest increase in a share of royalties was for classical music, although this genre was among the genres least streamed. Among 30 different genres of music, there was only a double-digit percentage improvement in the share of royalties (10 percent or more) under a user-centric model for classic rock, blues and classical, all among the genres least streamed. The biggest drop in royalty share was for pop music, which was also, by a very large share, the most streamed genre.

Deezer provides additional metrics in its analysis as well, such as its positive impact on discouraging certain types of fraudulent activity on streaming services (e.g., a fake subscriber that is heavily streaming its own recordings could never generate more money than the amount that fraudster paid for that subscription).

A Finnish study comparing the two models was conducted by analyzing one month's usage on Spotify in 2016. The study concluded that as the total stream count decreases (i.e., when the service was used less), the revenue difference between the user-centric and the pro-rata increases. The pro-rata model favors artists and music that are either streamed the most or are streamed by the most people. The user-centric model favors artists who have the smallest number of streams, especially when there is less streaming (the service is used less).³⁶

The study also notes that in the pro-rata model, only the number of streams is the important factor. In the user-centric model, the total number of streams per subscriber and how those streams are spread among various tracks and artists are important factors. As a result, the user-centric model is less predictable.

The study was conducted with very limited data in that it focused on only one small country and one DSP during a one-month period. The study also notes that it analyzed artists and not works (i.e., not specific recordings). Whether or not the results as measured by artists were impacted by the number of recordings available by each artist at that time is unknown. Therefore, the results, while informative, should not be assumed to apply across the entire streaming market. The report also cautioned that "the positive financial effect is not automatic in all user-centric cases, but the result may as well be the opposite. The results depend on the cumulative effects of both individual and user groups' listening habits."

In another report, a theoretical economic analysis of the two models and a proposal for adopting another possible approach, the authors reached the following conclusions.³⁷

Analyzing the effects from one user's different streaming activities under both models using a monthly subscription fee of \$10 as follows.

When the user streams music very infrequently (low total usage) and, when streaming, does not listen to a variety of artists (low diversity), the user's \$10 subscription fee benefits those few artists under the user-centric model. Under the pro-rata model, this user's low usage and low diversity has only a minuscule impact on those artists' share of streams and royalty payout on a platform that is used heavily.

When the user streams music very frequently (high total usage) and, when streaming, does not listen to a variety of artists (low diversity), the most the user can add under the user-centric model to those artists' share is \$10. Under the pro-rate model, if the user streams a particular artist a lot (low diversity, very few artists), then the user can meaningfully increase that artist's share of total streams (by high usage) and the artist's proportion of total royalty payments (an increase of more than \$10).

When a user streams music frequently (high total usage) and streams a wide variety of artists (high diversity), only a fraction of this user's \$10 will go to any single artist. Under a pro-rata model, this user's streams will weigh more heavily onto where royalties go. If the user's proportion of streams dedicated to a particular artist are higher than that artist's current allocation of streams, this user can meaningfully increase that artist's total share of streams despite this user's diverse listening.

When a user streams music infrequently (low total usage) but streams a variety of artists (high diversity), the results are ambiguous under both models. This user will not have much

³⁶ Pro Rata and User Centric Distribution Models: A Comparative Study, Digital Media Finland Oy, November 2017

³⁷ 'User-Centric' Revisited: The Unintended Consequences of Royalty Distribution, Will Page and David Safir, July 2019

impact on any artist's total market share. The high diversity means that no one artist benefits. Low usage means a low number of streams. This type of listener is not terribly desirable under either payment model.

Many music companies and DSPs have reportedly conducted analyses within their own companies and groups, although their results are not available to the public. How extensive or limited these analyses have been is unknown.

Comments from some executives who question the user-centric model say that while the approach is intuitively appealing because the money from the subscriber generally goes for the music streamed by that subscriber on further analysis, the model becomes less appealing to them. However, they note that the test samples of data to date seem too small, limited or incomplete to make an ultimate decision.

Based on the information available so far, those who question the model say that the main problem is that the approach undervalues the choices of heavy music users. The philosophy of valuing the most popular music less than the least popular music is not a philosophy that many music executives want to endorse.³⁸

The approach also effectively encourages less user engagement and less use of the streaming service, these executives say. Both of these effects are contrary to the streaming business model of generating more money over the long term through more highly engaged users who can help attract more users, more subscription revenues and less churn for the streaming services.

Also, a broader analysis has not yet been conducted on potential undesirable consequences of a user-centric model, especially for songwriters. There seems to be some question on how the user-centric model may impact rightsholders whose money comes from CMOs. The timing and methods of collections, matching songs to recordings and distribution rules may play into the effect.

Some executives believe that while the user-centric model appears to help certain music niches and fringes do better, there also appears to be a lot more genres that are much worse off.

Since the studies so far have been very limited, as one executive noted, the nightmare is that no one really knows what something is like until they go there. The industry may be left with truly negative, unintended consequences.

Considering potential consequences is especially important because the global recorded music industry only reached its first significant year-on-year growth in 2015 after nearly two decades. The subscription streaming models have made significant positive results in the music industry. If there is an abrupt shift in the dynamic without thorough studies and analysis, there could be unintended consequences throughout the market. If the unintended consequences could negatively impact user engagement, the streaming model of generating money for artists, songwriters and companies over the long term could be disrupted.

If an unintended consequence is that there is less money for record companies to invest in artists or a shift among songwriters and publishers to work outside collective rights representation for all digital uses, such results could impact a broader part of the creative community.

Although Deezer does not believe the user-centric model would require additional data processing costs on the part of rightsholders, there does not yet appear to be any cost analysis conducted on the part of rightsholders to understand whether or not there would be such a consequence.

Deezer hopes to launch a pilot project in one or more territories for further study.

(H) PERFORMER AND SONGWRITER ISSUES

The tremendous growth of recorded music consumption through streaming services has indeed altered the revenue flows to performers and songwriters; rightsholders are debating about the reasons behind these changes with different arguments.

³⁸ Similarly, in the view of FIM, SCAPR, FILAIE and AEPO ARTIS, the main problem of the pro-rata model is that the approach overvalues the choices of heavy music listeners.

Many groups for performers and songwriters compare revenues that they received from the sale of physical goods or radio broadcasts to their receipts at specific points in time from streaming services. Some groups, performers and songwriters who are dissatisfied with digital earnings often direct their complaints to record companies and DSPs, claiming that the companies are unfairly short-changing the creators.

Note, however, that the author of this report confirmed with some attorneys who represent recording artists that there are artists who have generated much more revenue from the digital marketplace than they did from physical sales. According to these interviewed attorneys, this seems to occur more extensively in certain genres of music.

Whether the changes are for the positive or the negative, the shift in earnings are caused by a variety of factors.

(i) DIFFERENT PRICE POINTS AND METRICS

Physical goods, whether vinyl albums or CDs, are sold for a price at a single point in time. There must be a sale (or a 'shipment') for a recording artist or a songwriter to receive a royalty. By analogy in accounting terms, the flow of money from physical units follows the cash (cash basis accounting). Cash comes in from a sale, the artist and the songwriter receive a portion of that cash. Sale, cash, royalty. No sale, no cash, no royalty.

The physical goods market was especially lucrative for many record companies, recording artists, publishers and songwriters for a very long time for several reasons, including the pricing of units as sales, albums sold as units, repurchases and limited competition.

Each physical unit is priced for a one-time purchase. The price to buy a product is nearly always higher than the price to acquire a product in some other way. Since recording artists record many songs around the same time (in the past, the most cost-effective and often most creatively inspiring way to record), the recordings are essentially bundled together (as an album) for release as physical units. Albums have been the predominant format for physical units for many decades. Albums have a higher sales price than individual tracks.

When a CD is sold as an album, the consumer price is equal to 10 or more times the price of one track. When cash is paid for an album, the artist royalty that is based on a percentage of a wholesale or retail price is calculated on that higher album price. Likewise, a songwriter mechanical royalty is based on the number of tracks he/she wrote for that album multiplied by the number of album units sold.

After a consumer buys an album, there is little reason for the consumer to buy that album again—unless the album becomes available in a significantly different format. However, because albums are priced for one-time sales, only a consumer's favorites albums are likely to be purchased again in a new format. In the past, a consumer updated a vinyl album to an 8-track tape to play in an automobile; updated an 8-track album to a cassette tape to avoid flipping the tape from one side to the other to hear an entire album and to rewind or fast forward; and updated a cassette album to a CD for a different quality of sound. The recording artists and songwriters kept earning money for each copy of those albums, all priced for one-time sales in each format.

Consumers took charge of dismantling album formats into single tracks most notably when the original unlicensed peer-to-peer service Napster hit the Internet. Consumers pushed the industry to change to paid permanent downloads, but by the time most music companies were catching up to this change, consumers were again pushing the market to free, ad-supported streaming services. Only when DSPs and record companies helped shape streaming services to generate more revenues for rightsholders through paid-subscription streaming has the marketplace been able to grow revenues again and ignite, or reignite, consumers' interest in consuming, and paying for, more music.

With the shift away from albums, record companies, recording artists, publishers and songwriters must rely on earnings from individual tracks. But in measuring the impact, the shift to individual tracks pales in comparison to the change in competition created among performers and songwriters by the digital opening of the gates to the marketplace.

During the three years following the appearance of Napster (2000-2002), the record industry distributed an average of about 33,500 releases per year in the U.S. The figure means

that consumers could choose from about 33,500 new releases each year to buy plus any older recordings that they had not previously purchased. While this figure only reflects the U.S., it was then, and remains today, the largest recorded music market in the world. A significant portion of albums sold around the world during those years were American releases. The performers who made recordings but could never convince a record company to invest in them or could not secure a distribution agreement could rarely get any significant numbers of their recordings to consumers.³⁹

Today with the large number of roads into digital music services—whether with a traditional record company (one that helps with recording, distribution, marketing, promotion and so on) or through an aggregator or digital distributor—there is an almost limitless number of performers and songwriters who are recording, or having their songs recorded by others, and competing for consumers' ears.

The most popular multinational streaming services receive on average more than one million recordings each month currently (April 2020) from more than 500 different sources (which aggregate approximately 40,000 different sources, such as traditional record labels, non-traditional record labels, aggregators, distributors, self-released artists) that are delivering new recordings each month. This means that the number of recordings expected to be delivered to these streaming services in 2020 alone will likely add another 12 million recordings to the tens of millions of tracks already available. As a result of the stay-at-home and lockdown orders from the spread of the novel coronavirus around the world, the author expects that this number may skyrocket above that figure as songwriters and musicians stay at home writing and recording more music using at-home digital audio workstations (enabling performers to record and mix via computer).⁴⁰

The consumer-driven streaming models also alter the metrics for sharing revenue from recorded music. In the physical music market, no one could ever answer the following questions: After a consumer bought an album, how often did the consumer listen to the entire album purchased? How many tracks on the album were listened to repeatedly? Which tracks were listened to repeatedly? How many times did the consumer listen to each track, if at all, and over what period of time? Did the consumer ever listen to the album more than once or twice?

In the physical market, it did not matter how much a consumer loved or disliked any track on the album because the price was already paid for all tracks. The recording artists and the songwriters were paid their shares for the full album price even if any individual track was never listened to more than a few times.

Now, how often a consumer listens to a particular track is a most important measurement.

Subscribers may stream an old song a few times from an album that they never would have purchased more than once. They may stream fairly often songs from older albums they used to love. They may stream music from all sorts of genres that they would never buy as albums. They may stream new hits for a few months constantly and then rarely stream them again, or they may stream some hits repeatedly for months or years to come.

The pricing metrics have entirely changed, which means the earnings for performers and songwriters have entirely changed.

There is still an amount paid to advertise or to subscribe to stream the recordings, but no one knows which music is paid for at that point in time. By analogy in accounting terms, the money flows when there is use (an accrual basis). The price is paid, but the music must then earn a share of the money through repeated listening (streams).

With this major change in revenue streams for creators, there seems to be a lack of clarity and/or concerns about their remuneration not only among many performers and songwriters but among many of their personal managers and other representatives as well. The way of doing

³⁹ Several years ago, the author of this report acquired figures for U.S. releases for 2002 and 2003 for prior reporting. The author obtained, and confirmed in April 2020 (including by way of comparing to information received in the past), all of the figures provided in this section from multiple trusted journalistic sources with direct access to this information who do not want be attributed.

⁴⁰ The author of this report obtained this figure, then confirmed it with multiple sources, in April 2020, who wish to be unattributed.

business with consumers has changed entirely. The prices are measured in micro-currencies and impacted by a wide variety of highly negotiated terms with DSPs, which are aimed by the licensing rightsholders to bring the most money possible to all rightsholders including creators.

This report aims to help bridge at least some of these information gaps.

(ii) STREAMING vs. RADIO

The comparison of streaming to radio broadcasts arises generally in two contexts within the scope of this report.

One context is the claim by performer groups (i.e., FIM, SCAPR, FILAIE and AEPO ARTIS) that audio streaming is growing at the expenses of many existing distribution channels, including radio broadcast listening and, therefore, reducing the remuneration to performers who collect through CMOs. This claim does not apply in the U.S. because terrestrial radio broadcasters are exempt from paying a public performance fee for sound recordings. The other context is the comparison by some songwriters of their royalty receipts from performing rights CMOs for radio performances to royalty receipts for streams.

In the first context, rightholders have diverging views regarding the performers' claim that streaming of music has been replacing radio broadcasts and reducing that source of revenue.

The author of this report obtained year-by-year figures for radio collections by CMOs on behalf of performers and record companies for the broadcasting of sound recordings in more than 60 countries over a 10-year period. From 2010 through 2019, collections from radio increased in 51 countries and decreased in 15 countries. Analyzing the data over more recent years to better align the period with broader use of streaming services, the author focused on the years 2015 through 2019 and confirmed the availability of streaming services in the countries. Collections from radio over this recent period grew in 42 countries, declined in 15 countries and remained stable in three countries.⁴¹

Observing general trends from diverse sources, while it seems that the revenues from radio broadcasting have not declined in recent years, probably due to a variety of factors, the annual revenue figures for the recorded music industry since 2012 have shown the steady decline of revenues from physical units and downloads.

The first subscription streaming services with unlimited listening to large catalogs of music launched around 2002. By 2015, digital became the primary revenue stream for recorded music globally. Digital revenues made up 45 percent of total revenues compared to 39 percent from physical sales globally. The increase was primarily driven by a sharp rise in streaming revenues that offset the declining recorded music revenues from physical units and downloads.⁴²

In the second context, there can be no accurate comparison of royalties from radio for a certain number of plays to royalties from streaming for a certain number of streams that songwriters and/or performers receive from streaming; the metrics are clearly different.

In addition, terrestrial radio broadcasters cannot generally count exactly how many people are listening to a particular song.

For example, in 2013, a songwriter blogged that he and his co-writers of one song received \$42.25 for 1,159,000 streams on a streaming service during a three-month period and compared it to receiving \$3,434.45 for 18,797 radio plays. To test that claim, the author of this WIPO report conducted research at the time, which revealed the following.⁴³

Arbitron, a company that measured and estimated the sizes of radio audiences, provided the weekly 'cume persons' figures to this author for the top five New York City terrestrial radio stations at the time. The 'cume' figure represents the estimated total number of different

⁴¹ Radio Revenues Summary Table, IFPI. The author does not have permission to provide specific figures for this report. Note that collections reported by CMOs in any category of revenue are often impacted by a variety of factors, including changing terms in license agreements, reporting current collections that include past-due amounts from licensees, reporting current collections including amounts received after resolution of legal disputes, and more.

⁴² IFPI Global Music Report 2016.

⁴³ The 2013 amount from streaming is only used to illustrate the difference between streams and radio audience; the per-stream amount does not reflect amounts in today's market, which has changed in many ways over the following seven years.

persons (in digital, they would be called unique visitors) who tune to a radio station during the course of a day for at least five minutes.

Hot Adult Contemporary station WWFS-FM was in fifth place. During one week in May 2013, between the hours of 6:00 a.m. and midnight, the station had a 'cume' of 3.37 million people. If just half of those people listened at the same time, it would mean that 1.68 million people listened to a song played one time on one radio station during one week, which is a likely equivalent of 1.68 million digital performances over three months.

However, it is highly unlikely that one play on one terrestrial radio station would ever be picked up by a performance rights CMO's sample survey (the way in which they determine which music was played) much less generate any royalties to the songwriter. Even if the song had to be played on the one station five times per day every day for one week for that many people to hear the song, that limited amount of play might still not be identified and generate any songwriter royalties.

Further, authors' performing rights CMOs do not simply collect license fees, divide them by the number of performances and pay royalties pro rata to those songwriters. Using an American CMO as an example that year, royalties for radio were calculated by first coming up with a number of 'credits' for a performance, then allocating the songwriter/publisher shares of the credits, and then multiplying the credits by a 'credit value' to reach the amount due to a writer.

Credits for a song's radio performance were calculated by multiplying a value assigned to the way the song was used (e.g., featured or promotional); by a license 'weight' factor that reflected the license fee paid by the station or group of stations; by a 'follow the dollar' factor to ensure that the license fees received from a particular medium were paid for performances in that medium (money from radio stations paid for radio performances); and adding any 'radio feature premium credits,' which were credits given to songs that earned certain threshold numbers of radio feature credits in a three-month period.⁴⁴

This is an example of the challenges faced when trying to compare digital remuneration with remuneration from a different type of use known from the past even if still available today.

(iii) AGGREGATORS: ACCESS TO THE DIGITAL MARKET AND DATA

Many executives who work in a sector of the business that provides artists' services, sometimes called aggregators or digital distributors, say that they have found performers outside of the largest recorded music markets to know very little about the opportunities through these kinds of companies or how to release their own music without a 'record deal.' Some of the companies are working toward expanding into emerging markets to provide these options for performers who do not have traditional recording agreements.

There are many kinds of companies that aggregate the recordings of many small, indie labels and self-released artists that want their recordings distributed to DSPs. While these companies are generally called aggregators or distributors, the terms are not truly an accurate description of what they all do.

In one category of these companies are several that represent enough quality music recordings that they are able to provide tens of thousands of new recordings each month to a DSP. These are the companies that are capable of ensuring that the recordings are in the proper formats required by each DSP, providing related information (metadata) that is required and ensuring and verifying the identities of the individuals and companies that are delivering recordings. The companies that have these significant development resources may be entitled to become connected to a DSP's special artist channel (or similar type of program) through which the DSP provides deeper artist analytics for the artists distributing their recordings through that company.

These companies are more accurately providing artist and label services rather than simply aggregating and distributing recordings. Which record companies and artists they work with may depend on the strategic view the company has toward the digital market.

⁴⁴ This example is anecdotal. A focused research on this subject was beyond the scope of this report.

One view is to provide services more like a traditional record label. They are looking for high-quality music that can generate revenue from consumers. These companies charge a distribution fee to the small labels and self-released artists.

Another view is taken by companies with a more artist focus rather than music-release focus. They charge artists various fees for the variety of services they perform, which may include marketing opportunities, publishing administration, data analytics and other services as well as distribution.

These companies may or may not have direct agreements with DSPs. They may go through Merlin to license the recordings.

In addition, there are many small companies that focus solely on YouTube. They work to help monetize an artist's music on YouTube channels, track the uses and help administer the rights.

(iv) FEATURED ARTIST RECORDING CONTRACTS

For those artists who enter into a recording agreement, most record company executives try to set realistic expectations for recording artists concerning their potential revenues from interactive streaming.

As one executive explains: Counting revenue from interactive streaming only (i.e., not taking into consideration possible revenue from other sources or activities), the successful artists and songwriters, meaning those with hit songs, should be doing well financially in the streaming market but that money will be spread out over the longer period of time that it takes to generate revenue from the streaming model. The mid-tier artists and songwriters, those who in the past would likely have a track on an album that would be played far less than the hit singles, may be okay financially if they also have a huge hit that can make up that streaming volume. The artists and songwriters who will be successful are those who perform and/or write music that a huge number of people want to listen to right away (huge audience, short term) or music that many people want to listen to over a longer period of time over and over again (solid fan base, longer term).

For example, one of the music industry's biggest superstars is Drake. His third album, Take Care, in 2011 sold over one million physical copies in the U.S. alone. His tenth studio album, Scorpion in 2018, was also a huge success compared to other albums released that year but sold only approximately 100,000 physical copies in the U.S., not because of disinterest. It broke Spotify's record for the most global streams in one day with over 132 million streams within the first 24 hours after release.⁴⁵

In contrast, digital distribution is not the primary focus of performers in Nigeria unless they can reach the international market. Even if they have a hit record in Nigeria, as in most of West Africa, they are not likely to earn enough money from digital to cover recording and promotion costs. So, the focus is to release the music, but position themselves to market themselves as a brand. At least until the beginning of 2020 when the COVID-19 pandemic spread out globally, they have been able to earn much more money from live performances and sometimes for use of their image, appearance fees and other activities related to being a popular brand than from the recordings alone.

On the local streaming services, however, the artists might get fantastic numbers of streams, but the percentage of users who pay subscription fees are not as high as in other countries. Internet penetration and access to smartphones are growing in Nigeria, but the artists earn more money from other markets where streaming subscription fees are higher, like South Africa and Kenya. If the artists do well on streaming services in North America, Europe and Asia, however, where people pay higher subscription fees, they can earn "pretty impressive revenue."⁴⁶

Regardless of the market change, performers groups argue that recording artists do not receive a fair share of revenue generated from online exploitation due to their weak bargaining position when negotiating recording contracts. The groups report that record companies offer

⁴⁵ See the list of attributions in the Annex to this report.

⁴⁶ See the list of attributions in the Annex to this report.

standard contracts where there is minimal or no room for negotiation. They claim that in a large number of cases, recording contracts entered into during the pre-digital era are applied using old formulas to calculate remuneration schemes that were developed for physical distribution of recorded music.

On the contrary, most record company attorneys and numerous artist attorneys confirm that there is no generalization about fair remuneration or contractual terms that can be made across the entire record industry or even across all major record companies. Past and present recording contracts, even among the three major record groups, vary in terms, especially today. Note that currently there are estimated to be about 10,000 indie record labels (traditional kinds of labels) around the world and three major record company groups that each have many separately operated record labels. Over the past 30 years, there have also been countless mergers and acquisitions of entire record company groups, individual record labels, divisions of companies and catalogs of master recordings. There have been countless record companies that have gone out of business and new record companies that have launched.

Based on formal interviews with artists' attorneys and documents reviewed by the author over a period of years, the types of agreements entered into between featured artists and record companies and the remuneration provisions in these agreements cover a broad range of possibilities per company and per artist, including: a percentage of some amount with no technical deductions; a percentage of some amount with certain deductions that may or may not apply for digital exploitation; a percentage of some amount with a 'breakage' provision that may or may not be applied in actual practice; higher percentage royalty rates than in the past; a percentage royalty rate under a worldwide agreement with the same percentage rate calculated for each country; a percentage royalty rate under a worldwide agreement that changes depending on the country in which the music is used; an equal sharing (50-50) share of net profits (after all expenses are deducted from gross receipts); some percentage share of net profits under various definitions of net profits; some percentage of revenues under a distribution-only agreement, particularly for certain genres of artists in some countries; indie record companies that provide much higher royalty rates than major labels but with far less money to invest in services for the artists than the majors; indie record companies with higher royalty rates than majors and with significant sums of money to invest in artists; indie record companies that provide royalty rates that are the about the same as major label rates; and indie record companies that provide lower royalty rates than major labels.

Whether or not record companies will change the remuneration provisions in old recording contracts, practices again vary from company to company and sometimes country to country. The agreements with some companies are interpreted as not providing for digital exploitation, and, therefore, some labels have renegotiated royalty rates with those artists to secure rights for digital uses. Some companies have renegotiated royalty rates with particular artists when the label needed artist permission under the agreement to include the recordings in certain projects or offerings.

Some companies on their own chose to automatically adjust royalty rates upward under old agreements for digital uses. Some companies will renegotiate royalty rates, depending on the artist and the circumstances. Other companies tend not to renegotiate the rates.

In the view of FIM, SCAPR, FILAIE and AEPO ARTIS, this deserves special attention. They say either contracts allow record companies to use the recordings online (and formally set royalty rates for this purpose) or they do not. If there is no contractual provision to this end, they argue that the record company does not have the right to use the recording online at all. There have been legal cases involving this issue, which are beyond the scope of this report.

(v) BACKGROUND PERFORMERS

Groups representing performers argue that background performers (a.k.a. non-featured musicians and vocalists or session musicians) are not fairly remunerated from the digital market for a number of reasons. One reason is that the remuneration they receive as 'lump sum' payments without ongoing royalties they believe to be insufficient for their services as a performer or for a transfer of their rights in the recording to the record company. Among other things, the groups representing background performers claim that these performers should

receive continuing remuneration/royalties from digital exploitation of the recordings, i.e., the type of continuing remuneration that featured artists who enter into the recording agreements receive, since the session musicians also performed on the recordings.

To provide an alternative point of view for balance, the author raised the argument with many artists' lawyers, music executives and some artists' personal managers that background performers should receive ongoing royalties or increasing remuneration. In response, they pointed to the different roles of featured artists (those who enter into a recording contract) and background performers to demonstrate some reasons for the different types of payment schemes.

Featured artists who enter into recording agreements typically have a different level or type of marketability or other characteristics that make them more distinctive than the performers who are not signed to recording agreements, even though not all of the recording/featured artists ultimately become very successful.

One of the reasons that featured artists receive ongoing royalties as a percentage of revenues is because the featured artists typically provide their recording services exclusively, and sometimes other services exclusively, to the record company during the term of the recording agreement for multiple years. They do not only assign or transfer exclusive rights in the recordings to the record company.

Background or session performers are not recording exclusively for the record company for a period of years. They may perform on multiple records and in multiple sessions for many artists for which they receive remuneration in the form of session fees. They could, and often do, record for multiple records every year. The session fees that they are paid are sometimes amounts negotiated between record companies and musicians' unions or under similar terms.

As a result of exclusive recording contracts, the featured artists record a more limited number of recordings than session musicians may record during the same period of time.

Also, the featured artists, rather than record company executives, are often the individuals who decide whether or not specific background musicians are members of his or her band or group to sign with the record company. Some featured artists prefer to hire different session musicians for different recordings or tours, replacing them with other musicians. There are also times when a session musician's performance may have been later edited out of the recording before release to the public and replaced with a performance by another musician without the first musician's knowledge for creative reasons.

Finally, there is nothing to prevent session musicians from releasing their own recordings through aggregators and digital distributors to digital music services. Their agreements in transferring rights in recordings with the featured artists, who are under contract with a record company, do not prevent these musicians from recording music apart from that featured artist and releasing those recordings through digital music services.

(vi) SONGWRITERS AND COMPOSERS

The issues that songwriters face in the digital marketplace generally fall into the categories of collective rights administration and remuneration.

A challenge facing songwriters and publishers is the accurate identification of their songs streamed on digital services to ensure they are properly paid. They also want accreditation as songwriters listed on the digital music services with their songs. Many digital services now include songwriters' names, but some do not. Both of these issues are related to metadata and the proper flow of information, which is described in more detail in the Information Flow (sections 5).

Remuneration is also top of mind with many songwriters and publishers and their CMOs. Perhaps more so than recording artists, songwriters have felt the revenue change in the shift from a physical market to a digital market. The songwriters who generated mechanical royalties from having several tracks on an album but not necessarily the hit songs have essentially lost that source of income when the market changed to a 'singles' market. For decades, the mechanical royalty rates or tariffs for physical product have not risen by much. Therefore, songwriters and those who represent songs are continually working toward increasing their share of the revenues from DSPs.

One experienced executive estimates that, generally speaking, record companies receive between 53 to 54 percent of revenues from streaming services (record companies then pay the featured artists according to their contractual terms); songwriters and publishers combined about 16 to 17 percent; and the remainder is for the DSPs, currently. In some territories, the portion for songwriters and publishers may be much less.

Composers for television and film are also facing a change in the way they are being compensated for programs produced and streamed on audiovisual services like Amazon and Netflix. Composers of this type of music are akin to featured performers in the recorded music sector.

Composers, and CMOs that represent composers, are concerned that certain customs and practices in the U.S. and some other countries are being extended to international productions and digital distribution of audiovisual programs produced by, and digitally distributed by, video streaming service operators and video-on-demand.

U.S. copyright law provides that a work specially ordered or commissioned for use as a part of a motion picture or other audiovisual work shall be considered a work made for hire if the parties expressly agree in a written instrument signed by them. This has often been used for composers who write music for television and film. The company that commissions a work made for hire is the author under copyright law.

In the U.S., the film and television production industry typically hire composers for scores under a work-made-for-hire agreement. The companies often have their own music publishing company. The same type of agreement is entered into for the screenwriter, producer, director, actor and any 'above and below the line' talent. The reason is that no production company wants to be held up in their distribution by any one of these participants restricting permission.

In the majority of these so-called buy-out agreements in the U.S., the right of the composer to directly collect the writer's share (50 percent) of performing rights from a CMO is assigned back to the composer. There will also be a royalty schedule wherein the composer is paid by the producer/publisher 50 percent of all royalties they don't already collect directly (i.e. all non-performance royalties). So, in effect, the music royalties are split 50/50 between composer and producer/publisher. However, when a broadcaster owns most of the music that is aired and they buy out composers to reduce their public performance blanket license fees, they may not be willing to assign back that right to collect a share of performance royalties in order to reduce what they must pay as a broadcaster.

Even when the revenue is split 50/50, the control is all held with the producer. The composer typically has no approval rights over third-party licensing. The producer is free to license the music separately or in context with the program without any approvals from the composer.

CMOs claim that buy-outs are also the result of the laws in some countries in Asia and Latin America, where there is a presumption of assignment of rights to the audiovisual producer (*cession legis* or *iuris tantum*) without any proportional remuneration to the creators. This is the case for instance in El Salvador, Guatemala, Peru, Dominican Republic, Paraguay and Venezuela.

As the audiovisual online market is globalized, online services and broadcasters are being viewed by CMOs and composers as taking advantage of the international character of the services. When negotiating with creators, some parties claim that the producers can submit the contract to foreign laws that suit them best when negotiating. Other parties claim that this kind of 'forum shopping' is rare. Online video streaming services that are producing programs are reportedly offering upfront lump sum buy-outs. CMOs and authors' groups are searching for solutions to avoid this practice as digital exploitation of audiovisual works grows around the world. Larger publishers say they are pushing back on this practice for songwriters and reserving secondary streaming rights in agreements with production houses.

(I) TRANSPARENCY

Transparency is so loosely defined that claims of companies lacking, or an industry lack of, transparency is difficult to address at such a broad level. This report briefly describes

explanations from stakeholders related to two of the claims most often raised and some of the ways in which many companies and organizations are addressing the issues.

(i) COMMON CLAIMS RELATED TO TRANSPARENCY

(a) *DSP CONTRACTUAL TERMS*

One of the primary reasons that information such as pricing, revenues and costs, which are covered under the negotiated terms of contractual agreements between DSPs and record companies or publishers, are not shared with others arises from legal competition requirements as well as the need for DSPs and record companies to operate effectively in a competitive marketplace. Even though confidential contractual provisions are not to be shared by record companies and publishers, this does not mean that recording artists and songwriters are not provided with other information related to the terms.

(b) *ADVANCES, GUARANTEES, BREAKAGE*

There is a widespread misunderstanding and misinterpretation of the term 'breakage.' At one time, there was typically a breakage deduction from royalties that took into account an amount of money set aside to cover the cost of physical goods that break in shipment. Today, breakage is used in line with the use by the telecommunication industry to indicate a type of service that is unused by the customer.

Breakage comes into play in the music industry in connection with advances paid by DSPs to music companies (record and publishing companies). Breakage means a DSP's non-recoupable advance payment and the unrecouped portion of an advance payment or a guaranteed minimum payment. When an advance payment is made to a music company, and reports of usage are later delivered, money previously received as part of a recoupable advance is first used as royalty payments attributable to the music reported as used. When more money is paid as a non-recoupable advance or minimum guaranteed payment, the DSP may not apply that amount toward payment of royalties.

The major music groups have stated publicly that they share breakage from DSPs with the recording artists and songwriters. Typically, a company will share that amount with the artists and songwriters whose music was reported as used by that DSP during the term of that agreement. The extent to which any indie companies that received any advance share the breakage varies from company to company.

Aside from breakage, some music companies have acquired an equity interest (an ownership interest) in a DSP. This may occur in different ways.

When a new DSP is starting up, the DSP may offer an equity interest in lieu of (or as part of) an advance payment or minimum guarantee. When the equity interest was provided in order to receive a discount on a license fee or royalty rate or in connection with the use of music, the music company typically treats the amount as an advance or royalty and treats it as such when the equity interest is sold. If that DSP becomes a publicly traded company, selling that equity stake at that moment may not be a wise financial move. Therefore, music companies may retain that interest until there is a better time to sell.

For example, when the founder of Spotify first approached major record companies to acquire the rights to stream their catalogs of recorded music, no one really knew who this man from Sweden was, as one executive said to the author of this report some years ago. The companies wanted to support new digital services and new innovations, but they needed to protect rightsholders, too. To strike a balance, an equity share in Spotify was accepted. When Spotify went public, many people, especially through the press, began asking or expecting or demanding answers about the shares and how much money would be shared with recording artists. There was a presumption by many individuals before any shares were sold that the money would not be shared, and many of them seemed to expect that the equity stakes would be sold immediately. However, selling the shares immediately would not necessarily be the best time to generate the best price. The major music companies reported that they would share that money among their recording artists.

In contrast to this kind of an equity stake, when a music company separately invests in a DSP with money that is not attributed to any artist or songwriter agreement (with the company's own money), the money generated from a sale of that equity interest is not shared with recording artists or songwriters. This is a separate investment that is made independently, just as a recording artist or a songwriter may use his/her own money to invest in that DSP or other companies.

(ii) ADDRESSING TRANSPARENCY ISSUES

(a) INDUSTRY APPROACHES

To assess independently for this report the transparency provided in connection with royalties, royalty rates, the sharing of advances or other forms of revenue and related deductions to recording artists and songwriters provided by the major record companies and major publishers, the author requested access to the online royalty portals of Sony Music Entertainment, Sony/ATV Music Publishing, Warner Music Group, Warner Chappell Music, Universal Music Group and Universal Music Publishing Group. All six groups agreed to provide the author with online access for purposes of this report.⁴⁷

In April 2020, the author spent several hours online going through demonstrations of the six portals, nearly all with actual (not fictional) artist and songwriter information (subject to a confidentiality agreement not to disclose the figures and related artist-specific and songwriter-specific data that was viewed). The demo with a fictitious creator was only due to time constraints and continuing development on the portal. Several executives were also available to answer questions and demonstrate their answers.

Each company's royalty portal is at different stages of development. Some of the portals have been available for several years but with recent significant upgrades. Some are newer and are in continuing development. Some are already available in every country in which the particular company operates while others are currently expanding this year into the countries around the world in which they operate. They are available in multiple languages. They are interactive and offer the ability to view different types of information online in a significantly easier way than going through printed documents.

The author found the information about royalties, royalty rates, the sharing of advances and other forms of revenue, related deductions and much additional, useful information to be easily accessible and clear. The portals all offer the ability to download the information to at least two forms of documents (PDF and CSV/Excel compatible files that can be manipulated to present data in the way preferred by the user). In addition, there are ways in which help in understanding the statements or to gain additional information can be obtained through the portal, including answers to frequently asked questions.

While the portals are typically used by business managers (accountants), any recording artist or songwriter who is entitled to royalties from one of these groups under a recording or songwriter contract, respectively, can gain direct access. They simply need to contact the company, which can be done online, and provide authentication.

The author believes that for those recording artists and songwriters who are no longer under contract with a company, are not sure which company controls the recordings or songs that are now on digital music services but believe that the recordings or songs are under the control of one of these music companies, those creators could learn whether or not their music is controlled by them (and any royalties due) by simply seeking information through the respective royalty portal. When the author of this report tested one of the portals by requesting information about a former legal client (now deceased) whose account was unrecouped (and, therefore, not entitled to royalties for many years), the information was available from that record company.

⁴⁷ The author is experienced in examining systems from a user's point of view having conducted more than 25 demos of systems at large CMOs, publishing companies and record companies around the world over the past 13 years. In addition, the author previously accessed and used software systems in the late 1990s and 2000s as an attorney for artists, songwriters and indie labels.

In addition to these major groups, there are several other companies and CMOs that provide online access to royalty statements.

In the independent music community, this type of access is increasing but not yet universally available. As one executive says, "Everybody will get there," although the requirements to accomplish this kind of access and clarity are: adequate time for development; the money (the cost is significant); the desire to invest in IT; and setting company priorities for use of that time and money.

Further, the ways in which the industry is addressing the issues of identifying the music used digitally to ensure that monies flow to rightsholders is discussed in the Information Flow section below (section 5).

(b) EUROPEAN UNION DIRECTIVES

In the European Union, two Directives include transparency provisions.

For authors (including songwriters) and performers in Europe, the Directive on Copyright and Related Rights in the Digital Single Market⁴⁸ provides that Member States are to ensure the following.

Authors and performers receive on a regular basis, at least once a year, and taking into account the specificities of each sector, up to date, relevant and comprehensive information on the exploitation of their works and performances from the parties to whom they have licensed or transferred their rights, or their successors in title, in particular as regards modes of exploitation, all revenues generated and remuneration due.

Where the rights referred to in the previous paragraph have subsequently been licensed, authors and performers or their representatives shall, at their request, receive from sub-licensees additional information, in the event that their first contractual counterpart does not hold all the information that would be necessary for the purposes of the previous paragraph. Where that additional information is requested, the first contractual counterpart of authors and performers shall provide information on the identity of those sub-licensees. Member States may provide that any request to sub-licensees pursuant to the is made directly or indirectly through the contractual counterpart of the author or the performer.

These obligations shall be proportionate and effective in ensuring a high level of transparency in every sector. Member States may provide that in duly justified cases where the administrative burden resulting from the obligation set out would become disproportionate in the light of the revenues generated by the exploitation of the work or performance, the obligation is limited to the types and level of information that can reasonably be expected in such cases.

In addition, Member States have the option to decide the following.

These obligations do not apply when the contribution of the author or performer is not significant having regard to the overall work or performance, unless the author or performer demonstrates that he or she requires the information for the exercise of his or her rights under the contract adjustment mechanism in this Directive and requests the information for that purpose.

For agreements subject to or based on collective bargaining agreements, the transparency rules of the relevant collective bargaining agreement are applicable, on condition that those rules meet the criteria provided for in other parts of the Directive.

These obligations shall not apply if covered under other obligations, described in more detail in the Directive.

For online content-sharing service providers (user-generated-content service providers), the EU Directive on Copyright and Related Rights in the Digital Single Market provides: "Member States shall provide that online content-sharing service providers provide rightholders, at their request, with adequate information on the functioning of their practices with regard to the cooperation referred to in [the section covering the unauthorized making available and communicating to the public of copyright-protected works and other subject matter] and, where

⁴⁸ EU Directive 2019/790 on copyright and related rights in the Digital Single Market, 17 April 2019, Chapter 3, Article 19.

<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1588898690952&uri=CELEX:32019L0790>

licensing agreements are concluded between service providers and rightholders, information on the use of content covered by the agreements.⁴⁹

For CMOs in the European Union, a Directive requires CMOs to provide transparency in certain aspects of their organizational structures and operations.⁵⁰ Member States shall require CMOs to provide to rightsholders reports of revenue (royalty statements) that include, among other things: (i) The revenue attributed to the rightholder; (ii) The amounts paid by the CMO to the rightholder per category of rights managed and per type of use; (iii) The period during which the use took place, unless objective reasons relating to reporting by users prevent the CMO from providing this information; (iv) Deductions made for the CMO's fees for managing the rights; (v) Other deductions; and (vi) Any revenue attributed to the rightholder which is outstanding for any period.

Also, the Directive requires, due to the nature of their services and structures as collective rights management organizations, CMOs to disclose certain information to the public plus an annual transparency report. The information is much like that required to be disclosed by publicly traded companies although more specific to CMOs. The information to be disclosed is stated in detail in the Directive, which includes: (i) Standard licensing contracts and standard applicable tariffs, including discounts. Note that this is not a requirement to disclose the terms of negotiated licenses, the license fees under negotiated agreements or any sensitive business information; (ii) Audited accounting information; (iii) The total amount attributed, as well as paid, to rightholders with a breakdown per category of rights managed and type of use; (iv) The frequency of payments per category of rights managed per type of use; and (v) Information on the CMO's relationships with other CMOs.

(J) THE DIGITAL RIGHTS (VALUE) DEBATE

There is an ongoing legal debate within the music industry in some countries over the interpretation of certain legal rights as they are, or believed that they should be, applied to digital music services.

In this report overall, the author provides descriptions and explanations of beliefs and practices for various aspects of the marketplace in which there are information gaps among stakeholders (misunderstandings, misinterpretations, a lack of information and so on). In connection with this digital rights debate, however, there do not appear to be information gaps. Rather, there are simply differences of opinion and objectives. The parties taking part in this legal debate seem well aware of each other's positions and their factual and legal support or lack of support.

It is beyond the scope of this report to provide a legal opinion or to describe in depth the different points of view, proposals or legal arguments. Therefore, the author provides a brief bird's eye view of the debate.

The debate appears to boil down to who should control administering rights, pricing and certain revenue collections for recordings with digital music services, whether record companies (producers), which invest in featured artists and recordings and which typically secure exclusive rights in the recordings, or CMOs, which are tasked to collectively manage certain rights of performers, which vary from region to region.⁵¹

⁴⁹ EU Directive 2019/790 on copyright and related rights in the Digital Single Market, 17 April 2019, Chapter 3, Article 17.8.
<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1588898690952&uri=CELEX:32019L0790>

⁵⁰ EU Directive 2014/26/EU on collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online use in the internal market, 26 Feb. 2014, Chapter 5.
<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014L0026>

⁵¹ The author of this report believes this to ultimately be more about controlling the flow of money than about the rights. This statement is not made in judgment of whether this is good or bad, right or wrong. It is an observation made to add insight and is based on the control that is part of a proposal made by certain performers' union and performer CMO groups as follows: once an exclusive right of making available on demand is transferred by contract from the performer to the producer (record company), the performer should benefit from a remuneration right. That remuneration would, by law, be "managed by a performer CMO"; the remuneration (the money) would be collected from the streaming platform by the performer CMOs; and the performer would not be able to transfer that right under

(i) BACKGROUND

The argument by the groups for the CMO position aligns with the beliefs that featured performers' royalties should be greater than what they are receiving from the digital market, and background or session musicians should be entitled to ongoing royalties or other form of additional remuneration generated by recordings in the digital marketplace, regardless of the contractual provisions and transfer of exclusive rights to producers. As mentioned in other parts of this report, statutory provisions granting remuneration to musicians are in place in many countries' legislation for broadcasting and communication to the public uses.

The record companies observe that streaming services are substituting physical sales as the main method of delivering recorded music to consumers, and revenue from these services has become the main revenue source for the industry. According to record companies, licensing of streaming services should be organized along similar lines to the distribution of physical products.

(ii) RIGHTS IN PLAY

The specific legal rights implicated in the online uses of sound recordings stem from the WIPO Performances and Phonograms Treaty (1996) (WPPT). The CMOs that represent songs play a different role in the digital music market than CMOs that represent recordings, so the WIPO Copyright Treaty (1996) (WCT) does not appear to be part of this debate.

The WPPT guarantees certain rights (including reproduction and making available to the public) as exclusive rights, enabling the owner of the rights to decide whether, and on what terms, a sound recording may be used by others. Separately, the WPPT provides rights of communication to the public and broadcasting of sound recordings as remuneration rights (a right to be compensated for the use of a work or sound recording) not as exclusive rights.

The making available to the public right: "Performers shall enjoy the exclusive right of authorizing the making available to the public of their performances fixed in phonograms, by wire or wireless means, in such a way that members of the public may access them from a place and at a time individually chosen by them."⁵²

Likewise: "Producers of phonograms shall enjoy the exclusive right of authorizing the making available to the public of their phonograms, by wire or wireless means, in such a way that members of the public may access them from a place and at a time individually chosen by them."⁵³

There does not appear to be a question that the performers' and producers' rights of making available to the public were meant to be exclusive rights.

The right to remuneration for communication to the public and broadcasting: "Performers and producers of phonograms shall enjoy the right to a single equitable remuneration for the direct or indirect use of phonograms published for commercial purposes for broadcasting or for any communication to the public. ...[N]ational legislation [may provide for the] single remuneration shall be claimed from the user by the performer or by the producer of a phonogram or by both."⁵⁴

It appears that the level of protection afforded to the rights of broadcasting and communication to the public were in question when the WPPT was adopted. The Agreed Statement to Article 15 (which sets out these rights) states:

"It is understood that Article 15 does not represent a complete resolution of the level of rights of broadcasting and communication to the public that should be enjoyed by performers and phonogram producers in the digital age. Delegations were unable to achieve consensus on differing proposals for aspects of exclusivity to be provided in certain circumstances or for rights

individual contracts to others (such as record companies or any other non-CMO entity) and would not be able to waive the remuneration. The groups say this is not about controlling the money flow, it is about the rights of performers (featured and non-featured performers).

⁵² WPPT, Article 10

⁵³ WPPT, Article 14

⁵⁴ WPPT, Article 15

to be provided without the possibility of reservations and have therefore left the issue to future resolution."

Therefore, the countries that would become contracting parties of the WPPT were afforded a broad discretion as to whether they would implement the rights of broadcasting and communication to the public as remuneration rights, partially or not at all.⁵⁵ However, even if the option is not expressly mentioned in the language of the WPPT, it is understood that contracting parties would also have the option to grant exclusive rights of broadcasting and communication to the public, beyond the right of equitable remuneration.⁵⁶ National laws provide varying levels of protection and varying degrees of regulation over the exercise of these rights.

For example, while most countries of the world do specifically grant these rights, they may be unfamiliar to American eyes. The U.S. chose not to specifically adopt rights that are called the making available right, the communication to the public right or a broadcast right. U.S. law is unusual internationally in that terrestrial broadcasters are exempted from any requirement to license, or to provide remuneration for, broadcasting recordings. There is, however, a 'public performance' right for digital audio transmissions of recordings.

More specifically, U.S. copyright law grants an exclusive right to the owner of a sound recording to publicly perform the recording by means of a digital audio transmission. The law permits non-interactive digital music services (plus certain cable and satellite companies) to obtain a statutory license to perform recordings from a single collective that represents performers and copyright owners (record companies); to negotiate a voluntary license with the collective; or to negotiate a voluntary license with copyright owners.⁵⁷

In this regard, many U.S. multi-format broadcasters as well as DSPs that offer more than purely non-interactive digital music services enter into agreements with record companies rather than separate agreements with the collective and record companies. Interactive DSPs are licensed directly by rightsholders.

In Asia, the European Union and Latin America, interactive services are also licensed directly by rightsholders. Where performers and producers have (with some exceptions) broadcast and communications to the public rights, these rights are in some cases provided as rights to remuneration instead of exclusive rights. To the extent that remuneration rights apply to digital transmissions, they have been applied only to purely non-interactive uses⁵⁸ of recordings (most commonly simulcasting where a terrestrial broadcast is simultaneously transmitted by the broadcaster in an unaltered manner online).⁵⁹

There is an exception in Spain. Even though interactive digital services are licensed directly by rightsholders rather than CMOs, performers in this country are granted by law not only the exclusive right of making available to the public, which they may transfer to producers (record companies), but an additional unwaivable right to remuneration through collective management even after performers have transferred exclusive rights in recordings to others.

One exception to this is in Hungary where the performers' exclusive right of making available to the public is subject in law to default collective licensing (from which performers can opt-out).

⁵⁵ WPPT, Article 15(3): "Any Contracting Party may, in a notification deposited with the Director General of WIPO, declare that it will apply the provisions of paragraph (1) only in respect of certain uses, or that it will limit their application in some other way, or that it will not apply these provisions at all."

⁵⁶ Guide to the Copyright and Related Rights Treaties Administered by WIPO and Glossary of Copyright and Related Rights Terms, by Mihaly Ficsor, available at <https://www.wipo.int/publications/en/details.jsp?id=361&plang=EN> and Records of the Diplomatic Conference on Certain Copyright and Neighboring Rights Questions - Volume II, available at https://www.wipo.int/edocs/pubdocs/en/wipo_pub_348_vol_ii.pdf (for instance pages 685-686)

⁵⁷ 17 U.S.C. section 114

⁵⁸ The concept of "purely non-interactive" is subject to controversy. Some argue that, based on the WPPT, only the concept of "making available on demand" should be used and that any form of exploitation that is not "purely" making available on demand should fall under a different right, i.e. the right of broadcasting and communication to the public.

⁵⁹ The debate also involves questions over definitions in practice of interactive vs. non-interactive digital transmission by each digital music service; how their activities implicate exclusive rights vs. remuneration rights; and, therefore, who should be receiving and/or controlling collection of the remuneration for use of those rights. An analysis focusing on this specific issue is beyond the scope of this report.

(iii) THE MAIN ARGUMENTS

The debate will no doubt continue for some time and may be the subject of further development by stakeholders or government agencies.

(K) REVENUES

The available information follows on the revenues of the four sectors of: digital music services; recorded music; compositions; and performers and songwriters/composers.

(i) DIGITAL MUSIC SERVICE REVENUES

The publicly traded companies that own digital music services do not report revenue and cost figures for the music services separately when they file and report their annual and quarterly financial results. They are the companies that offer a broad range of products and services in addition to music, some of which complement the music services that they offer and benefit from the music offerings.⁶⁰ The only publicly available financial information is from SiriusXM for Pandora Media, Spotify, SoundCloud and Tencent Music. The most recent reports for these companies are provided below.⁶¹

Spotify reports for 2019 global revenue of €5.2 billion with cost of revenue €3.9 billion. Cost of revenue includes the licensing fees and royalties for rights in music and other content. Gross profit was €1.3 billion, then the company spent €493 million on research and development. This would include the costs to expand into other territories and continual technology development, which equaled just over 36 percent of gross profit, which was essentially invested back into the company. Sales and marketing costs were €620 million, and general and administrative costs were €283 million, for a 2019 operating loss of €43 million. This was much better than the prior two years.

Spotify reported for 2017: Revenue of €4.1 billion, costs of revenue €3.2 billion and gross profit of €849 million. The company spent €396 million on research and development; €567 million on sales and marketing; and €264 million on general and administrative expenses for an operating loss €378 million. The company reduced its operating loss in 2019 significantly.

Spotify reported for 2016: revenue of €2.9 billion; cost of revenue €2.5 billion; and gross profit of €401 million. The company spent €207 million for research and development; €368 million for sales and marketing; and €175 million for general and administrative expenses. It reported an operating loss of €349 million.

SoundCloud filed a financial report with a U.K. government agency. It reported revenues for 2018 (its 2019 filings are not yet due). The service reported revenues of €107.9 million with cost of revenues €82.6 million with an operating loss of €32.8 million, reducing its loss from the prior year by 36 percent. Per region, SoundCloud's revenue from subscriptions in the U.S. were €53.1 million and from advertising €22 million; revenue from subscriptions in Europe and the rest of the world were €30 million and from advertising €2.8 million.

SoundCloud reported for 2017 revenues of €90.6 million with cost of revenues €66.6 million and an operating loss of €51.4 million.

SiriusXM, which owns U.S. webcaster Pandora Media, reported 2019 financial results for Pandora. Total revenues were \$1.7 billion (advertising revenue of \$1.2 billion) with a cost of revenue \$1.1 billion, reporting a gross profit of \$624 million. While revenues grew by 10 percent, and the service added 251,000 new self-paying subscribers to reach 6.2 million self-paying subscribers (i.e., those who are not part of a promotion), the monthly active users fell

⁶⁰ The companies that offer digital music services, including the companies' complementary products and services, are provided in part one of this report: An Introduction to the Global Digital Music Market, WIPO, prepared by Susan Butler, Oct. 9, 2019, Document SCCR 39/3, https://www.wipo.int/meetings/en/doc_details.jsp?doc_id=456065

⁶¹ Spotify investors.spotify.com;

SoundCloud Limited Annual Report for the year ended 31 December 2018, Companies House Registered number 06343600;

SiriusXM Fourth Quarter and Full Year 2019 Results <http://siriusxm2019cr.q4web.com/investor-overview/press-releases/press-release-details/2020/SiriusXM-Reports-Fourth-Quarter-and-Full-Year-2019-Results/default.aspx>; Tencent Music <https://ir.tencentmusic.com/2020-03-16-Tencent-Music-Entertainment-Group-Announces-Fourth-Quarter-and-Full-Year-2019-Unaudited-Financial-Results>

from 69.4 million in 2018 to 63.5 million by the end of 2019. Ad-supported users' listening hours also fell from 16.2 hours in 2017, 14.8 hours in 2018 to 13.4 hours in 2019. The company did not report expenses.

With international headquarters in China, Tencent Music Entertainment Group reported its 2019 financial results (in both Chinese renminbi and U.S. dollars). Revenues from online music services increased by 29.2 percent from 2018 to RMB7.15 billion (US\$1.03 billion). The growth was primarily driven by increased revenues from user subscriptions and sales of digital music singles and albums to users. Revenue from music subscriptions was RMB3.56 billion (US\$512 million), up from RMB2.50 billion in 2018. The company does not report its cost of revenues for only online music.

The company's revenues from social entertainment services increased by 35.9 percent to RMB18.28 billion (US\$2.63 billion), primarily driven by the revenue growth in both the company's live streaming services and online karaoke service. The cost of revenues for online music and social entertainment services combined increased by 43.2 percent to RMB16.76 billion (US\$2.41 billion), primarily due to the increase in content expenses and revenue sharing fees. The increase in content costs was mainly attributable to increased market price and increased amount of licensed and original music content. The increase in revenue sharing fees reflected the increase in the company's online karaoke and live streaming services.

Tencent reported that gross profit for year increased by 19.2 percent to RMB8.67 billion (US\$1.25 billion). Total operating expenses increased by 19.4 percent to RMB4.74 billion (US\$681 million). Selling and marketing expenses increased by 19.1 percent to RMB2.04 billion (US\$293 million); general and administrative expenses increased by 19.7 percent to RMB2.70 billion (US\$388 million).

(ii) RECORDED MUSIC REVENUES

Recorded music trade revenues are published annually by IFPI, the London-based international trade group for record companies.).⁶² ⁶³

For recordings, global revenues, measured at 'trade value' (wholesale value), grew for the first time in more than a decade in 2012 (the first growth since 1999). The growth was driven primarily by the digital business. At that time, digital downloads were the main source of total global digital revenues, making up more than a 70 percent share. However, revenue from downloads alone has never fully offset the annual revenue loss from declining sales in physical units globally. Global revenue from digital downloads declined year-after-year after 2013, although there were country-by-country differences each year.

In 2013, music streaming subscriptions became the fastest-growing single revenue stream for recordings. In 2014, the growth in ad-supported streaming and subscription streaming revenues globally were driving the rise in mainstream music revenues. The spread of smartphones and bundling partnerships—telcos bundling streaming music services with their user tariffs—were key factors. Leading telcos increased marketing of these services. By 2015, digital revenues globally overtook physical unit revenues for the first time. By 2016, digital revenues generated more than half of total global revenues for recordings.

⁶² The author of this report has been reviewing and analyzing IFPI revenue figures each year since 2005, which are typically released in Q1 for the prior year. The IFPI report is the only music report that gathers information from around the world (53 territories in 2019) directly from record companies or their national trade groups, with the latter obtaining the data from the companies. The group has standards, refined each year, that the reporting companies and groups must follow. IFPI also uses detailed coverage rate calculations, distinct to each market, which estimate the size of each market that is not covered by the reporting companies. The IFPI report is, therefore, the most accurate information on recorded music in the world. The figures plus extensive analysis are published in its Global Music Report, which is a for-sale publication to help defray the costs of preparing the report. IFPI authorized the author of this report to include the figures from 2019 and prior years. The publication for 2020 (Global Music Report 2021), when published, will be available for purchase from IFPI through its website ifpi.org.

⁶³ For its annual reports, IFPI converts local currencies to U.S. Dollars for ease of comparison. It publishes the currency conversion rate used in each report. The report also provides country-by-country data; in these pages, IFPI provides revenues in local currencies as well. In this WIPO report, only the U.S. Dollar figures are provided.

(a) RECORDED MUSIC REVENUES⁶⁴

In 2019, trade revenues for the global recorded music market grew by 8.2 percent from the prior year to reach \$20.2 billion. Total revenues include those generated from physical unit sales, digital offerings, synchronization licensing and public performance income from recorded music audio and audiovisual recordings. It was the fifth consecutive year of global growth. This growth was predominantly driven by a 24.1 percent rise in paid-subscription streaming revenue, which accounted for 42 percent of total revenues. Overall streaming revenues (subscription and ad-supported) grew by 22.9 percent from the prior year to reach \$11.4 billion, making up more than half of global recorded music revenue for the first time.

In Asia, revenues overall grew at a slower rate in 2019 (+3.4 percent) than the prior year due mostly to a slowdown in Japan's physical sales. Excluding Japan, Asia in 2019 reported double-digit growth (+11.5 percent) boosted by a strong increase in subscription streaming. The region reported total recorded music revenues of \$4.6 billion. Excluding Japan, almost all Asian markets were predominantly digital, including China, India, Indonesia, Malaysia, Philippines, Singapore, South Korea and Thailand. Excluding Japan, revenues from streaming in Asia made up 70.8 percent of total revenues, while revenues from digital downloads and other digital made up 7 percent of total revenues. In Japan, revenues from streaming made up 16.6 percent of total revenues, while revenues from digital downloads and other digital made up 8.6 percent of the total.

In Australasia, streaming revenues in 2019 accounted for 70.8 percent of the \$552 million in total revenues.

Latin America reported the highest rate of growth globally for total recorded music revenues in 2019 (+18.9 percent) as it had in the four previous years, driven by strong gains in digital revenues. Total revenues were \$781 million. The region also reported the highest proportion of revenues generated by streaming worldwide, almost three-quarters of all income (73.1 percent). In the three largest markets, streaming revenues made up 75.5 percent of the \$314 million in total recorded music revenues in Brazil; 86.2 percent of the \$181 million in Mexico; and 44.9 percent of the \$86.4 million of total recorded music revenues in Argentina.

In Europe, 2019 was the first year that revenues from digital (streaming plus downloads and other digital formats) made up more than 50 percent (+55 percent) of the \$6.2 billion in total recorded music revenues. Digital revenues made up less than 40 percent of total recorded music revenues in seven of the countries/territories reported by IFPI. These countries are in Northern Europe (Baltics), Eastern Europe and Southern Europe.

South Africa reported 48.4 percent of the total recorded music revenue of \$59.9 million generated from streaming and 8.2 percent of total revenues from other digital formats (downloads, mobile personalization and other digital) in 2019. The Middle East and North Africa (MENA) reported \$19.6 million in total recorded music revenues, all generated from digital offerings.

The U.S. and Canada combined reported \$7.8 billion in total recorded music revenues in 2019. Streaming revenues made up 69.1 percent of total recorded music revenues in Canada while other digital formats generated 8.8 percent of total revenues. In the U.S., streaming revenues made up 67.7 percent of total revenues and other digital formats 10.1 percent.

(b) THE STREAMING IMPACT

Sweden was an early digital benchmark of sorts for streaming. The country's recorded music industry reported a slight increase of just 0.1% in trade revenues in 2001. The Swedish music market began declining in 2002, and then The Pirate Bay, a notorious online piracy site, launched in the country in 2003. Record companies' trade revenues declined sharply every year for seven years. Record companies lost over 48 percent of their trade revenues during that period of time as physical unit sales revenues plummeted and piracy was rampant. Legal authorities shut down The Pirate Bay website in 2006, but the operators used computer servers in other countries and were back online about one month later.

⁶⁴ IFPI Global Music Report 2020 (for the year 2019 with country-by-country figures for a five-year period).

Although nine digital services were available in Sweden in 2007 (all download services except one streaming to mobile), the digital offerings only made up 7 percent of total revenues that year.

It wasn't only Swedish record companies, artists, publishers and songwriters suffering. At that time, the music sold in the country was slightly less than half domestic music and just over half international music. Most record company executives at the time viewed Sweden as a lost market.

Spotify launched its streaming service in late 2008 in Sweden. The following year, digital trade revenues more than doubled, and the country's record companies saw the first total revenue growth since 2001. Digital revenues nearly doubled again in 2010 (73 percent increase), although total revenues dropped slightly. Digital revenues made up 28 percent of total recorded music trade revenues that year.

By 2018, nine of the 12 DSPs operating in Sweden were streaming services. Recorded music total trade revenues had grown every year since 2010 to reach \$193.5 million in 2019. Streaming revenues made up more than 75 percent of total recorded music revenues by 2019. The mix of revenues from streaming were subscription audio streams (\$136.7 million); ad-supported audio streams (\$3.7 million); music video streams (\$5.6 million). Downloads also generated \$1.6 million in revenues.

Much like the course of the industry in Sweden, revenues from streaming services have become a lifeline in many small or emerging recorded music markets during the past decade and essential to the growth observed in larger markets.⁶⁵

For example, Asia has become a world player in recorded music with markets like South Korea, the sixth largest, and China, the seventh largest, in 2019. While South Korean revenues from streaming made up 53 percent of total trade revenues, China's revenues were dominated by income from licensed music streaming services such as QQ Music, Kugou, and NetEase. Streaming contributed more than 90 percent of the entire Chinese market in 2019 and generated trade revenues of US \$533.7 million out of a total market worth US \$590.9 million. Ad-supported streams produced the largest share of streaming incomes and more than half of total revenues in the country.

Calculating total recorded music revenues in 2018 and excluding only performance rights and synchronization licensing (i.e., licensing the recordings to sync with visual images), 50 countries by 2018 reported more than half of their recorded music revenues from streaming:

Bolivia (98.9%)	Russia (81.0%)
Paraguay (98%)	Romania (79.7%)
Ecuador (94.7%)	Sub-Saharan Africa (76.3%)
Brazil (94.2%)	Turkey (73.9%)
Peru (94.2%)	MENA (Middle East & North Africa) (71.7%)
China (93.5%)	Ireland (71.6%)
Colombia (92.7%)	Netherlands (71.5%)
Chile (92.4%)	Australia (71.4%)
Singapore (90.6%)	Taiwan (71.4%)
Norway (90.5%)	Uruguay (71.1%)
Sweden (89.4%)	Canada (67.3%)
Central America (89.3%)	Spain (66.1%)
Philippines (88.8%)	U.S. (66.0%)
Caribbean (88.7%)	Bulgaria (63.8%)
Denmark (87.3%)	Hong Kong (63.2%)
Argentina (86.6%)	U.K. (61.5%)
Finland (85.2%)	Switzerland (60.4%)
Iceland (84.6%)	Slovakia (60.1%)
Mexico (84.1%)	Greece (57.6%)
Thailand (83.8%)	South Korea (56.9%)
India (82.3%)	Malaysia (56.9%)
New Zealand (81.4%)	Italy (56.2%)

⁶⁵ IFPI Recording Industry in Numbers 2006, 2008, 2011; IFPI Global Music Report 2019 and 2020 (in each report, IFPI provides figures for the year prior to the date of the report).

Hungary (56.1%)
South Africa (55.8%)
Czech Republic (55.5%)

Belgium (55.1%)
France (51.0%)
Portugal (50.6%)

While the figures above reflect the impact of streaming to total revenue excluding public performance and synchronization licensing revenues, the following reflect the markets in which digital revenue (streaming and other forms) generated more than half of total recorded music revenues (including performance and sync licensing revenues) by 2018:

Bolivia (100.0%)
Indonesia (98.2%)
China (95.7%)
Philippines (92.7%)
Russia (90.8%)
MENA (Middle East & North Africa) (90.8%)
Thailand (87.2%)
Mexico (85.1%)
Iceland (84.9%)
Ecuador (84.8%)
Central America (84.3%)
Singapore (80.3%)
India (78.0%)
Sweden (75.6%)
Australia (75.0%)
Canada (74.6%)
U.S. (74.2%)
Norway (73.8%)
New Zealand (73.6%)
Brazil (72.4%)
Taiwan (71.9%)
Malaysia (71.6%)
Chile (69.4%)
Sub-Saharan Africa (68.7%)
Peru (67.4%)
Colombia (63.2%)
Denmark (62.1%)
Turkey (62.0%)
Ireland (61.7%)
Switzerland (61.5%)
Finland (59.6%)
Caribbean (58.4%)
U.K. (57.1%)
South Korea (56.4%)
Netherlands (53.5%)
Spain (51.4%)
Hong Kong (51.1%)
South Africa (50.3%)

These revenue figures are gross revenues. They do not reflect any individual record company's profit or loss for the year, which will vary greatly from company to company, especially among the independent music community.

(iii) COMPOSITION REVENUES

Far too many people are under the impression that recorded music revenues represent total music industry revenues and, likewise, their contributions to economies around the world. To the contrary, many music sectors are not provided in industry-wide annual reports. Revenue generated from songs is one of them.

(a) THE METRICS

Industry-wide revenues generated from songs have been impossible to measure accurately to date. Some music executives are able to make good estimates for their companies and investors due to their access to confidential information, but publicly available information is insufficient to calculate the market. This information is only useful to look at trends, but even trends must be viewed with caution for the following reasons.

This sector of music is made up of the mix of publishers and CMOs that collect for the licensing and use of songs. This creates out-of-sync timing issue. Money paid by a DSP to a CMO may not reach the publisher and songwriter for many months, up to a year, depending on the CMO and the territory. Money that a DSP pays to a CMO in one territory that is collecting for a CMO in another territory may not reach the publisher for more than one year, sometimes two years, and the songwriter following that time. While reports of recorded music revenues generally reflect the use of those recording for the period reported, revenues reported by the very few publishing companies that report earnings publicly reflect the use of those songs over a period of years.

There are a variety of payment options that affect the timing and, therefore, the reporting of revenues as well. Publishers that have license agreements directly with a DSP may require the DSP to pay the publisher directly by certain dates. Publishers that have license agreements directly with a DSP may instead set up an agreement with a CMO for that CMO to collect amounts due from the DSP and then distribute them to the publishers by certain dates. CMOs have policies on when they will distribute amounts collected from DSPs to their writer/publisher members/affiliates, which may be quarterly or semi-annually.

Financial reports from publishers include their collections from CMOs. When someone uses figures reported publicly by publishers and adds them to CMO reports of collections or distributions, there is double counting of amounts generated by the songs. There is no way to tell which amounts are counted more than once without having access to the financial reports of both publisher and CMO.

Further, when CMOs report their collections publicly, not all CMOs report for individual categories of uses. For example, CMOs often report collections from radio and TV broadcasting as one sum. Digital collections reported by one CMO may include digital audio and audiovisual while another CMO may not include video streaming as digital.

(b) CISAC CMO REPORTS

The international body that represents authors' CMOs is Paris-based CISAC. While many of the 239 member CMOs in 122 countries represent multiple authors in multiple fields (audiovisual, dramatic, literature, music and visual arts), music drove 88 percent of the amounts collected by CISAC member CMOs in 2018.

CISAC reports that digital income for songs continues to be the driving force behind the growth of music collections by CMOs, making up 19.1 percent of total collections, up from 15.0 percent of total collections in 2017.

The group reports that collections for digital in 2018 by CMOs were €1.618 billion, an increase of 29.6 percent from the prior year. Over the previous five years, digital music collections grew by 185 percent.

Increasing subscription revenues drove digital music growth for songs in France (+146 percent); Germany (+45.2 percent); the U.S. (+25.6 percent); and Japan (+19.6 percent). Five

of the top 20 CMO markets in 2018 reported the highest share of collections from digital: Mexico 48.9 percent; Sweden 42.8 percent; Australasia 36.6 percent; South Korea 34.8 percent; and Canada 30.9 percent.⁶⁶

As noted above, these figures do not include revenues of music publishers that licensed DSPs directly and either did not collect those royalties through CMOs or were not reported with the CMO collections.

(iv) PERFORMERS AND SONGWRITERS

This report focuses only on the digital music market and not the broader music industry.

There have been some valiant attempts to learn how much the average performers earn from music, but the author of this report believes that none have been a true reflection of the marketplace. The standards for conducting market research and surveys do not produce accurate results for such a unique marketplace for many reasons.

The most successful recording artists do not respond to surveys, according to many artists' lawyers and personal managers.

The genres of music performed affect the results, and survey respondents are often within genres that do not generally generate as much recorded music revenue as other genres or the survey does not ask this specific question. Revenue generated from classical, jazz and niche genres tend to be less than revenues generated from hip-hop and pop currently.

The ages of the performers are particularly important in the music market. Age and audience are often directly linked and impacts the performer's ability to earn money in the music market. Whether a performer is a solo performer, member of a four-piece band or member of a symphonic orchestra also impacts that performer's share of revenues.

Further, multiple executives with digital music aggregators who work with artists in many countries say that many artists tell them they do not report all of their earnings through official music channels. Some performers who are union members record for projects produced for indie, non-union record companies and do not report that work or their earnings to the union. These executives say there are a lot of earnings by performers around the world that are not reported through official channels.

Recording artists also earn royalties under many different types of contractual provisions, as described above (section 4H(iv)), Featured Artist Contracts).

Songwriters receive a share of royalties from publishers and from CMOs. Their shares from publishers typically vary from 50 percent to 90 percent or more depending on the type of agreement. Songwriters receive from CMOs 50 percent or more of distributions. However, each CMO has different distribution rules for calculating how much of the collections go to each songwriter. Collections are also reduced by administration fees and sometimes other deductions (such as social and cultural deductions) before distributed to songwriters.

CMOs that represent recordings, collecting for producers and/or performers, in some territories must comply with government-imposed percentage shares for equitable remuneration between performers and producers. CMOs that represent songs typically have rules or regulations that govern the minimum share of mechanical and/or performing rights income to be paid directly to songwriters.

(L) COSTS OF DIGITAL

There is a misperception that digital releases of recordings incur little or no costs compared to physical records that require manufacturing and physical distribution. The reality is that digital streaming has required record companies, publishing companies and CMOs to spend, and continue to spend, quite significant sums of money to meet the demands of the digital music market.⁶⁷

⁶⁶ CISAC Global Collections Report 2019 for 2018 Data. CISAC generally releases in Q4 of each year reports for the prior calendar year. The latest CISAC information available is for 2018. The report does not go into as much detail per category or per country. It does not include revenues of publishers. These collections do not include what a society may have collected on behalf of a publisher that has a Special Purpose Vehicle or similar arrangement.

⁶⁷ The author of this report was unable to compile an estimate of the costs of digital before publication of this report.

It begins with the product. When recordings were released primarily as CDs, major record companies would create about six or seven different versions of one album CD, such as adding a couple extra tracks for the CD released in Japan, perhaps one extra track for another territory, and so on. For a similar type of product for the digital market, a major record company may now create 250 to 350 individual pieces of content that will get released into the market.⁶⁸

As mentioned in another section of this report (4H(i)), the most popular multinational streaming services receive on average more than one million recordings each month currently (April 2020) from more than 500 different sources, which aggregate approximately 40,000 different sources, such as traditional record labels, non-traditional record labels, aggregators, distributors, self-released artists.

Record companies, digital distributors, music publishers and CMOs have invested, and continue to invest, very significant amounts of money into developing, maintaining and upgrading IT infrastructure, system operations and professional staff for digital supply systems and digital revenue processing.

Record companies and digital distributors are delivering tens of millions of digital assets for the recordings and millions of pieces of associated metadata to hundreds of DSPs. Every DSP has its own requirements for the types of digital files (the formats) and other metadata that it expects to receive. Nearly every DSP has requirements that are different from the other DSPs.

These assets do not include the millions of additional pricing and metadata updates that a record company manages across its existing catalog of digitally available music and videos. For record companies and distributors, the vast array of IT systems underpinning their digital supply chain and, also for publishers and CMOs, the digital revenue processing capabilities require constant maintenance and ongoing development to keep pace with the evolution of the music business.

Before releasing a recording, a group of personnel will also review the metadata that is supplied with the digital audio file to ensure its accuracy and confirms that it complies with the standards set by digital subscription and streaming platforms. This process is essential to retain a company's direct to store status with each platform to avoid delays in bringing the artists' recordings to market. The group also reviews the metadata related to the artwork, artist information and track information to enable the DSP to identify the recording in its system.

The digital supply chain has evolved to include several interacting electronic database systems within a single record company group. For those companies that have mastering studios, which convert master sound recordings into digital audio files, they incur material digital storage costs to support and preserve their vast catalog libraries of digital content and other assets, including artwork, digital audio and video files that make up the multi-track and high resolution master digital releases.

Companies may have another IT platform that controls the scheduling of digital releases, which are not always simultaneous with physical releases. To prevent piracy of their artists' music prior to release, there are sophisticated digital scheduling and security systems to ensure that the product does not leak onto the Internet and is released at the appropriate time. There are also interfaces to connect to anti-piracy and other fingerprinting systems. They may use global repertoire systems to track metadata associated with each recording, a global pricing mechanism to set wholesale prices, a global rights system that tracks how the label is permitted to use the recordings. Also, some companies have redeveloped their digital distribution platform to finalize and prepare products for delivery to digital services.

Record companies, distributors, publishers and CMOs are also processing anywhere from millions to trillions (depending on the company) of micro transactions related to matching usage reports from DSPs to their catalogs of music and then recognizing digital revenue and calculating the associated royalty obligations.

During 2019, a North American performing rights CMO processed more than 2.1 trillion digital performances of songs that it represents, which made up 98 percent of its total processing of performances (2 percent of the processing was for non-digital performances). A

⁶⁸ These figures were provided to the author during prior reporting in 2014. The numbers are almost certainly much higher today.

U.K. performing rights CMO reported processing in 2018 over 11.2 trillion performances of digital music, up from 6.6 trillion the year before, a 70 percent growth in data volume. This data "explosion" is occurring throughout the global CMO network.⁶⁹

Then as rights in catalogs of music change hands, the systems and DSPs must be updated. This is a constant problem, with the means available at the moment for dealing with it are described as barely 20th century solutions let along 21st century. Acquisitions occur every month in the industry. When EMI Group was sold, it reportedly took the music industry one year to update information about the catalogs with DSPs.

Further descriptions of these processes appear in the Information Flow section, below (section 5).

(M) VALUE GAP, UNAUTHORIZED SERVICES AND THE SHARE OF VALUE

(i) VALUE GAP AND UNAUTHORIZED SERVICES

Often colloquially referred to as the 'Value Gap,' the digital music market is viewed by most rightsholders and many digital music executives as a distorted market caused by unclear liability rules that not only harm rightsholders but skew the competitive market to the disadvantage of licensed digital music services. These rules have allowed some online platforms to distribute music without negotiating licenses or conduct negotiations in the shadow of broad liability privileges. Those digital platforms have built large businesses by providing free access to music and other copyright content.

The market also faces the challenge of the unauthorized use of music online. Despite a gradual reduction, thanks to rightsholders' enforcement efforts and the drive across the recorded music industry to provide easy access to licensed services, unauthorized use of music online continues at unacceptably high levels.

The impact is felt from multinational music companies to the small music publisher, music entrepreneur and professional musician.

Several years ago, a music publisher in Italy discovered music that his company controls being used by a DJ as part of a mix on a multinational user-generated-content (UGC) video site. Being unsuccessful in having the music removed, he decided to file a legal action but did not have confidence in the Italian court system to accomplish this successfully. He began a legal action in Germany. The content was removed.

The music reappeared quickly on the video site in America. Sending a take-down notice to the site in the U.S., the video was removed. The video then reappeared. The UGC operator claimed that the DJ in Japan protested the copyright claim, arguing he had the right to use it in America, and the site allowed the music to be uploaded again. The publisher could not afford to file another lawsuit in America.

A professional musician in Canada finds digital platforms in many cases commercializing her music and the music of her fellow creators without giving the creators the ability to say "no." Widespread legal exceptions have inhibited their ability to realize any commercial gain from many uses of their music in the digital space.

The team of a music entrepreneur in Nigeria prepares promotional material for recording artists and delivered it to online bloggers. The blog hosted the promotional stories but provided links with the stories to the music on unlicensed, piracy sites where it was available for free without authorization.

Addressing these challenges on an international scale is vital to sustain and expand a digital music ecosystem that supports creativity and consumer engagement with music. An in-depth review of these issues is beyond the scope of this report and deserves further action. The following is a brief review of the issues at the heart of these challenges.

The Value Gap involves services that host UGC and rely on the so-called safe harbor provisions. These provisions were adopted in the European Union as part of the E-Commerce Directive in 2000; the U.S. as part of the Digital Millennium Copyright Act (DMCA) in 1998;

⁶⁹ BMI Sept. 9, 2019, report on fiscal year ending June 30, 2019; CISAC Global Collections Report 2019 for 2018 Data.

China within the Regulation for the Protection of the Right of Communication through Information Network (RPRCIN) in 2006.

UGC services have argued (with some support by court decisions) that they are protected under Safe Harbor provisions of copyright laws because they merely host information provided by users. Many of them have argued that the safe-harbor provisions are a success, enabling them to grow exponentially and serve the public without facing debilitating lawsuits.⁷⁰

Rightsholders and their supporters argue that laws on online copyright liability are not always clear enough, are sometimes outright outdated and are no longer fit for purpose. In particular in certain countries, the so called safe harbor provisions are constructed or applied in a manner that allows UGC platforms to actively engage in the distribution of music without a license, or allows these platforms to resort to a mere take down procedure to remove unauthorized content following a notice from a rightsholder. In these circumstances, the digital marketplace is distorted and, as a result, rightsholders are unable to negotiate fair commercial terms and obtain appropriate payment for their rights or obtain adequate reporting on the use of their music.

More specifically, the complaint from the music industry has been that during license negotiations for content, which may also cover some UGC, many music companies believe that the UGC platform providers negotiate for a lower-than-market royalty rate with them because music companies cannot effectively say 'no' to the license. While music companies could say "no" to the license request because they perceive the offered royalty rate is too low, realistically much of their music—even when removed from the UGC site—will likely reappear when another user uploads that music. Therefore, many music companies believe their only choice is to accept the rate that is lower than digital music services agree to pay or spend money constantly searching for the unlicensed UGC and sending take-down notices over and over again. It is better to take some money than to only spend money.

Rightsholders argue that it is clear that the manner in which creative content is used by UGC platforms goes well beyond the mere role of a 'host' protected under safe harbor provisions. It is also clear that the low level of royalties collected reflect the difficulties that rightsholders have to enter into licenses with them.

The CISAC-commissioned study, "Economy Analysis of Safe Harbor Provisions," (Feb. 2018) is viewed to clarify how safe harbors create an unfair bargaining position between copyright owners and UGC services when they negotiate rates.⁷¹

Further, the publication, "Is Copyright Law Fit for Purpose in the Internet Era? An economic and Legal Perspective," argues that the application of exceptions to copyright that benefit intermediary business models, combined with the limitation on the liabilities of intermediaries made possible in the DMCA in the U.S. and the eCommerce Directive in Europe, has led to the situation where rights holders are prevented from giving full consent for use of their works as required under copyright law and that this is damaging to the economy as a whole.⁷²

The new European Union Copyright Directive seeks to address the problem by clarifying and confirming the liability of certain User Upload Content (UGC) platforms for the works and recordings made available on their platforms. It also provides: "Member States shall provide that online content-sharing service providers provide rightholders, at their request, with adequate information on the functioning of their practices with regard to the cooperation [related to obtaining authorization for using content and removing content upon notice] and, where licensing agreements are concluded between service providers and rightholders, information on the use of content covered by the agreements."⁷³

⁷⁰ U.S. Copyright Office Section 512 Study, May 21, 2020.

<https://www.copyright.gov/policy/section512/section-512-full-report.pdf>

⁷¹ <https://www.cisac.org/CISAC-University/Library/Studies-Guides/Economic-Analysis-of-Safe-Harbour-Provisions>

⁷² Robert Ashcroft and Dr George Barker 2014,

https://www.prssformusic.com/-/media/files/prs-for-music/corporate/is_copyright_law_fit_for_purpose_in_the_internet_era

⁷³ EU Directive 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, Article 17.

<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1588898690952&uri=CELEX:32019L0790>

Further, rightsholders find that unauthorized services continue to undermine the fair functioning of the digital content market. According to a 21-country IFPI study in 2019, 27 percent of all internet users downloaded unlicensed music in the past month.⁷⁴ At these levels, unauthorized online services continue to undermine the functioning of the licensed digital content market and services. They make it more difficult for licensed services to operate. The situation is particularly difficult in many underdeveloped and emerging markets that would otherwise benefit from rich and vibrant music sectors.

Most recently, the U.S. Copyright Office completed a five-year study evaluating the impact and effectiveness of the safe harbor provisions. It concluded that the operation of the safe harbor system today in the U.S. is unbalanced.⁷⁵

(ii) THE SHARE OF VALUE

There are groups of performers that believe the digital music market has resulted in an unfair share of revenue for recorded music performers and songwriters. The reasons include the amounts paid by DSPs for music; remuneration provisions in contracts the performers entered into with record companies; comparisons to past remuneration practices; and issues related to transparency.

The author of this report describes these positions more fully, and provides current information and data obtained in 2020 from direct sources who have access to the data (i.e., not from third parties without direct access to the information), throughout this report as follows.

Issues related to the amounts paid by DSPs are provided in this report in Payment Models, section 4(G)(ii), which also addresses 'per-stream rates.'

Issues related to comparisons of remuneration from the digital market to past remuneration are provided in Different Price Points and Metrics, section 4(H)(i); and Streaming vs. Radio, section 4(H)(ii).

Issues related to remuneration provisions in contracts that performers entered into with record companies are provided in Featured Artist Recording Contracts, section 4(H)(iv); Background Performers, section 4(H)(v); Revenue for Performers and Songwriters, section 4(K)(iv); and Costs of Digital, section 4(L). Revenue for songwriters and composers is also provided in section 4(H)(vi).

Issues related to transparency are provided in Transparency, section 4(I).

Some of the performers' groups are proposing a change in laws or a reinterpretation of laws for these purposes. Reporting on all of the proposals and positions are beyond the agreed-upon scope of this report.

5. THE INFORMATION FLOW

The proper flow of information about the music, rightsholders, creators and performers through the music ecosystem, as well as maintaining (updating) that information as rights change hands over time and in specific territories (through acquisitions, mergers, expiring and new contract terms, reversions of rights to creators and other reasons) is vital to ensure that DSPs are able to offer consumers engaging choices and that the correct rightsholders receive the money they are due.

Ensuring that detailed information ('metadata') flows smoothly throughout the ecosystem (a.k.a., the supply chain) and that the metadata is properly maintained (updated and changed) requires the adoption and use of certain standards for identifying and communicating that metadata throughout the industry. How well the metadata is supporting or disrupting the ability for DSPs to offer engaging consumer choices and for every stakeholder to be paid properly depends on the types, amount and accuracy (the 'quality') of the metadata that is shared. How well all of the pieces of metadata that need to be linked to perform these needed functions are actually matched and linked accurately, in the most cost effective ways, depends in large part

⁷⁴ Music Listening 2019, IFPI <https://www.ifpi.org/downloads/Music-Listening-2019.pdf>

⁷⁵ U.S. Copyright Office Section 512 Study, May 21, 2020
<https://www.copyright.gov/policy/section512/section-512-full-report.pdf>

on the infrastructure and the communication pipelines within each company and throughout the industry.

This is a highly complex area of music industry operations. Due to its complexity as well as technical and industry-specific nuances, this report merely touches on some of the basic factors impacting the flow of information.⁷⁶

(A) INFRASTRUCTURE AND PIPELINES

The music industry's infrastructure and pipelines for communication consist of the millions of contractual relationships spanning many years around the globe—defining and covering rights, permissible uses of those rights, payment terms, information flows (from registrations of creative works and recordings to royalty statements and audits) and many other areas that touch those relationships—and the IT systems (hardware, software, databases).

Until about 15 years ago, companies in the music industry were in effect working as geographic and organizational silos. Their business models and business operations were shaped to work within national borders and were defined by local languages and cultures. Most of the successful companies had business relationships with foreign companies through ownership interests or contractual agreements, but they still mostly operated separately.

This means that nearly every contractual agreement of every kind and nearly every accounting, administration and IT system, including information about music and rightsholders in their databases, were created to work only within these silos. More and more of these agreements and set-ups and business customs were built on top of the older ones, decade after decade after decade, layer upon layer.

Further, in the physical recorded music market, the amount of information that was needed to be shared and maintained in each territory for each recording and each song was relatively limited. For example, although precise figures are not available today, the author confirmed in 2003 and again in 2016 that the number of recordings released within a few-year period around 2002 in the U.S., the world's largest recorded music market, had been about 35,000 releases per year (the breakdown of album vs. a shorter length release was not available). Even if the figure was only albums, that would correspond to no more than 420,000 songs were recorded for the releases. Likewise, radio only reaches a limited number of people within the broadcast area and can only play a limited number of recorded songs given the number of hours in a day.

The multinational nature of digital music offerings, the multinational operations by the largest and biggest revenue-generating DSPs for the music industry, plus the huge growth in the number of recordings available on DSPs, the growth in the number of recordings delivered to DSPs each week and the number of streams reported to record companies, publishers and CMOs each month have required a seismic shift in the IT systems and CMO administration of this information.

Further, to gain just a glimpse of the infrastructure challenges, if a CMO were to include in its database the global copyright picture for one song (rather than information related to a song in only a few territories), the amount of metadata count reach up to 1,000 pieces of information. Note that as organizations that have operated within their national borders mostly, much of the information in their databases may be in their local language and native scripts (Latin or Chinese scripts, for example).⁷⁷

⁷⁶ Over the past 15 years or so, the multiple trials and errors, at great cost, have demonstrated that these challenges are best left to the music industry itself to work through and resolve due to the need to have a very high level of expertise in the inner workings of each particular sector (record companies, music publishers, collective rights managers), which often differs in each particular geographical region, as well as an understanding of the proprietary and privacy interests of the large array of stakeholders.

⁷⁷ The pieces of metadata for a global 'copyright picture' of a song may include: different identifiers (IDs) for the song used by various parties, counting anywhere from 30 to 100 or more IDs per song, such as the ISWC (International Standard Musical Works Code) and separate IDs used in their own systems by the CMO, each publisher, at least one ID at each other CMO and each user (DSP, broadcaster, etc.) and one or more IDs with each publisher that ever held rights in the song, with an average of 40 core numbers; different titles and different spellings of titles for the same song, as many as 100 different titles used in some extreme circumstances but on average about 12; songwriter identifiers, including names (up to 30 or more in some extreme cases), IPIs (Interested Party Information

While the major music companies, some of the largest indie music companies and some of the largest CMOs have been able to make this shift for the most part, the constant growth in recordings, songs, data and uses that demands the systems to ‘scale’ presents constant challenges. Companies and CMOs have been faced with the need to re-build the infrastructure for a multinational or a global digital music business.

(B) IDENTIFYING, MESSAGING AND COMMUNICATING

(i) IDENTIFIERS

There are generally no legal restrictions for songs to have the same or similar titles to other songs. There is no requirement that a recording have the same title as the song. The names that recording artists and songwriters may use for their professional work are often different than, or modified from, their complete legal names. Many people have the same names. One electronic dance music artist reportedly uses roughly 100 different pseudonyms.

As a result, text is not an effective way to identify recordings, songs, individuals or companies. This is why the assignment and use of unique alpha-numeric identifiers are extremely important in the music industry.

While each company and each CMO typically has its own internal code to identify their respective recordings, performers, recordings, songs, songwriters and others, most stakeholders recognize the importance and need for unique identifiers that are adopted and used worldwide for more accurate identification. Nevertheless, not all identifiers are adopted and/or used throughout the industry.

The standard identifiers include the following.

For recordings, the International Standard Recording Code (ISRC) is a means for copyright owners (or their designated agent) to identify a particular sound recording and music video. The codes are meant to be tied to a particular recording forever regardless of the owner. IFPI is ultimately responsible for issuing the ISRC in accordance with rules established by the International Organization for Standardization (ISO). IFPI appoints national agencies to assign the numbers. It may be a trade group for record companies or a CMO that licenses and collects payments for performances of sound recordings (a.k.a. neighboring rights). In some instances, the designated agent may also appoint ISRC managers to issue the numbers.

ISRCs are not just assigned as one number per recording. Since the code is meant to identify a unique recording, there may be all sorts of versions of any given recorded performance. Under the standard, any new or “materially changed” recording must be provided with a new ISRC. Recordings are considered to be different based on differences in the actual recorded content, such as: different versions (e.g., differences in playing time); different mixes or edits; restoration of a historical recording that involves creative input, and other changes.

Those performers represented by a performers’ CMO that is a member of the international group SCAPR are assigned a unique International Performer Number (IPN), which SCAPR maintains in an International Performers’ Database (IPD) for use by member societies. The IPNs are generally not shared with record companies, DSPs or other parties.

numbers), CMO membership or affiliation (1 to 30 pieces of data, which varies by territory, rights and dates), and a songwriter’s calculated percentage share of ownership; publisher data, a number that can amount to hundreds of pieces for a worldwide view, with about 1 to 30 pieces of data for a local territorial view, including names, IPIs, links to songwriters, contractual agreement numbers (certain terms of publisher contracts with songwriters and publisher contracts with subpublishers), CMO membership or affiliation for them (1 to 30 pieces of data, which, like information about songwriters, varies by territory, rights and dates), and a publisher’s or subpublisher’s calculated percentage share of rights; recording information such as ISRC (International Standard Recording Code) identifying a particular sound recording of the song, with 1 to around 100 pieces of data connected to this identifier, and in some cases for huge hit songs more than 200 unique ISRCs for one song; music users information; performers/recording artists’ information for the recorded versions of a song, with up to around 30 pieces of data for a single recorded performance of a song; duration of the song; year of publication; genre (sometimes, not always categorized); intended use(s); production title for audiovisual works; original or version information; song type (such as a composite work, normal work, medley and so on); and approximately another 50 to 100 pieces of data that the CMO would hold related to a song but not needed for matching all of the pieces together or for merging with other pieces of data.

Certain performers, although relatively few to date, use the International Standard Name Identifier (ISNI), an ISO-certified global standard number for uniquely identifying the public identities of contributors to creative works and those active in their distribution. Identifying a public name means that a different ISNI would be assigned for each pseudonym used by a performer, for example. While the ISNI database of names is comprehensive, the music industry has not yet fully adopted use of this identifier. There is a movement among some influential DSPs and other stakeholders to adopt and use ISNI for the purpose of more accurately identifying performers.

For songs, the International Standard (Musical) Work Code (ISWC) identifies songs in an abstract way (meaning it identifies the music composed, the leads and the lyrics authored (if any) that come together to create the composition). The International Organization for Standardization (ISO) authorized the International ISWC Authority, created and managed by CISAC, to be responsible for the ISWC. The ISWC Authority maintains the standards and allocates the ISWCs to regional and national (local) registration agencies it appoints. The local agencies are usually managed by the local CMO.⁷⁸ ISWCs do not identify rightsholders.

The Interested Party Information (IPI) code, a CISAC standard, is a globally unique code for each natural person and each legal entity that holds rights in songs (e.g., songwriter and publisher) as well as other artistic works (those in the creation class represented by authors' societies). There is an IPI Base Number and IPI Name Numbers, the latter unique codes for each particular spelling of a natural person's legal name such as pseudonyms, alternate spellings, former names, merged companies and so on. Links exist in an IPI database between the Base Number and all Name Numbers. The database is maintained by Swiss CMO SUISA. While the IPI Name Numbers are available within the music industry (but not to licensees such as DSPs), the links are held in confidence by the CMOs.

(ii) MESSAGING AND COMMUNICATION

For recorded music, information is expected to flow from: (i) Record companies, which enter into direct licenses with DSPs, to DSPs (and vice versa); (ii) Record companies (and self-released performing artists) to aggregators or distributors to DSPs (and vice versa); (iii) Publishers to DSPs when they entered into voluntary, direct licenses (and vice versa), although often through intermediary entities that gather rights from the publishers and the interested CMOs and then pass data and rights to the DSPs; and (iv) Songwriters and/or publishers to CMOs to DSPs (and vice versa).

When there are new recordings of songs, information is expected to flow from the recording studio (or from the record producer) to the record company. Songwriter information is expected to flow to the songwriter's publisher and/or CMO.

Most record companies, publishers and CMOs have specific formats or information required to be delivered or registered with them for recordings and songs, respectively. There are some standard forms used in each segment for this registration process.

In addition, the standards organization Digital Data Exchange (DDEX) is the only organization in the music industry with member companies from every segment of the music ecosystem: record companies, music licensing companies (neighboring rights); publishers; authors' societies; DSPs; and third parties that work with these sectors in the supply chain.

The importance of adopting and using messaging standards relates to automation. If the vast amounts of information cannot be sent and received within the music ecosystem in a standard way, operations cannot be automated. Given the trillions of pieces of metadata transmitted around the world, automation is essential.

DDEX continually works with member companies and organizations to develop, revise, adopt and use standard ways of transferring information between these stakeholders in order to better automate the sharing and ingesting of needed and accurate information. For example, there are standards that define what information should or may be included: to inform another stakeholder about a new recording; when a DSP reports music sales or usage; to provide information on claims of ownership in a song and the fractional share of ownership in a co-

⁷⁸ In the past, the actual assignment of new ISWCs was performed by the local or regional registration agencies based on pre-allocated ranges. Today, the assignment is performed centrally.

written song; to provide information related to recordings for neighboring rights' CMOs; for collecting metadata in the recording studio when songs are being recorded to pass along an extensive amount of information about the recording and related information to stakeholders, and other standards.

(iii) CHALLENGES

Most music industry executives who work in operations view the biggest current challenges in the global digital music market to be related to metadata. More specifically, the lack of quality metadata received by DSPs and, in some cases, the limited information received from DSPs; matching songs to recordings reported in DSP usage reports; and encouraging the CMOs that do not have the capacity to properly administer DSP usage reports to combine efforts with other CMOs or out-source the work to qualified third parties to provide this type of 'back office' service.

(iv) DATA QUALITY AND MATCHING

The quality of metadata is generally judged not only by its accuracy but by the amount of information received and the consistency in the same information received from multiple sources.

Accurately identifying the rightsholders in each territory at a particular point in time, especially for songs each fractional share of a co-written song, and who is authorized to collect money for that rightsholder is crucial. Most CMOs only know about songs and recordings when that information is provided to them through registrations by the rightsholders. Typically, rightsholders in songs file registrations with most or all CMOs separately around the world. CMOs also require documentation from rightsholders to establish their rights.

Since only a few CMOs that represent rights in recordings are involved in digital music (other than digital simulcasts of broadcasts), this report focuses on the CMOs that represent rights in songs.

For more than a decade as record companies were delivering digital files with recorded music to DSPs, they were not including much, if any, information about the songs recorded. Major record companies and some of the indie record companies are now providing some information about the songs with the recordings they are delivering to DSPs. Nevertheless, there continues to be a lack of ISWCs to uniquely identify the songs; a lack of IPI numbers to uniquely identify the songwriters in the absence of ISWCs; songwriter names to identify the songwriters in the absence of IPI numbers; or consistent artist names and recording titles for ostensibly the same recording.

One aspect of the challenge is that the most common identifier for songs, the ISWC, is rarely assigned to a new song that is being recorded before the recording is released to the public. This means that the metadata provided to the DSP will not include the ISWC. The reason for this delay is that all of the information expected to be provided for a song before assigning an ISWC by CMOs is often not available before the recording is released to the public. The ISWC may be assigned weeks or even many months after the recording has been released.

The failures to link unique identifiers of the recording and the song recorded before release of new recordings and to link past recordings to the songs recorded are believed by music industry experts who work in this area to be an important impediment to the accurate flow of information. Linking is one important aspect to "matching" recordings to songs.

In the past, the process of matching recordings reportedly used to the songs recorded did not involve huge numbers of recordings. For example, if a radio station is playing 200 tracks in an active rotation in a month and changing 10 tracks in and out of that rotation per month, individuals even doing that matching manually could reasonably stay on top of matching the few new recordings.

But DSPs with more than tens of millions of recordings that may need to be matched is a different story.⁷⁹

Typically, the process of matching recordings to songs occurs after a DSP delivers its usage report to the CMO. The CMO is expected to claim the songs that it represents for that particular time period in the particular country for that use.

Therefore, the CMO works to identify the songs it represents by matching the recording titles and featured performer information or recording identifiers (like ISRC) that a CMO may have linked to a song in its database. Depending on the particular society and its IT systems, much of this matching can be an automated process.

But then every society and every publisher must perform manual labor—researching for information that can help them identify the recordings and the songs recorded, trying to distinguish similar songs. If those recordings are Karaoke or DJ mixes or ‘cover’ recordings or if the reports come from user-generated-content (UGC) providers, that job of identifying the songs is enormously difficult, sometimes impossible.

Publishers, at least those with sufficient IT systems and personnel, check for their songs when they have access to a DSP’s usage report.

There are a number of reasons that make matching recordings to songs challenging. Most often, the information received from a DSP in the usage report has insufficient information. This is often due to the lack or poor quality of information the DSP received from the distributor, aggregator or record company and acceptance of such poor-quality metadata by DSPs.^{80 81 82}

Still today, however, when DSPs do actually receive some ISWCs and review multiple submissions of the same ISWCs (for example, many recordings referring to the same ISWC), many DSPs have seen a single ISWC but with different creators for the same title. They have seen for a single ISWC different titles. They have also seen multiple ISWCs linked to the same recording (rather than one ISWC, one recording). These problems all fall under the description of data quality (e.g., poor quality data).

Poor quality metadata also impacts a DSP’s offerings.

When a distributor or record company delivers multiple recordings by the same featured artists, and when the metadata delivered spells the artist’s name a little differently for the

⁷⁹ In the U.S. where the statutory mechanical license provisions required a DSP that cannot identify a song or rightsholders in the song to file a Notice of Intent to license in order to obtain that statutory license. DSPs have filed notices for tens of millions of songs. One of the obligations of the new Mechanical Licensing Collective is to attempt to identify those songs or, after a period of years attempting to obtain that information, distribute the royalties according to policies for unclaimed royalties.... (Music Confidential Feb. 23, 2018): “SXWorks reports that on average last year, about 2.5 million NOIs were filed each month with the Copyright Office. Each month. This does not mean that they were not also covered by a direct license, but the number provides a rough picture of how many recordings did not likely link to identifiable information about the songs. There are about 60 million NOI entries indexed by the SXWorks Lookup tool [a tool that makes it easier to search for certain information contained in the U.S. Copyright Office database—specifically, to search for information in the Notices of Intention (NOIs) filed by users of recorded compositions]” The new blanket license under the Music Modernization Act replaces the Notice of Intent.

⁸⁰ Majors are generally much better.

⁸¹ “A digital music service sent a monthly report of music use to a collective recently. The list included around 20 million recordings. More than 50 percent of those titles had no information identifying the composition (the song) recorded—no songwriter names, no publisher names, no unique identifiers like the ISWC (International Standard Musical Work Code). One month. One DSP. One territory. More than 10 million songs not identified, only the recording information provided. How many of those titles were the same or nearly the same? Well, tens of thousands of recordings had titles with the same few key words. My go-to title [for comparisons] is Angel. This is a title that I previously reported returns more than 14,000 title results in searching a society’s song database, returns the maximum of 10,000 titles in searching the U.S. Copyright Office database (it would not return more than 10,000 results [on a quick run]) and, reportedly, turns up tens of thousands of unique recordings with Angel in the title. Think about trying to match each of the 35,000 Angel recordings with just one of the more than 14,000 songs with Angel in the title. There can even be more than one-quarter of one million (more than 250,000) recordings with the same few keywords. Ah, what ‘love’ does for the creative mind.” (Music Confidential, Feb. 28, 2019) Used for anecdotal purposes; no thorough research on this issue has or could be performed for a variety of reasons.

⁸² There is ongoing debate over who is most responsible for gathering and sharing high-quality metadata for each recording and each song; who is the most authoritative source of accurate information and for which information; who can most effectively share this metadata through the supply chain (including with whom, in how many formats, and in what standardized way); how to respond when sufficient metadata is not received; and related questions. There is also ongoing effort within the industry to answer these questions and to implement the solutions.

recordings, the differences can impair a digital user's experience. It can result in multiple artist pages being created on the DSP with some recordings on one page and other recordings on the other page, which can confuse the user. This can impact a DSP's user engagement.

Inconsistent metadata can also negatively impact some of the tools on a DSP's service, such as recommendations and playlists. For example, a DSP may receive classical recordings with hundreds of different spellings for Tchaikovsky, which can impact

The names of record companies may be provided differently, designated differently by territory or Inc., etc. This can impact transparency in reporting.

In contrast, the more information received about the performers and the songwriters by a DSP, for example, the better search capabilities the DSP can provide when a consumer asks to all recordings by a specific performer or (someday) by a specific songwriter. Most DSPs do not currently have search capabilities for a songwriter who is not also a recording artist. Information provided about genres and the home country for an artist allow a DSP to better provide genre-specific and country-specific offerings. Good quality metadata is especially important for services with virtual assistants (responding to voice requests).

The larger DSPs typically have some type of style guide that they provide to labels/distributors describing what the DSP needs or requires from labels and distributors, with detailed explanations for how to provide various types of information for different types of recordings.

There are bad actors who intentionally provide misleading metadata hoping to cash in on another artist's popularity, such as a 'tribute' band using the spelling of the famous artist to attract listeners to the tribute band or recording a 'cover' version of a song under a wholly different title to avoid monetization by the owner of those rights.

Also, user-generated content essentially puts the onus to identify the music in large part of the public who have the least possible access to the necessary metadata.

(v) TRENDS

To reduce poor quality data being sent to DSPs, the larger DSPs have typically implemented non-compliance and scoring mechanisms. Essentially any metadata delivered that does not fully comply with the requirements accumulates points. When a company reaches a certain threshold point level, the DSP would no longer accept any more recordings from that source. There are also typically ways in which a company could clean its slate at some point. Many DSPs also have some type of premium opportunities for companies that meet certain standards or provide additional material, such as song lyrics.

Some CMOs have significantly upgraded their IT systems and are providing their 'back office service' to other CMOs to help save costs and provide more accuracy and efficiency.

Some CMOs have joined forces to build upgraded IT systems and to offer those combined back office services and middle office (data analysis) to other CMOs.

Some of the CMOs are also offering to provide these types of back office services for music publishers that cannot afford to invest large sums of money to upgrade their own systems when effective software solutions are not available to them.

Some CMOs have retained third-party IT companies to provide the services for them, at least for digital uses.

CISAC is working on several projects to speed up the ISWC assignment system and related offerings for CISAC member CMOs.⁸³

Some CMOs and stakeholders are working on projects to link the identifiers for recordings with the identifiers for the songs recorded.

Perhaps most importantly, several CMOs and other entities are developing and/or enhancing matching tools to better identify the songs recorded and used by DSPs and related information.

There are many other projects underway to tackle the challenges in these areas.

⁸³ CISAC launches major project to upgrade the international musical work identifier.
<https://www.cisac.org/Newsroom/News-Releases/CISAC-launches-major-project-to-upgrade-the-international-musical-work-identifier>

CONCLUSION: INFORMATION, CLARIFICATION AND INNOVATION

Very few people have the 'bandwidth' to keep their fingers on the pulse of everything that is happening outside of their areas of responsibilities. Whether they are copyright administrators registering sound recordings and songs with CMOs to ensure money flows to the correct rightsholders, IT professionals developing systems to automate the cleansing of 'dirty' metadata, lawyers and business development teams negotiating or renegotiating contractual agreements, or creators writing songs and performing music with collaborators, there is an enormous amount of information related to digital music outside of their focus that directly impacts what they do and their potential earnings. Often, they are simply not aware of these activities and their impacts.

The digital music market is made up of so many different parts that are interconnected in so many complex ways, with new innovations in development around the world every day, that everyone can benefit from more up-to-date information. The trick to achieving a more smooth-running and profitable marketplace for all stakeholders is to find ways to share information in understandable ways and to clarify it where there are any misunderstandings or misinterpretations about the operations of this marketplace in a much broader way around the world.

There are even innovations being developed in the music industry today to help bring clarity and money to stakeholders. Sophisticated smartphone apps are becoming available for recording artists and songwriters to not only check their royalty statements on their mobile devices but to see where their music is hot at that moment around the world and, with a click or a slide, transfer money from their royalty account into their bank account.

There is a program for mobile phones that are not merely apps in the traditional sense that save and share information about who is doing what when they co-write a song or record a track in the studio. There are innovative programs in advanced development that look like a simple app on a smartphone but are actually very technical programs integrated into a complex IT systems that will allow co-creators to be communicating with their record companies and publishers throughout recording sessions to make sure their music is registered. Merely walking into a studio can trigger the app to see who else on the project is present, connecting them all. Then to identify and tag that new music from the instant of creation through millions of streams later to be tracked with authoritative, verified information about everyone involved and how much money they are each owed.

Indeed, behind the scenes in the music industry, deep in the operational backrooms of companies around the world, there are some mind boggling developments happening to help make sure that creators and everyone in the music ecosystem can benefit as much as possible from the digital music market. There just needs to be better ways to spread the news.

APPENDIX: SOURCES

The author approached the preparation of this report as an investigative trade reporter and business analyst. The author sincerely thanks everyone who contributed to this report.

The author formally interviewed more than 85 individuals during Q1 2020 in preparation for this report in addition to obtaining source material from the author's prior research and from sources listed in this report.

Sources who requested that their contributions be unattributed include music attorneys, personal manager and music business executives in Brazil, Chile, Colombia, Jamaica, Japan, Hong Kong, South Korea, Australia, India, Canada, U.S., Belgium, Denmark, Finland, France, Germany, Italy, Poland, Spain, Sweden, Switzerland, U.K., United Arab Republic, Nigeria and South Africa.

The individuals who agreed to be attributed are:

INDIVIDUALS

David Alexander (South Africa) Sheer Music Publishing (Founder/Managing Director)
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Richard Constant (U.K.) Attorney
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Andreas Lichtenhahn (Germany) Sasse Bachelin Lichtenhahn (Partner)
Tracy Maddux (U.S.) AVL Digital Group (CEO)
Fernando Marcos (Argentina) BackOffice Music Services (Regional Manager/Owner)
Martin Mills (U.K.) Beggars Group (Founder/Chairman)
Niclas Molinder (Sweden) Songwriter, Producer, Entrepreneur
Miranda Mulholland (Canada) Professional Musician, Record Label Owner
Efe Omorogbe (Nigeria) Now Muzik Entertainment Services (Founder/CEO); Hypertek Digital (CEO); BuckWyld Media Network (Principal Consultant/Creative Director)
Will Page (U.K.) Economist
Louis Posen (U.S.) Hopeless Records (President)
David Safir (U.S.) Consultant
Spek (Hussain Yoosuf) (UAE) PopArabia (Founder, Musician)

COMPANIES AND ORGANIZATIONS

In addition to the sources provided in the footnotes in this report, information was obtained either from publicly available information from these sources or through meetings or through unattributed interviews with executives:

AEPO-ARTIS
Amazon
American Assn. of Independent Music (A2IM)
Apple
Artistas Intérpretes o Ejecutantes Sociedad de Gestión de España (AIE)
The American Society of Composers, Authors and Publishers (ASCAP)
Broadcast Music, Inc. (BMI)
Confédération Internationale des Sociétés d'Auteurs et Compositeurs (CISAC)
Deezer
Digital Data Exchange (DDEX)
Digital Media Assn. (DiMA)
Independent Alliance for Artists Rights (IAFAR)
Independent Music Companies Assn. (IMPALA)
International Confederation of Music Publishers (ICMP)
International Council of Music Creators (CIAM)
International Federation of Musicians (FIM)
International Federation of the Phonographic Industry (IFPI)
La Federación Ibero Latino Americana de Artistas Intérpretes o Ejecutantes (FILAIE)
Merlin
Music Managers Forum UK

The Music Rights Awareness Foundation
Pandora Media
peermusic
PPL
PRS for Music
Recording Industry Assn. of America (RIAA)
Société des auteurs, compositeurs et éditeurs de musique (SACEM)
Session
Societies' Council for the Collective Management of Performers' Rights (SCAPR)
Sony Music Entertainment
Sony/ATV Music Publishing
SoundCloud
SoundExchange
Spotify
Stage Enterprises
Tencent Music Entertainment
Universal Music Group
Universal Music Publishing Group
Warner Chappell Music
Warner Music Group
XANDRIE/QOBZ
YouTube

ADDITIONAL SOURCE INFORMATION

In addition to the sources noted in footnotes:

Witness statements before the U.S. Copyright Royalty Judges, In re Determination of Rates and Terms for Digital Performance of Sound Recordings and Making of Ephemeral Copies to Facilitate those Performances (Web V), Docket No. 19-CRB-005-WR (2020)

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