

Before the  
UNITED STATES COPYRIGHT ROYALTY BOARD  
Washington, D.C.

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In the Matter of:	)	
	)	
DETERMINATION OF RATES	)	Docket No. 21-CRB-0001-PR
AND TERMS FOR MAKING AND	)	(2023-2027)
DISTRIBUTING PHONORECORDS	)	
(Phonorecords IV)	)	
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**AMAZON’S AMENDED WRITTEN DIRECT STATEMENT**

Under 37 C.F.R. § 351.4(c), Amazon amends its Written Direct Statement, which Amazon originally filed on October 13, 2021. Amazon’s amendments affect its Proposed Rates and Terms (Exhibit A) and Index of Exhibits (Exhibit B) in Volume I; and the Written Direct Testimony of Leslie M. Marx, Ph.D. (Exhibit C) and Written Direct Testimony of Kajal Gayadien (Exhibit D) in Volume II. Amazon also re-produces the exhibits to its Written Direct Statement with Bates-stamped versions (Exhibit E), and adds Exhibit 205 (Exhibit F) and Exhibit 206 (Exhibit G) to Volume III. A declaration certifying Amazon’s RESTRICTED designations is attached as Exhibit H.

This amendment is timely under the Order Following Status Conference and Modifying Scheduling Orders (Dec. 13, 2021) (Dkt. No. 25974) at 2, which set March 8, 2022, as the deadline to file Amended Written Direct Statements.

Under 37 C.F.R. § 351.4(c), Amazon explains the basis for its amendment as follows:

**Volume I**

**Proposed Rates and Terms:** Amazon amends its proposed rates and terms to remove language stating that taxes recognized by a Service Provider in connection with an Offering are

to be deducted from Service Provider Revenue. Amazon also removes the definition of Taxes, which is not used elsewhere in its proposed terms and conditions. Amazon does not amend any other aspect of its rate proposal.

This change is intended to be ministerial. In originally proposing this tax-related language, Amazon's intention was to make express the already implicit (and uncontroversial) fact that sales taxes – which a government levies on Service Providers' end users, and which a Service Provider collects and remits on the government's behalf – are not the Service Provider's revenues and so are properly not included in the Service Provider Revenue. Further proceedings have suggested that Amazon's proposed language was arguably broader than intended, and also unnecessary because sales taxes were never "revenue from End Users recognized by a Service Provider" to begin with. Amazon's Amended Written Direct Statement, Ex. A.1 at 6 (subsection (1)(i) of the definition of Service Provider Revenue; relevant language adopted from the *Phonorecords III* Final Determination). This clarifying amendment [REDACTED]

[REDACTED]. See Amazon's Opposition to Copyright Owners' Motion to Compel Production of Documents and Information from the Services Concerning Their Rate Proposals at 16 (Feb. 3, 2022). Amazon's clarification to its rate proposal confirms that motion should be denied.

The amended Proposed Rates and Terms are attached as Exhibit A.1; the redlined copy against the Services' Proposed Rates and Terms in the *Phonorecords III* remand proceeding is attached as Exhibit A.2; and the redlined copy against Amazon's Proposed Rates and Terms submitted as part of its Written Direct Statement on October 13, 2021, is attached as Exhibit A.3.



All versions are PUBLIC; Amazon does not submit a RESTRICTED version of its Proposed Rates and Terms.

**Index of Exhibits:** Amazon amends its exhibit index include Amazon Exhibits 205 and 206 and, for each exhibit, the Sponsoring Witness, Description, and Restricted/Public designation. These exhibits are [REDACTED]

[REDACTED]. Amazon's witness, Kajal Gayadien, [REDACTED]

[REDACTED].

Further, Amazon amends its exhibit index to include Bates numbers. Amazon produced a Bates-stamped version of each exhibit to its Written Direct Statement during discovery, and now replaces the existing exhibits with these Bates-stamped versions. The amended exhibit index reflects the Bates numbers in these replaced exhibits.

The RESTRICTED and PUBLIC versions of the Index of Exhibits are attached as Exhibits B.1 and B.2, respectively, and the redlined copies of the RESTRICTED and PUBLIC versions are attached as Exhibits B.3 and B.4, respectively.

## **Volume II**

**Written Direct Testimony of Leslie M. Marx:** Amazon amends Dr. Marx's testimony to incorporate into her benchmarking analysis additional MLC royalty data that Amazon received in discovery. Those additional data, which Copyright Owners obtained from the MLC, have slightly adjusted some of Dr. Marx's benchmark calculations. Dr. Marx also makes several other minor updates to her benchmarking analysis, to match the timeframe of her analysis with the latest MLC data and to incorporate a handful of contract-valuation documents obtained in discovery. Dr. Marx's proposed musical-works headline rate, based on her preferred benchmark,

does not change with these updated calculations. Dr. Marx's amended testimony also updates her citations to Ms. Gayadien's amended fact testimony, which [REDACTED]. [REDACTED]. None of these changes affects her ultimate opinions. The RESTRICTED and PUBLIC versions of the Amended Marx Testimony are attached as Exhibits C.1 and C.2, respectively, and the redlined copies of the RESTRICTED and PUBLIC versions are attached as Exhibits C.3 and C.4, respectively.

**Written Direct Testimony of Kajal Gayadien:** Amazon amends Ms. Gayadien's testimony to (1) include citations and references to [REDACTED]  
[REDACTED]  
[REDACTED]; and (2) add Bates numbers for each exhibit cited in the testimony, many of which were produced in discovery after Amazon submitted its Written Direct Statement. The RESTRICTED and PUBLIC versions of the Amended Gayadien Testimony are attached as Exhibits D.1 and D.2, respectively, and the redlined copies of the RESTRICTED and PUBLIC versions are attached as Exhibits D.3 and D.4, respectively.

### **Volume III**

Amazon amends Volume III of its Written Direct Statement to replace existing exhibits with Bates-stamped versions produced during discovery. The RESTRICTED and PUBLIC versions of the Bates-stamped exhibits are attached as Exhibits E.1 and E.2, respectively. Further, Amazon adds two new exhibits:

**Exhibit 205:** Amazon adds as Exhibit 205 [REDACTED]  
[REDACTED], and produced on December 10, 2021 with Bates number AMZN\_Phono IV\_00015532 (identified in the Amended Gayadien Testimony with Bates numbers

AMZN\_Phono IV\_00015532.001 - AMZN\_Phono IV\_00015532.106). The RESTRICTED and PUBLIC versions of Exhibit 205 are attached as Exhibits F.1 and F.2, respectively. No redlined copies are included since Exhibit 205 was not a part of Amazon's Written Direct Statement.

**Exhibit 206:** Amazon adds as Exhibit 206 [REDACTED]

[REDACTED], and produced on December 10, 2021 with Bates numbers AMZN\_Phono IV\_00015566 - AMZN\_Phono IV\_00015585. The RESTRICTED and PUBLIC versions of Exhibit 206 are attached as Exhibits G.1 and G.2, respectively. No redlined copies are included since Exhibit 206 was not a part of Amazon's Written Direct Statement.

March 8, 2022

Respectfully submitted,

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# Exhibit A

# Exhibit A.1

## **PART 385—RATES AND TERMS FOR USE OF NONDRAMATIC MUSICAL WORKS IN THE MAKING AND DISTRIBUTING OF PHYSICAL AND DIGITAL PHONORECORDS**

### **Subpart A—Regulations of General Application**

#### **§385.1 General.**

(a) *Scope.* This part establishes rates and terms of royalty payments for the use of nondramatic musical works in making and distributing of physical and digital phonorecords in accordance with the provisions of 17 U.S.C. 115. This subpart contains regulations of general application to the making and distributing of phonorecords subject to the section 115 license.

(b) *Legal compliance.* Licensees relying on the compulsory license detailed in 17 U.S.C. 115 shall comply with the requirements of that section, the rates and terms of this part, and any other applicable regulations. This part describes rates and terms for the compulsory license only.

(c) *Interpretation.* This part is intended only to set rates and terms for situations in which the exclusive rights of a Copyright Owner are implicated and a compulsory license pursuant to 17 U.S.C. 115 is obtained. Neither the part nor the act of obtaining a license under 17 U.S.C. 115 is intended to express or imply any conclusion as to the circumstances in which a user must obtain a compulsory license pursuant to 17 U.S.C. 115.

(d) *Relationship to voluntary agreements.* The rates and terms of any license agreements entered into by Copyright Owners and Licensees relating to use of musical works within the scope of those license agreements shall apply *in lieu* of the rates and terms of this part.

#### **§385.2 Definitions.**

Unless otherwise specified, terms in this part shall have the same meaning given to them in 17 U.S.C. 115(e). For the purposes of this part, the following definitions apply:

*Accounting Period* means the monthly period specified in 17 U.S.C. 115(c)(2)(I) and in 17 U.S.C. 115(d)(4)(A)(i), and any related regulations, as applicable.

*Active Subscriber* means an End User of a Bundled Subscription Offering who has made at least one Play during the Accounting Period.

*Affiliate* means an entity controlling, controlled by, or under common control with another entity, except that an affiliate of a Sound Recording Company shall not include a Copyright Owner to the extent it is engaging in business as to musical works.

*Artificial Accounts* are accounts that are disabled or terminated for having engaged in User Manipulation or other fraudulent activity and for which any subscription revenues are refunded or otherwise not received by the Service Provider.

*Bundled Subscription Offering* means a Subscription Offering providing Licensed Activity consisting of Eligible Interactive Streams or Eligible Limited Downloads that is made available to End Users as a bundle with one or more other products or services (including products or services subject to other subparts), where End Users could obtain each product or service

comprising the bundle (including the Subscription Offering) on a standalone basis, and where End Users purchase the bundle in a single transaction without separate pricing for the product(s) or service(s) comprising the bundle (including the Subscription Offering).

*Copyright Owner(s)* are nondramatic musical works copyright owners who are entitled to royalty payments made under this part pursuant to the compulsory license under 17 U.S.C. 115.

*Digital Phonorecord Delivery* has the same meaning as in 17 U.S.C. 115(e)(10).

*Eligible Interactive Stream* means a Stream that is an interactive stream as defined in 17 U.S.C. 115(e)(13).

*Eligible Limited Download* means a transmission of a sound recording embodying a musical work to an End User of a digital phonorecord under 17 U.S.C. 115 that results in a Digital Phonorecord Delivery of that sound recording that is only accessible for listening for—

(1) An amount of time not to exceed one month from the time of the transmission (unless the Licensee, in lieu of retransmitting the same sound recording as another Eligible Limited Download, separately, and upon specific request of the End User made through a live network connection, reauthorizes use for another time period not to exceed one month), or in the case of a subscription plan, a period of time following the end of the applicable subscription no longer than a subscription renewal period or three months, whichever is shorter; or

(2) A number of times not to exceed 12 (unless the Licensee, in lieu of retransmitting the same sound recording as another Eligible Limited Download, separately, and upon specific request of the End User made through a live network connection, reauthorizes use of another series of 12 or fewer plays), or in the case of a subscription transmission, 12 times after the end of the applicable subscription.

*End User* means each unique person, other than Artificial Accounts, that (1) Pays a subscription fee for an Offering during the relevant Accounting Period or (2) Makes at least one Play of an Eligible Interactive Stream or Eligible Limited Download during the relevant Accounting Period.

*Family Plan* means a discounted Subscription Offering to be shared by two or more family members for a single subscription price.

*Free Trial Offering* means a subscription to a Service Provider's transmissions of sound recordings embodying musical works when

(1) Neither the Service Provider, the Sound Recording Company, the Copyright Owner, nor any person or entity acting on behalf of or *in lieu* of any of them receives any monetary consideration for the Offering;

(2) The free usage does not exceed 30 consecutive days per subscriber per two-year period;

(3) In connection with the Offering, the Service Provider is operating with appropriate musical license authority and complies with the recordkeeping requirements in § 385.4;

(4) Upon receipt by the Service Provider of written notice from the Copyright Owner or its agent stating in good faith that the Service Provider is in a material manner operating without appropriate license authority from the Copyright Owner under 17 U.S.C. 115, the Service Provider shall within 5 business days cease transmission of the sound recording embodying that musical work and withdraw it from the repertoire available as part of a Free Trial Offering;

(5) The Free Trial Offering is made available to the End User free of any charge; and

(6) The Service Provider offers the End User periodically during the free usage an opportunity to subscribe to a non-free Offering of the Service Provider.

*GAAP* means U.S. Generally Accepted Accounting Principles in effect at the relevant time, except that if the U.S. Securities and Exchange Commission permits or requires entities with securities that are publicly traded in the U.S. to employ International Financial Reporting Standards in lieu of Generally Accepted Accounting Principles, then that entity may employ International Financial Reporting Standards as “GAAP” for purposes of this subpart.

*Licensee* means any entity availing itself of the compulsory license under 17 U.S.C. 115 to use copyrighted musical works in the making or distributing of physical or digital phonorecords.

*Licensed Activity*, as the term is used in subparts C and D of this part, means covered activity, under voluntary or statutory license, *via* Digital Phonorecord Deliveries in the form of Eligible Interactive Streams, Eligible Limited Downloads, and Restricted Downloads.

*Limited Offering* means a Subscription Offering providing Licensed Activity consisting of Eligible Interactive Streams or Eligible Limited Downloads for which—

(1) An End User cannot choose to listen to a particular sound recording (*i.e.*, the Service Provider does not provide Eligible Interactive Streams of individual recordings that are on-demand, and Eligible Limited Downloads are rendered only as part of programs rather than as individual recordings that are on-demand); or

(2) The particular sound recordings available to the End User over a period of time are substantially limited relative to Service Providers in the marketplace providing access to a comprehensive catalog of recordings (*e.g.*, a product limited to a particular genre or permitting Eligible Interactive Streaming only from a monthly playlist consisting of a limited set of recordings).

*Locker Service* means an Offering providing digital access to sound recordings of musical works in the form of Eligible Interactive Streams, Permanent Downloads, Restricted Downloads or Ringtones where the Service Provider has reasonably determined that the End User has purchased or is otherwise in possession of the subject phonorecords of the applicable sound recording prior to the End User’s first request to use the sound recording via the Locker Service. The term Locker Service does not mean any part of a Service Provider’s products otherwise meeting this definition, but as to which the Service Provider has not obtained a section 115 license.

*Mixed Service Bundle* means an Offering providing Licensed Activity consisting of Eligible Interactive Streams or Eligible Limited Downloads that meets all of the following criteria:



(1) The Offering is made available to End Users only in combination (*i.e.*, the Offering is not available on a standalone basis) with one or more non-audio or non-audiovisual products or services (*e.g.*, two-day shipping) of more than token value as part of one transaction for which End Users make a payment without receiving pricing for the Offering separate from the product(s) or service(s) with which it is made available.

(2) The Offering is made available by a Service Provider that also offers End Users a separate, standalone Subscription Offering.

(3) The Offering offers End Users less functionality relative to that separate, standalone Subscription Offering. Such lesser functionality may include, but is not limited to, limitations on the ability of End Users to choose to listen to specific sound recordings on request or a limited catalog of sound recordings.

*Music Bundle* means two or more of physical phonorecords, Permanent Downloads or Ringtones delivered as part of one transaction (*e.g.*, download plus ringtone, CD plus downloads). In the case of Music Bundles containing one or more physical phonorecords, the Service Provider must sell the physical phonorecord component of the Music Bundle under a single catalog number, and the musical works embodied in the Digital Phonorecord Delivery configurations in the Music Bundle must be the same as, or a subset of, the musical works embodied in the physical phonorecords; provided that when the Music Bundle contains a set of Digital Phonorecord Deliveries sold by the same Sound Recording Company under substantially the same title as the physical phonorecord (*e.g.*, a corresponding digital album), the Service Provider may include in the same bundle up to 5 sound recordings of musical works that are included in the stand-alone version of the set of digital phonorecord deliveries but not included on the physical phonorecord. In addition, the Service Provider must permanently part with possession of the physical phonorecord or phonorecords it sells as part of the Music Bundle. In the case of Music Bundles composed solely of digital phonorecord deliveries, the number of digital phonorecord deliveries in either configuration cannot exceed 20, and the musical works embodied in each configuration in the Music Bundle must be the same as, or a subset of, the musical works embodied in the configuration containing the most musical works.

*Non-Licensed Work* means either (1) a work where musical works are not included as part of the work, or are not the main focus of the work (*e.g.*, podcasts, audiobooks, and spoken word recordings) or (2) a work where music is included but is not eligible to be licensed under section 115 (*e.g.*, music videos).

*Offering* means a Service Provider's engagement in Licensed Activity covered by subparts C and D of this part.

*Paid Locker Service* means a Locker Service for which the End User pays a fee to the Service Provider.

*Performance Royalty* means the license fee payable for the right to perform publicly musical works in any of the forms covered by subparts C and D of this part.

*Permanent Download* has the same meaning as in 17 U.S.C. 115(e)(24).

*Play* means an Eligible Interactive Stream, or a play of an Eligible Limited Download, lasting 30 seconds or more and, if a track lasts in its entirety under 30 seconds, an Eligible Interactive Stream or play of an Eligible Limited Download of the entire duration of the track. A

Play excludes an Eligible Interactive Stream, or a play of an Eligible Limited Download, caused by User Manipulation. For purposes of the definition of “Play” only, “Eligible Interactive Stream” and “Eligible Limited Download” shall each be defined to include a sound recording embodying a musical work in the public domain, if such sound recording would otherwise qualify as an Eligible Interactive Stream or Eligible Limited Download if the musical work was not in the public domain.

*Promotional Offering* means a digital transmission of a sound recording, in the form of an Eligible Interactive Stream or an Eligible Limited Download, embodying a musical work, the primary purpose of which is to promote the sale or other paid use of that sound recording or to promote the artist performing on that sound recording and not to promote or suggest promotion or endorsement of any other good or service and

(1) A Sound Recording Company is lawfully distributing the sound recording through established retail channels or, if the sound recording is not yet released, the Sound Recording Company has a good faith intention to lawfully distribute the sound recording or a different version of the sound recording embodying the same musical work;

(2) For Eligible Interactive Streaming of segments of sound recordings not exceeding 90 seconds, the Sound Recording Company delivers or authorizes delivery of the segments for promotional purposes and neither the Service Provider nor the Sound Recording Company creates or uses a segment of a sound recording in violation of 17 U.S.C. 106(2) or 115(a)(2);

(3) The Promotional Offering is made available to an End User free of any charge; and

(4) The Service Provider provides to the End User at the same time as the Promotional Offering stream an opportunity to purchase the sound recording or the Service Provider periodically offers End Users the opportunity to subscribe to a paid Offering of the Service Provider.

*Purchased Content Locker Service* means a Locker Service made available to End User purchasers of Permanent Downloads, Ringtones, or physical phonorecords at no incremental charge above the otherwise applicable purchase price of the Permanent Downloads, Ringtones, or physical phonorecords acquired from a qualifying seller. With a Purchased Content Locker Service, an End User may receive one or more additional phonorecords of the purchased sound recordings of musical works in the form of Permanent Downloads or Ringtones at the time of purchase, or subsequently have digital access to the purchased sound recordings of musical works in the form of Eligible Interactive Streams, additional Permanent Downloads, Restricted Downloads, or Ringtones.

(1) A *qualifying seller* for purposes of this definition is the entity operating the Service Provider, including Affiliates, predecessors, or successors in interest, or—

(i) In the case of Permanent Downloads or Ringtones, a seller having a legitimate connection to the locker service provider pursuant to one or more written agreements (including that the Purchased Content Locker Service and Permanent Downloads or Ringtones are offered through the same third party); or

(ii) In the case of physical phonorecords,

(A) The seller of the physical phonorecord has an agreement with the Purchased Content Locker Service provider establishing an integrated offer that creates a consumer experience commensurate with having the same Service Provider both sell the physical phonorecord and offer the integrated locker service; or

(B) The Service Provider has an agreement with the entity offering the Purchased Content Locker Service establishing an integrated offer that creates a consumer experience commensurate with having the same Service Provider both sell the physical phonorecord and offer the integrated locker service.

*Relevant Page* means an electronic display (for example, a web page or screen) from which a Service Provider's Offering providing Licensed Activity consisting of Eligible Interactive Streams or Eligible Limited Downloads is directly available to End Users, but only when the Offering and content directly relating to the Offering (e.g., an image of the artist, information about the artist or album, reviews, credits, and music player controls) comprises 75% or more of the space on that display, excluding any space occupied by advertising. For avoidance of doubt, content relating to the sale of Permanent Downloads and physical phonorecords is not content that directly relates to an Offering for purposes of determining whether an electronic display is a Relevant Page. An Offering is directly available to End Users from a page if End Users can receive sound recordings of musical works (in most cases this will be the page on which the Eligible Limited Download or Eligible Interactive Stream takes place).

*Restricted Download* means a Digital Phonorecord Delivery in a form that cannot be retained and replayed on a permanent basis. The term Restricted Download includes an Eligible Limited Download.

*Ringtone* means a phonorecord of a part of a musical work distributed as a Digital Phonorecord Delivery in a format to be made resident on a telecommunications device for use to announce the reception of an incoming telephone call or other communication or message or to alert the receiver to the fact that there is a communication or message.

*Service Provider* means that entity governed by subparts C and D of this part, which might or might not be the Licensee, that with respect to the section 115 license—

(1) Contracts with or has a direct relationship with End Users or otherwise controls the content made available to End Users;

(2) Is able to report fully on Service Provider Revenue from the provision of musical works embodied in phonorecords to the public, and to the extent applicable, verify Service Provider Revenue through an audit; and

(3) Is able to report fully on its usage of musical works, or procure such reporting and, to the extent applicable, verify usage through an audit.

*Service Provider Revenue.* (1) Subject to paragraphs (2) through (5) of this definition and subject to GAAP, *Service Provider Revenue* shall mean, for each Offering subject to § 385.21 of this Part:

(i) All revenue from End Users recognized by a Service Provider and directly derived from the provision of the Offering;

(ii) All revenue recognized by a Service Provider by way of sponsorship and commissions as a result of the inclusion of third-party “in-stream” or “in-download” advertising as part of the Offering, *i.e.*, advertising placed immediately at the start or end of, or during the actual delivery of, a musical work, by way of Eligible Interactive Streaming or Eligible Limited Downloads, except that notwithstanding the foregoing, and with respect to advertisements or sponsorships that are placed between content that constitutes Licensed Activity and content that constitutes non-Licensed Activity (e.g., an advertisement placed between the performance of a sound recording of a musical work and the performance of Non-Licensed Work), only 50% of revenue from such advertising will be included; and

(iii) All revenue recognized by the Service Provider, including by way of sponsorship and commissions, as a result of the placement of third-party advertising on a Relevant Page of the Service Provider or on any page that is accessed automatically (such as a pop-up window) when an End User interacts with a Relevant Page; provided that, in case more than one Offering is available to End Users from a Relevant Page, any advertising revenue shall be allocated between or among the Service Providers on the basis of the relative amounts of the page they occupy.

(2) Service Provider Revenue shall:

(i) Include revenue recognized by the Service Provider, or by any associate, Affiliate, agent, or representative of the Service Provider *in lieu* of its being recognized by the Service Provider;

(ii) Include the value of any barter or other nonmonetary consideration, to the extent recognized by the Service Provider as revenue under GAAP; and

(iii) Except as expressly detailed in this part, not be subject to any other deduction or set-off other than for Third-Party Fees and refunds to End Users for the Offering that the End Users were unable to use because of technical faults in the Offering or other bona fide refunds or credits issued to End Users in the ordinary course of business.

(3) Service Provider Revenue shall exclude revenue derived by the Service Provider solely in connection with activities other than Licensed Activity, including delivery of Non-Licensed Work. For the avoidance of doubt, in the case of advertising or sponsorship revenue, Service Provider Revenue shall (1) exclude revenue from advertisements or sponsorships that are embedded or served within a phonorecord that constitutes Non-Licensed Work and (2) include 50% of the revenue subject to the exception set out in paragraph (1)(ii) above.

(4) For purposes of paragraph (1) of this definition, advertising or sponsorship revenue shall be reduced by the actual cost of obtaining that revenue, not to exceed 15%.

(5) In instances in which a Service Provider provides a Bundled Subscription Offering, the revenue from End Users deemed to be recognized by the Service Provider for the Bundled Subscription Offering for the purpose of paragraph (1) of this definition shall be calculated as follows:

(i) *Step 1:* The price of the Bundled Subscription Offering shall be divided by the sum of the standalone prices of each of the products or services (including the Subscription Offering) included in the Bundled Subscription Offering.

(ii) *Step 2:* The standalone price of the Subscription Offering included as part of the Bundled Subscription Offering shall be multiplied by the percentage calculated in Step 1.

(6) In instances in which a Service Provider makes a product or service (including a product or service subject to another subpart) available for a separate charge to End Users who also purchase a Subscription Offering (including a Bundled Subscription Offering), where End Users could not obtain that product or service on a standalone basis (*i.e.*, without also purchasing the Subscription Offering (including a Bundled Subscription Offering)), the revenue from End Users deemed to be recognized by the Service Provider for the Subscription Offering for the purpose of paragraph (1) of this definition shall exclude the separate charge for the product or service.

*Sound Recording Company* means a person or entity that:

- (1) Is a copyright owner of a sound recording embodying a musical work;
- (2) In the case of a sound recording of a musical work fixed before February 15, 1972, has rights to the sound recording, under chapter 14 of title 17, United States Code, that are equivalent to the rights of a copyright owner of a sound recording of a musical work under title 17, United States Code;
- (3) Is an exclusive Licensee of the rights to reproduce and distribute a sound recording of a musical work; or
- (4) Performs the functions of marketing and authorizing the distribution of a sound recording of a musical work under its own label, under the authority of a person identified in paragraph (1) through (3) of this section.

*Standalone Non-Portable Subscription Offering—Streaming Only* means a Subscription Offering through which an End User can listen to sound recordings only in the form of Eligible Interactive Streams and only from a non-portable device to which those Eligible Interactive Streams are originally transmitted while the device has a live network connection.

*Standalone Non-Portable Subscription Offering—Mixed* means a Subscription Offering through which an End User can listen to sound recordings either in the form of Eligible Interactive Streams or Eligible Limited Downloads but only from a non-portable device to which those Eligible Interactive Streams or Eligible Limited Downloads are originally transmitted.

*Standalone Portable Subscription Offering* means a Subscription Offering through which an End User can listen to sound recordings in the form of Eligible Interactive Streams or Eligible Limited Downloads from a portable device.

*Stream* means the digital transmission of a sound recording of a musical work to an End User—

- (1) To allow the End User to listen to the sound recording, while maintaining a live network connection to the transmitting service, substantially at the time of transmission, except to the extent that the sound recording remains accessible for future listening from a Streaming Cache Reproduction;

(2) Using technology that is designed such that the sound recording does not remain accessible for future listening, except to the extent that the sound recording remains accessible for future listening from a Streaming Cache Reproduction; and

(3) That is subject to licensing as a public performance of the musical work.

*Streaming Cache Reproduction* means a reproduction of a sound recording embodying a musical work made on a computer or other receiving device by a Service Provider solely for the purpose of permitting an End User who has previously received a Stream of that sound recording to play the sound recording again from local storage on the computer or other device rather than by means of a transmission; provided that the End User is only able to do so while maintaining a live network connection to the Service Provider, and the reproduction is encrypted or otherwise protected consistent with prevailing industry standards to prevent it from being played in any other manner or on any device other than the computer or other device on which it was originally made.

*Student Plan* means a discounted Subscription Offering available on a limited basis to students.

*Subscription Offering* means an Offering, other than a Mixed Service Bundle, for which End Users are required to pay a fee to have access to the Offering for defined subscription periods of 3 years or less (in contrast to, for example, a service where the basic charge to users is a payment per download or per play), whether the End User makes payment for access to the Offering on a standalone basis or as part of a bundle with one or more other products or services.

*Third-Party Fees* means amounts charged by or payable to third parties (e.g., carriers) in connection with a Subscription Offering or Mixed Service Bundle, not to exceed 10% of the subscription fees paid by customers to a Service Provider for access to the Subscription Offering or Mixed Service Bundle; and amounts charged by or payable to app stores in connection with a Subscription Offering or Mixed Service Bundle, not to exceed 30% of the subscription fees paid by customers to Service Provider for access to the Subscription Offering or Mixed Service Bundle.

*Total Cost of Content* or *TCC* means the total amount expensed by a Service Provider or any of its Affiliates in accordance with GAAP for rights to make Eligible Interactive Streams or Eligible Limited Downloads of a musical work embodied in a sound recording through the Service Provider for the Accounting Period, which amount shall equal the Applicable Consideration for those rights at the time the Applicable Consideration is properly recognized as an expense under GAAP. As used in this definition, "Applicable Consideration" means anything of value given for the identified rights to undertake the Licensed Activity, including, without limitation, ownership equity, monetary advances, barter or any other monetary and/or nonmonetary consideration, whether that consideration is conveyed via a single agreement, multiple agreements and/or agreements that do not themselves authorize the Licensed Activity but nevertheless provide consideration for the identified rights to undertake the Licensed Activity, and including any value given to an Affiliate of a Sound Recording Company for the rights to undertake the Licensed Activity. Value given to a Copyright Owner of musical works that is controlling, controlled by, or under common control with a Sound Recording Company for rights to undertake the Licensed Activity shall not be considered value given to the Sound Recording Company. For the avoidance of doubt, Applicable Consideration shall not include in-kind promotional consideration given to a Sound Recording Company (or Affiliate thereof) that is

used to promote the sale or paid use of sound recordings embodying musical works or the paid use of music services through which sound recordings embodying musical works are available where the in-kind promotional consideration is given in connection with a use that qualifies for licensing under 17 U.S.C. 115.

*User Manipulation* means any behavior that artificially distorts the number of Plays or number of transmissions of Non-Eligible Works by fraudulent means, including but not limited to the use of manual (e.g., click farms) or automated (e.g., bots) means.

### **§385.3 Making payment of royalty fees.**

(a) *Payment to the mechanical licensing collective.* A Licensee must make the royalty payments owed under this part to the mechanical licensing collective, which is the collective designated by the Copyright Royalty Board to collect and distribute royalties under this part.

(b) *Late fees.* Except as otherwise specified in this subparagraph (b), a Licensee shall pay an annual late fee equal to the Internal Revenue Service underpayment rate specified in 26 U.S.C. § 6621(a)(2), to be applied as specified in 26 U.S.C. § 6622(a), for any payment owed to a Copyright Owner and remaining unpaid after the due date established in 17 U.S.C. 115(c)(2)(I) or 17 U.S.C. 115(d)(4)(A)(i), as applicable and detailed in part 210 of this title. Late fees shall not be owed for any adjustments to monthly reports of usage made in accordance with section 210.27(f) or (k), or for any adjustments to any annual reports of usage made in accordance with section 210.27(k)(6)(i), (ii) or (v). In the case of underpayments found after an audit pursuant to 17 U.S.C. 115(d)(4)(D), or an audit referenced in section 210.27(k)(6)(iv), interest on the underpayment shall be calculated at the post-judgment rate specified in 28 U.S.C. § 1961, accrued from and after the date the payment was originally due.

(1) *Accrual of late fees.* Late fees shall accrue from the due date until the mechanical licensing collective receives payment.

(2) *Waiver of late fees.* The mechanical licensing collective may waive or lower late fees for immaterial or inadvertent failures of a Licensee to make a timely payment.

### **Subpart C—Eligible Interactive Streaming, Eligible Limited Downloads, Limited Offerings, Mixed Service Bundles, Bundled Subscription Offerings, Locker Services, and Other Delivery Configurations**

#### **§385.20 Scope.**

This subpart establishes rates and terms of royalty payments for subscription and non-subscription Offerings providing Licensed Activity consisting of Eligible Interactive Streams, Eligible Limited Downloads, and Restricted Downloads of musical works that is made available by digital music Service Providers in accordance with the provisions of 17 U.S.C. 115, exclusive of Offerings subject to subpart D of this part.

#### **§385.21 Royalty rates and calculations – Other than Mixed Service Bundles**

(a) *Applicable royalty.* Royalties payable by Service Providers for Offerings covered by this subpart shall be calculated as provided in this section, subject to the all-in royalty floors for specific types of services described in subsection (b) of this subpart, provided, however, that

Mixed Service Bundles shall be subject to the royalty rates provided in section 385.22 of this part.

(b) *Rate calculation.* Royalty payments for Licensed Activity in this subpart shall be calculated as provided in this paragraph (b). If a Service Provider offers different Offerings, royalties must be calculated separately with respect to each Offering taking into consideration Service Provider Revenue and expenses associated with each Offering. For purposes of calculating rates pursuant to this section and all of its subparts, a Family Plan shall be treated as 1.5 subscribers per month, prorated in the case of a Family Plan in effect for only part of a calendar month and a Student Plan shall be treated as 0.50 subscribers per month, prorated in the case of a Student Plan End User who subscribed for only part of a calendar month. Artificial Accounts shall not be counted as subscribers.

(1) *Step 1:* Calculate the All-In Revenue Pool for the Offering. For each Accounting Period, the all-in revenue pool for each Offering subject to this section shall be result of multiplying the Service Provider Revenue by 10.54%.

(2) *Step 2:* Determine the All-In Royalty Pool. For each Standalone Non-Portable Subscription Offerings—Streaming Only, Standalone Non-Portable Subscription Offerings—Mixed, Standalone Portable Subscription Offerings, Bundled Subscription Offerings, and Limited Offerings, the all-in royalty pool is amount is the greater of:

(i) The all-in revenue pool determined in Step 1 in paragraph (b)(1) of this section, and

(ii) The monthly all-in royalty floor, which is calculated by multiplying the per-subscriber minimum by the number of subscribers (or, in the case of a Bundled Subscription Offering, the number of Active Subscribers) in each month in the Accounting Period.

Offering	Per-Subscriber Minimum
<i>Standalone Portable Subscription Offering</i>	80 cents per subscriber per month
<i>Standalone Non-Portable Subscription Offering—Streaming Only</i>	40 cents per subscriber per month
<i>Bundled Subscription Offering</i>	Per-subscriber amount applicable to the Subscription Service included in the bundle

For non-subscription/ad-supported services provided free of any charge to the End User, the all-in royalty pool is amount is the greater of:

(i) The all-in revenue pool determined in Step 1 in paragraph (b)(1) of this section, and

(ii) 19.1% of TCC.

*Computation of monthly all-in royalty floors.* For purposes of this paragraph (b)(2), to determine the monthly all-in royalty floor, as applicable to any particular Offering for which a



per-subscriber minimum applies, the total number of subscriber-months for the Accounting Period, shall be calculated by taking 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 an Offering subject to subpart D. The product of the total number of subscriber-months for the Accounting Period and the specified number of cents per subscriber shall be used as the subscriber-based component of the all-in royalty floor for the Accounting Period.

(3) *Step 3: Subtract Applicable Performance Royalties.* From the amount determined in Step 2 in paragraph (b)(2) of this section, for each Offering of the Service Provider, subtract the total amount of Performance Royalties that the Service Provider has expensed or will expense pursuant to public performance licenses in connection with uses of musical works through that Offering during the Accounting Period that constitute Licensed Activity. Although this amount may be the total of the Service Provider's payments for that Offering for the Accounting Period, it will be less than the total of the Performance Royalties if the Service Provider is also engaging in public performance of musical works that does not constitute Licensed Activity. In the case in which the Service Provider is also engaging in the public performance of musical works that does not constitute Licensed Activity, the amount to be subtracted for Performance Royalties shall be the amount allocable to Licensed Activity uses through the relevant Offering as determined in relation to all uses of musical works for which the Service Provider pays Performance Royalties for the Accounting Period. The Service Provider shall make this allocation on the basis of Plays of musical works.

(4) *Step 4: Calculate the Per-Work Royalty Allocation.* This 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 in paragraph (b)(3) of this section must be allocated to each musical work used through the Offering. The allocation shall be accomplished by the mechanical licensing collective by (1) dividing the payable royalty pool determined in Step 3 for the Offering by the total number of Plays of all musical works through the Offering during the Accounting Period (other than Plays subject to subpart D of this part) to yield a per-Play allocation, (2) identifying and locating copyright owners of each musical work and shares thereof, or determining whether such work is in the public domain, and (3) multiplying the per-Play allocation by the number of Plays of each matched musical work or matched share of such work (other than Plays subject to subpart D of this part and/or Plays of public domain works) 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 provided in paragraph (c) of this section.

(c) *Overtime adjustment.* For purposes of the calculations in Step 4 in paragraph (b)(4) of this section only, for sound recordings of musical works with a playing time of over 5 minutes, adjust the number of Plays as follows.

- (1) 5:01 to 6:00 minutes—Each Play = 1.2 Plays
- (2) 6:01 to 7:00 minutes—Each Play = 1.4 Plays
- (3) 7:01 to 8:00 minutes—Each Play = 1.6 Plays
- (4) 8:01 to 9:00 minutes—Each Play = 1.8 Plays

(5) 9:01 to 10:00 minutes—Each Play = 2.0 Plays

(6) For playing times of greater than 10 minutes, continue to add 0.2 Plays for each additional minute or fraction thereof.

### **§385.22 Royalty rates and calculations – Mixed Service Bundles**

(a) *Applicable royalty.* Royalties payable by Service Providers for Mixed Service Bundles shall be calculated as provided in this section.

(b) *Rate calculation.* For each Accounting Period, 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 Mixed Service Bundle shall be determined as follows:

(1) *Step 1:* Calculate the All-In Revenue Pool for the Mixed Service Bundle. For each Accounting Period, multiply the total number of Plays of all musical works through the Mixed Service Bundle during the Accounting Period (other than Plays subject to subpart D of this part) by \$0.00085.

(2) *Step 2:* Subtract Applicable Performance Royalties. From the amount determined in Step 1 in paragraph (b)(1) of this section, for each Mixed Service Bundle of the Service Provider, subtract the total amount of Performance Royalties that the Service Provider has expensed or will expense pursuant to public performance licenses in connection with uses of musical works through that Mixed Service Bundle during the Accounting Period that constitute Licensed Activity. Although this amount may be the total of the Service Provider's payments for that Mixed Service Bundle for the Accounting Period, it will be less than the total of the Performance Royalties if the Service Provider is also engaging in public performance of musical works that does not constitute Licensed Activity. In the case in which the Service Provider is also engaging in the public performance of musical works that does not constitute Licensed Activity, the amount to be subtracted for Performance Royalties shall be the amount allocable to Licensed Activity uses through the relevant Mixed Service Bundle as determined in relation to all uses of musical works for which the Service Provider pays Performance Royalties for the Accounting Period. The Service Provider shall make this allocation on the basis of Plays of musical works.

(3) *Step 3:* Calculate the Per-Work Royalty Allocation. This 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 Mixed Service Bundle during the Accounting Period. To determine this amount, the result determined in Step 2 in paragraph (b)(2) of this section must be allocated to each musical work used through the Mixed Service Bundle. The allocation shall be accomplished by the mechanical licensing collective by (1) dividing the payable royalty pool determined in Step 2 for the Mixed Service Bundle by the total number of Plays of all musical works through the Offering during the Accounting Period (other than Plays subject to subpart D of this part) to yield a per-Play allocation, (2) identifying and locating copyright owners of each musical work and shares thereof, or determining whether such work is in the public domain, and (3) multiplying the per-Play allocation by the number of Plays of each matched musical work or matched share of such work (other than Plays subject to subpart D of this part and/or Plays of public domain works) through the Mixed Service Bundle during the Accounting Period.

## **Subpart D – Promotional Offerings, Free Trial Offerings and Certain Purchased Content Locker Services**

### **§385.30 Scope.**

This subpart establishes rates and terms of royalty payments for Promotional Offerings, Free Trial Offerings, and Certain Purchased Content Locker Services provided by subscription and non-subscription digital music Service Providers in accordance with the provisions of 17 U.S.C. 115.

### **§385.31 Royalty rates.**

(a) *Promotional Offerings.* For Promotional Offerings of audio-only Eligible Interactive Streaming and Eligible Limited Downloads of sound recordings embodying musical works that the Sound Recording Company authorizes royalty-free to the Service Provider, the royalty rate is zero.

(b) *Free Trial Offerings.* For Free Trial Offerings for which the Service Provider receives no monetary consideration, the royalty rate is zero.

(c) *Certain Purchased Content Locker Services.* For every Purchased Content Locker Service for which the Service Provider receives no monetary consideration, the royalty rate is zero.

(d) *Unauthorized use.* If a Copyright Owner or agent of the Copyright Owner sends written notice to a Licensee stating in good faith that a particular Offering subject to this subpart differs in a material manner from the terms governing that Offering, the Licensee must within 5 business days cease Streaming or otherwise making available that Copyright Owner's musical works and shall withdraw from the identified Offering any End User's access to the subject musical work.

# Exhibit A.2

## **PART 385—RATES AND TERMS FOR USE OF NONDRAMATIC MUSICAL WORKS IN THE MAKING AND DISTRIBUTING OF PHYSICAL AND DIGITAL PHONORECORDS**

### **Subpart A—Regulations of General Application**

#### **§385.1 General.**

(a) *Scope.* This part establishes rates and terms of royalty payments for the use of nondramatic musical works in making and distributing of physical and digital phonorecords in accordance with the provisions of 17 U.S.C. 115. This subpart contains regulations of general application to the making and distributing of phonorecords subject to the section 115 license.

(b) *Legal compliance.* Licensees relying on the compulsory license detailed in 17 U.S.C. 115 shall comply with the requirements of that section, the rates and terms of this part, and any other applicable regulations. This part describes rates and terms for the compulsory license only.

(c) *Interpretation.* This part is intended only to set rates and terms for situations in which the exclusive rights of a Copyright Owner are implicated and a compulsory license pursuant to 17 U.S.C. 115 is obtained. Neither the part nor the act of obtaining a license under 17 U.S.C. 115 is intended to express or imply any conclusion as to the circumstances in which a user must obtain a compulsory license pursuant to 17 U.S.C. 115.

(d) *Relationship to voluntary agreements.* The rates and terms of any license agreements entered into by Copyright Owners and Licensees relating to use of musical works within the scope of those license agreements shall apply *in lieu* of the rates and terms of this part.

#### **§385.2 Definitions.**

Unless otherwise specified, terms in this part shall have the same meaning given to them in 17 U.S.C. 115(e). For the purposes of this part, the following definitions apply:

*Accounting Period* means the monthly period specified in 17 U.S.C. 115(c)(2)(I) and in 17 U.S.C. 115(d)(4)(A)(i), and any related regulations, as applicable.

*Active Subscriber* means an End User of a Bundled Subscription Offering who has made at least one Play during the Accounting Period.

*Affiliate* means an entity controlling, controlled by, or under common control with another entity, except that an affiliate of a Sound Recording Company shall not include a Copyright Owner to the extent it is engaging in business as to musical works.

*Artificial Accounts* are accounts that are disabled or terminated for having engaged in User Manipulation or other fraudulent activity and for which any subscription revenues are refunded or otherwise not received by the Service Provider.

*Bundled Subscription Offering* means a Subscription Offering providing Licensed Activity consisting of Eligible Interactive Streams or Eligible Limited Downloads that is made available to End Users as a bundle with one or more other products or services (including products or services subject to other subparts) ~~as part of,~~ where End Users could obtain each product or

service comprising the bundle (including the Subscription Offering) on a standalone basis, and where End Users purchase the bundle in a single transaction without separate 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 an End User can buy a portable device and one-year access to a subscription service providing Licensed Activity for a single price comprising the bundle (including the Subscription Offering)).

*Copyright Owner(s)* are nondramatic musical works copyright owners who are entitled to royalty payments made under this part pursuant to the compulsory license under 17 U.S.C. 115.

*Digital Phonorecord Delivery* has the same meaning as in 17 U.S.C. 115(e)(10).

*Eligible Interactive Stream* means a Stream ~~in which the performance of the sound recording is not exempt from the sound recording performance royalty under 17 U.S.C. 114(d)(1) and does not in itself, or as a result of a program in which it is included, qualify for statutory licensing under~~ that is an interactive stream as defined in 17 U.S.C. 114115(de)(213).

*Eligible Limited Download* means a transmission of a sound recording embodying a musical work to an End User of a digital phonorecord under 17 U.S.C. 115~~(e)(3)(C) and (D)~~ that results in a Digital Phonorecord Delivery of that sound recording that is only accessible for listening for—

(1) An amount of time not to exceed one month from the time of the transmission (unless the Licensee, in lieu of retransmitting the same sound recording as another Eligible Limited Download, separately, and upon specific request of the End User made through a live network connection, reauthorizes use for another time period not to exceed one month), or in the case of a subscription plan, a period of time following the end of the applicable subscription no longer than a subscription renewal period or three months, whichever is shorter; or

(2) A number of times not to exceed 12 (unless the Licensee, in lieu of retransmitting the same sound recording as another Eligible Limited Download, separately, and upon specific request of the End User made through a live network connection, reauthorizes use of another series of 12 or fewer plays), or in the case of a subscription transmission, 12 times after the end of the applicable subscription.

*End User* means each unique person, other than Artificial Accounts, that (1) Pays a subscription fee for an Offering during the relevant Accounting Period or (2) Makes at least one Play of an Eligible Interactive Stream or Eligible Limited Download during the relevant Accounting Period.

*Family Plan* means a discounted Subscription Offering to be shared by two or more family members for a single subscription price.

*Free Trial Offering* means a subscription to a Service Provider's transmissions of sound recordings embodying musical works when

(1) Neither the Service Provider, the Sound Recording Company, the Copyright Owner, nor any person or entity acting on behalf of or *in lieu* of any of them receives any monetary consideration for the Offering;

(2) The free usage does not exceed 30 consecutive days per subscriber per two-year period;

(3) In connection with the Offering, the Service Provider is operating with appropriate musical license authority and complies with the recordkeeping requirements in § 385.4;

(4) Upon receipt by the Service Provider of written notice from the Copyright Owner or its agent stating in good faith that the Service Provider is in a material manner operating without appropriate license authority from the Copyright Owner under 17 U.S.C. 115, the Service Provider shall within 5 business days cease transmission of the sound recording embodying that musical work and withdraw it from the repertoire available as part of a Free Trial Offering;

(5) The Free Trial Offering is made available to the End User free of any charge; and

(6) The Service Provider offers the End User periodically during the free usage an opportunity to subscribe to a non-free Offering of the Service Provider.

*GAAP* means U.S. Generally Accepted Accounting Principles in effect at the relevant time, except that if the U.S. Securities and Exchange Commission permits or requires entities with securities that are publicly traded in the U.S. to employ International Financial Reporting Standards in lieu of Generally Accepted Accounting Principles, then that entity may employ International Financial Reporting Standards as “GAAP” for purposes of this subpart.

*Licensee* means any entity availing itself of the compulsory license under 17 U.S.C. 115 to use copyrighted musical works in the making or distributing of physical or digital phonorecords.

*Licensed Activity*, ~~as the term is used in subpart B of this part, means delivery of musical works, under voluntary or statutory license, via physical phonorecords and Digital Phonorecord Deliveries in connection with Permanent Downloads, Ringtones, and Music Bundles; and,~~ as the term is used in subparts C and D of this part, means ~~delivery of musical works~~covered activity, under voluntary or statutory license, ~~via Digital Phonorecord Deliveries in connection with the form of Eligible Interactive Streams, Eligible Limited Downloads, Limited Offerings, mixed Bundles, and Locker Services~~and Restricted Downloads.

*Limited Offering* means a Subscription Offering providing Licensed Activity consisting of Eligible Interactive Streams or Eligible Limited Downloads for which—

(1) An End User cannot choose to listen to a particular sound recording (*i.e.*, the Service Provider does not provide Eligible Interactive Streams of individual recordings that are on-demand, and Eligible Limited Downloads are rendered only as part of programs rather than as individual recordings that are on-demand); or

(2) The particular sound recordings available to the End User over a period of time are substantially limited relative to Service Providers in the marketplace providing access to a comprehensive catalog of recordings (*e.g.*, a product limited to a particular genre or permitting Eligible Interactive Streaming only from a monthly playlist consisting of a limited set of recordings).

*Locker Service* means an Offering providing digital access to sound recordings of musical works in the form of Eligible Interactive Streams, Permanent Downloads, Restricted Downloads or Ringtones where the Service Provider has reasonably determined that the End User has purchased or is otherwise in possession of the subject phonorecords of the applicable sound recording prior to the End User's first request to use the sound recording via the Locker Service. The term Locker Service does not mean any part of a Service Provider's products otherwise meeting this definition, but as to which the Service Provider has not obtained a section 115 license.

*Mixed Service Bundle* means ~~one or more of Permanent Downloads, Ringtones, Locker Services, an Offering providing Licensed Activity consisting of Eligible Interactive Streams or Eligible Limited Offerings a Service Provider delivers to End Users together~~ Downloads that meets all of the following criteria:

(1) The Offering is made available to End Users only in combination (i.e., the Offering is not available on a standalone basis) with one or more non-~~music services (e.g., internet access service, mobile phone service)~~ audio or non-~~music~~ audiovisual products (e.g., a ~~telephone device~~ or services (e.g., two-day shipping) of more than token value and provided to users as part of one transaction for which End Users make a payment without receiving pricing for the ~~music services or music products~~ Offering separate from the ~~whole~~ product(s) or service(s) with which it is made available.

(2) The Offering is made available by a Service Provider that also offers End Users a separate, standalone Subscription Offering.

(3) The Offering offers End Users less functionality relative to that separate, standalone Subscription Offering. Such lesser functionality may include, but is not limited to, limitations on the ability of End Users to choose to listen to specific sound recordings on request or a limited catalog of sound recordings.

*Music Bundle* means two or more of physical phonorecords, Permanent Downloads or Ringtones delivered as part of one transaction (e.g., download plus ringtone, CD plus downloads). In the case of Music Bundles containing one or more physical phonorecords, the Service Provider must sell the physical phonorecord component of the Music Bundle under a single catalog number, and the musical works embodied in the Digital Phonorecord Delivery configurations in the Music Bundle must be the same as, or a subset of, the musical works embodied in the physical phonorecords; provided that when the Music Bundle contains a set of Digital Phonorecord Deliveries sold by the same Sound Recording Company under substantially the same title as the physical phonorecord (e.g., a corresponding digital album), the Service Provider may include in the same bundle up to 5 sound recordings of musical works that are included in the stand-alone version of the set of digital phonorecord deliveries but not included on the physical phonorecord. In addition, the Service Provider must permanently part with possession of the physical phonorecord or phonorecords it sells as part of the Music Bundle. In the case of Music Bundles composed solely of digital phonorecord deliveries, the number of digital phonorecord deliveries in either configuration cannot exceed 20, and the musical works embodied in each configuration in the Music Bundle must be the same as, or a subset of, the musical works embodied in the configuration containing the most musical works.



*Non-Licensed Work* means either (1) a work where musical works are not included as part of the work, or are not the main focus of the work (e.g., podcasts, audiobooks, and spoken word recordings) or (2) a work where music is included but is not eligible to be licensed under section 115 (e.g., music videos).

*Offering* means a Service Provider's engagement in Licensed Activity covered by subparts C and D of this part.

*Paid Locker Service* means a Locker Service for which the End User pays a fee to the Service Provider.

*Performance Royalty* means the license fee payable for the right to perform publicly musical works in any of the forms covered by subparts C and D of this part.

*Permanent Download* has the same meaning as in 17 U.S.C. 115(e)(24).

*Play* means an Eligible Interactive Stream, or a play of an Eligible Limited Download, lasting 30 seconds or more and, if a track lasts in its entirety under 30 seconds, an Eligible Interactive Stream or play of an Eligible Limited Download of the entire duration of the track. A Play excludes an Eligible Interactive Stream, or a play of an Eligible Limited Download ~~that has not been initiated or requested by a human user. If a single End User plays the same track more than 50 straight times, all plays after play 50, caused by User Manipulation.~~ For purposes of the definition of "Play" only, "Eligible Interactive Stream" and "Eligible Limited Download" shall each be deemed not defined to have been initiated or requested by a human user include a sound recording embodying a musical work in the public domain, if such sound recording would otherwise qualify as an Eligible Interactive Stream or Eligible Limited Download if the musical work was not in the public domain.

*Promotional Offering* means a digital transmission of a sound recording, in the form of an Eligible Interactive Stream or an Eligible Limited Download, embodying a musical work, the primary purpose of which is to promote the sale or other paid use of that sound recording or to promote the artist performing on that sound recording and not to promote or suggest promotion or endorsement of any other good or service and

(1) A Sound Recording Company is lawfully distributing the sound recording through established retail channels or, if the sound recording is not yet released, the Sound Recording Company has a good faith intention to lawfully distribute the sound recording or a different version of the sound recording embodying the same musical work;

~~(2) For Eligible Interactive Streaming or Eligible Limited Downloads, the Sound Recording Company requires a writing signed by an authorized representative of the Service Provider representing that the Service Provider is operating with appropriate musical works license authority and that the Service Provider is in compliance with the recordkeeping requirements of § 385.4;~~

~~(3)~~ For Eligible Interactive Streaming of segments of sound recordings not exceeding 90 seconds, the Sound Recording Company delivers or authorizes delivery of the segments for promotional purposes and neither the Service Provider nor the Sound Recording

Company creates or uses a segment of a sound recording in violation of 17 U.S.C. 106(2) or 115(a)(2);

(43) The Promotional Offering is made available to an End User free of any charge; and

(54) The Service Provider provides to the End User at the same time as the Promotional Offering stream an opportunity to purchase the sound recording or the Service Provider periodically offers End Users the opportunity to subscribe to a paid Offering of the Service Provider.

*Purchased Content Locker Service* means a Locker Service made available to End User purchasers of Permanent Downloads, Ringtones, or physical phonorecords at no incremental charge above the otherwise applicable purchase price of the Permanent Downloads, Ringtones, or physical phonorecords acquired from a qualifying seller. With a Purchased Content Locker Service, an End User may receive one or more additional phonorecords of the purchased sound recordings of musical works in the form of Permanent Downloads or Ringtones at the time of purchase, or subsequently have digital access to the purchased sound recordings of musical works in the form of Eligible Interactive Streams, additional Permanent Downloads, Restricted Downloads, or Ringtones.

(1) A *qualifying seller* for purposes of this definition is the entity operating the Service Provider, including Affiliates, predecessors, or successors in interest, or—

(i) In the case of Permanent Downloads or Ringtones, a seller having a legitimate connection to the locker service provider pursuant to one or more written agreements (including that the Purchased Content Locker Service and Permanent Downloads or Ringtones are offered through the same third party); or

(ii) In the case of physical phonorecords,

(A) The seller of the physical phonorecord has an agreement with the Purchased Content Locker Service provider establishing an integrated offer that creates a consumer experience commensurate with having the same Service Provider both sell the physical phonorecord and offer the integrated locker service; or

(B) The Service Provider has an agreement with the entity offering the Purchased Content Locker Service establishing an integrated offer that creates a consumer experience commensurate with having the same Service Provider both sell the physical phonorecord and offer the integrated locker service.

*Relevant Page* means an electronic display (for example, a web page or screen) from which a Service Provider's Offering [providing Licensed Activity](#) consisting of Eligible Interactive Streams or Eligible Limited Downloads is directly available to End Users, but only when the Offering and content directly relating to the Offering (e.g., an image of the artist, information about the artist or album, reviews, credits, and music player controls) comprises 75% or more of the space on that display, excluding any space occupied by advertising. [For avoidance of doubt, content relating to the sale of Permanent Downloads and physical phonorecords is not content that directly relates to an Offering for purposes of determining whether an electronic display is a Relevant Page.](#) An Offering is directly available to End Users from a page if End

Users can receive sound recordings of musical works (in most cases this will be the page on which the Eligible Limited Download or Eligible Interactive Stream takes place).

*Restricted Download* means a Digital Phonorecord Delivery in a form that cannot be retained and replayed on a permanent basis. The term Restricted Download includes an Eligible Limited Download.

*Ringtone* means a phonorecord of a part of a musical work distributed as a Digital Phonorecord Delivery in a format to be made resident on a telecommunications device for use to announce the reception of an incoming telephone call or other communication or message or to alert the receiver to the fact that there is a communication or message.

*Service Provider* means that entity governed by subparts C and D of this part, which might or might not be the Licensee, that with respect to the section 115 license—

(1) Contracts with or has a direct relationship with End Users or otherwise controls the content made available to End Users;

(2) Is able to report fully on Service Provider Revenue from the provision of musical works embodied in phonorecords to the public, and to the extent applicable, verify Service Provider Revenue through an audit; and

(3) Is able to report fully on its usage of musical works, or procure such reporting and, to the extent applicable, verify usage through an audit.

*Service Provider Revenue.* (1) Subject to paragraphs (2) through (5) of this definition and subject to GAAP, *Service Provider Revenue* shall mean, for each Offering subject to § 385.21 of this Part:

(i) All revenue from End Users recognized by a Service Provider ~~for~~ and directly derived from the provision of ~~any~~ the Offering;

(ii) All revenue recognized by a Service Provider by way of sponsorship and commissions as a result of the inclusion of third-party “in-stream” or “in-download” advertising as part of ~~any~~ the Offering, *i.e.*, advertising placed immediately at the start or end of, or during the actual delivery of, a musical work, by way of Eligible Interactive Streaming or Eligible Limited Downloads, except that notwithstanding the foregoing, and with respect to advertisements or sponsorships that are placed between content that constitutes Licensed Activity and content that constitutes non-Licensed Activity (e.g., an advertisement placed between the performance of a sound recording of a musical work and the performance of Non-Licensed Work), only 50% of revenue from such advertising will be included; and

(iii) All revenue recognized by the Service Provider, including by way of sponsorship and commissions, as a result of the placement of third-party advertising on a Relevant Page of the Service Provider or on any page that ~~directly follows a Relevant Page leading up to and including the Eligible Limited Download or Eligible Interactive Stream of a musical work~~ is accessed automatically (such as a pop-up window) when an End User interacts with a Relevant Page; provided that, in case more than one Offering is available to End Users from a Relevant Page, any advertising revenue shall be allocated between or among the Service Providers on the basis of the relative amounts of the page they occupy.

(2) Service Provider Revenue shall:

(i) Include revenue recognized by the Service Provider, or by any associate, Affiliate, agent, or representative of the Service Provider *in lieu* of its being recognized by the Service Provider; ~~and~~

(ii) Include the value of any barter or other nonmonetary consideration, to the extent recognized by the Service Provider as revenue under GAAP; and

(iii) Except as expressly detailed in this part, not be subject to any other deduction or set-off other than for Third-Party Fees and refunds to End Users for ~~Offerings~~the Offering that the End Users were unable to use because of technical faults in the Offering or other bona fide refunds or credits issued to End Users in the ordinary course of business.

(3) Service Provider Revenue shall exclude revenue derived by the Service Provider solely in connection with activities other than ~~Offering(s), whereas~~Licensed Activity, including delivery of Non-Licensed Work. For the avoidance of doubt, in the case of advertising or sponsorship revenue ~~derived in connection with any Offering(s) shall be treated as provided in paragraphs,~~ Service Provider Revenue shall (1) exclude revenue from advertisements or sponsorships that are embedded or served within a phonorecord that constitutes Non-Licensed Work and (2) and (4) include 50% of this definition the revenue subject to the exception set out in paragraph (1)(ii) above.

(4) For purposes of paragraph (1) of this definition, advertising or sponsorship revenue shall be reduced by the actual cost of obtaining that revenue, not to exceed 15%.

(5) In instances in which a Service Provider provides ~~an~~a Bundled Subscription Offering to End Users as part of the same transaction with one or more other products or services that are not Licensed Activities, then, the revenue from End Users deemed to be recognized by the Service Provider for the Bundled Subscription Offering for the purpose of paragraph (1) of this definition shall be ~~the revenue recognized from End Users for the bundle less the~~calculated as follows:

(i) Step 1: The price of the Bundled Subscription Offering shall be divided by the sum of the standalone prices of each of the products or services (including the Subscription Offering) included in the Bundled Subscription Offering.

(ii) Step 2: The standalone published price for End Users for each of the other component(s) of the bundle; provided that, if there is no standalone published price for a component of the bundle, then of the Subscription Offering included as part of the Bundled Subscription Offering shall be multiplied by the percentage calculated in Step 1.

(6) In instances in which a Service Provider makes a product or service (including a product or service subject to another subpart) available for a separate charge to End Users who also purchase a Subscription Offering (including a Bundled Subscription Offering), where End Users could not obtain that product or service on a standalone basis (*i.e.*, without also purchasing the Subscription Offering (including a Bundled Subscription Offering), the revenue from End Users deemed to be recognized by the Service Provider for the Subscription Offering for the purpose of paragraph (1) of this definition shall ~~use~~exclude the ~~average standalone published price for End Users~~separate charge for the ~~most closely comparable~~ product or

service ~~in the U.S. or, if more than one comparable exists, the average of standalone prices for comparables.~~

*Sound Recording Company* means a person or entity that:

- (1) Is a copyright owner of a sound recording embodying a musical work;
- (2) In the case of a sound recording of a musical work fixed before February 15, 1972, has rights to the sound recording, under chapter 14 of title 17, United States Code, that are equivalent to the rights of a copyright owner of a sound recording of a musical work under title 17, United States Code;
- (3) Is an exclusive Licensee of the rights to reproduce and distribute a sound recording of a musical work; or
- (4) Performs the functions of marketing and authorizing the distribution of a sound recording of a musical work under its own label, under the authority of ~~the Copyright Owner of the sound recording~~ a person identified in paragraph (1) through (3) of this section.

*Standalone Non-Portable Subscription Offering—Streaming Only* means a Subscription Offering through which an End User can listen to sound recordings only in the form of Eligible Interactive Streams and only from a non-portable device to which those Eligible Interactive Streams are originally transmitted while the device has a live network connection.

*Standalone Non-Portable Subscription Offering—Mixed* means a Subscription Offering through which an End User can listen to sound recordings either in the form of Eligible Interactive Streams or Eligible Limited Downloads but only from a non-portable device to which those Eligible Interactive Streams or Eligible Limited Downloads are originally transmitted.

*Standalone Portable Subscription Offering* means a Subscription Offering through which an End User can listen to sound recordings in the form of Eligible Interactive Streams or Eligible Limited Downloads from a portable device.

*Stream* means the digital transmission of a sound recording of a musical work to an End User—

- (1) To allow the End User to listen to the sound recording, while maintaining a live network connection to the transmitting service, substantially at the time of transmission, except to the extent that the sound recording remains accessible for future listening from a Streaming Cache Reproduction;
- (2) Using technology that is designed such that the sound recording does not remain accessible for future listening, except to the extent that the sound recording remains accessible for future listening from a Streaming Cache Reproduction; and
- (3) That is subject to licensing as a public performance of the musical work.

*Streaming Cache Reproduction* means a reproduction of a sound recording embodying a musical work made on a computer or other receiving device by a Service Provider solely for the purpose of permitting an End User who has previously received a Stream of that sound recording to play the sound recording again from local storage on the computer or other device

rather than by means of a transmission; provided that the End User is only able to do so while maintaining a live network connection to the Service Provider, and the reproduction is encrypted or otherwise protected consistent with prevailing industry standards to prevent it from being played in any other manner or on any device other than the computer or other device on which it was originally made.

*Student Plan* means a discounted Subscription Offering available on a limited basis to students.

*Subscription Offering* means an Offering, other than a Mixed Service Bundle, for which End Users are required to pay a fee to have access to the Offering for defined subscription periods of 3 years or less (in contrast to, for example, a service where the basic charge to users is a payment per download or per play), whether the End User makes payment for access to the Offering on a standalone basis or as part of a bundle with one or more other products or services.

*Third-Party Fees* means amounts charged by or payable to third parties (e.g., carriers) in connection with a Subscription Offering or Mixed Service Bundle, not to exceed 10% of the subscription fees paid by customers to a Service Provider for access to the Subscription Offering or Mixed Service Bundle; and amounts charged by or payable to app stores in connection with a Subscription Offering or Mixed Service Bundle, not to exceed 30% of the subscription fees paid by customers to Service Provider for access to the Subscription Offering or Mixed Service Bundle.

*Total Cost of Content* or *TCC* means the total amount expended by a Service Provider or any of its Affiliates in accordance with GAAP for rights to make Eligible Interactive Streams or Eligible Limited Downloads of a musical work embodied in a sound recording through the Service Provider for the Accounting Period, which amount shall equal the Applicable Consideration for those rights at the time the Applicable Consideration is properly recognized as an expense under GAAP. As used in this definition, "Applicable Consideration" means anything of value given for the identified rights to undertake the Licensed Activity, including, without limitation, ownership equity, monetary advances, barter or any other monetary and/or nonmonetary consideration, whether that consideration is conveyed via a single agreement, multiple agreements and/or agreements that do not themselves authorize the Licensed Activity but nevertheless provide consideration for the identified rights to undertake the Licensed Activity, and including any value given to an Affiliate of a Sound Recording Company for the rights to undertake the Licensed Activity. Value given to a Copyright Owner of musical works that is controlling, controlled by, or under common control with a Sound Recording Company for rights to undertake the Licensed Activity shall not be considered value given to the Sound Recording Company. ~~Notwithstanding~~ For the foregoing avoidance of doubt, Applicable Consideration shall not include in-kind promotional consideration given to a Sound Recording Company (or Affiliate thereof) that is used to promote the sale or paid use of sound recordings embodying musical works or the paid use of music services through which sound recordings embodying musical works are available where the in-kind promotional consideration is given in connection with a use that qualifies for licensing under 17 U.S.C. 115.

*User Manipulation* means any behavior that artificially distorts the number of Plays or number of transmissions of Non-Eligible Works by fraudulent means, including but not limited to the use of manual (e.g., click farms) or automated (e.g., bots) means.



### **§385.3 ~~Late payments~~ Making payment of royalty fees.**

**A**

(a) *Payment to the mechanical licensing collective.* A Licensee must make the royalty payments owed under this part to the mechanical licensing collective, which is the collective designated by the Copyright Royalty Board to collect and distribute royalties under this part.

(b) *Late fees.* Except as otherwise specified in this subparagraph (b), a Licensee shall pay ~~an annual~~ late fee ~~of 1.5% per month, or the highest lawful rate, whichever is lower~~ equal to the Internal Revenue Service underpayment rate specified in 26 U.S.C. § 6621(a)(2), to be applied as specified in 26 U.S.C. § 6622(a), for any payment owed to a Copyright Owner and remaining unpaid after the due date established in 17 U.S.C. 115(c)(2)(I) or 17 U.S.C. 115(d)(4)(A)(i), as applicable and detailed in part 210 of this title. Late fees shall not be owed for any adjustments to monthly reports of usage made in accordance with section 210.27(f) or (k), or for any adjustments to any annual reports of usage made in accordance with section 210.27(k)(6)(i), (ii) or (v). In the case of underpayments found after an audit pursuant to 17 U.S.C. 115(d)(4)(D), or an audit referenced in section 210.27(k)(6)(iv), interest on the underpayment shall be calculated at the post-judgment rate specified in 28 U.S.C. § 1961, accrued from and after the date the payment was originally due.

(1) *Accrual of late fees.* Late fees shall accrue from the due date until the ~~Copyright Owner~~ mechanical licensing collective receives payment.

### **§385.4 ~~Recordkeeping for promotional or free trial non-royalty-bearing uses.~~**

~~(a) — *General.* A Licensee transmitting ~~a sound recording embodying a musical work~~ subject to section 115 and subparts C and D of this part and claiming a Promotional or Free Trial Offering zero royalty rate shall keep complete and accurate contemporaneous written records of making or authorizing Eligible Interactive Streams or Eligible Limited Downloads, including the sound recordings and musical works involved, the artists, the release dates of the sound recordings, a brief statement of the promotional activities authorized, the identity of the Offering or Offerings for which the zero rate is authorized (including the internet address if applicable), and the beginning and end date of each zero rate Offering.~~

~~(b) — *Retention of records.* A Service Provider claiming zero rates shall maintain the records required by this section for no less time than the Service Provider maintains records of royalty-bearing uses involving the same types of Offerings in the ordinary course of business, but in no event for fewer than five years from the conclusion of the zero rate Offerings to which they pertain.~~

~~(c) — *Availability of records.* If a Copyright Owner or agent requests information concerning zero rate Offerings, the Licensee shall respond to the request within an agreed, reasonable time.~~

**~~Subpart B—Physical Phonorecord Deliveries,  
Permanent Downloads, Ringtones, and Music Bundles.~~**

**~~§385.10 Scope~~**

~~This subpart establishes rates and terms of royalty payments for making and distributing phonorecords, including by means of Digital Phonorecord Deliveries, in accordance with the provisions of 17 U.S.C. 115.~~

**~~§385.11 Royalty rates.~~**

~~(a) — *Physical phonorecord deliveries and Permanent Downloads.* For every physical phonorecord and Permanent Download the Licensee makes and distributes or authorizes to be made and distributed, the royalty rate payable for each work embodied in the phonorecord or Permanent Download shall be either 9.1 cents or 1.75 cents per minute of playing time or fraction thereof, whichever amount is larger.~~

~~(b) — *Ringtones.* For every Ringtone the Licensee makes and distributes or authorizes to be made and distributed, the royalty rate payable for each work embodied therein shall be 24 cents.~~

~~(c) — *Music Bundles.* For a Music Bundle, the royalty rate for each element of the Music Bundle shall be the rate required under paragraph (a) or (b) of this section, as appropriate.~~

(2) *Waiver of late fees.* The mechanical licensing collective may waive or lower late fees for immaterial or inadvertent failures of a Licensee to make a timely payment.

**Subpart C—Eligible Interactive Streaming, Eligible Limited Downloads, Limited Offerings, Mixed Service Bundles, Bundled Subscription Offerings, Locker Services, and Other Delivery Configurations**

**§385.20 Scope.**

This subpart establishes rates and terms of royalty payments for subscription and non-subscription Offerings providing Licensed Activity consisting of Eligible Interactive Streams and Eligible Limited Downloads, and Restricted Downloads of musical works, ~~and other reproductions or distributions of musical works through Limited Offerings, Mixed Service Bundles, Bundled Subscription Offerings, Paid Locker Services, and Purchased Content Locker Services provided through subscription and nonsubscription~~ that is made available by digital music Service Providers in accordance with the provisions of 17 U.S.C. 115, exclusive of Offerings subject to subpart D of this part.

**§385.21 Royalty rates and calculations – Other than Mixed Service Bundles**

(a) *Applicable royalty.* ~~Licensees that engage in Licensed Activity~~ Royalties payable by Service Providers for Offerings covered by this subpart ~~pursuant to 17 U.S.C. 115~~ shall ~~pay royalties therefor that are~~ be calculated as provided in this section, subject to the all-in royalty floors for specific types of services described in subsection (b) of this subpart, provided,



however, that ~~Promotional Offerings, Free Trial Offerings, and Certain Purchased Content Locker Services~~ Mixed Service Bundles shall ~~instead~~ be subject to the royalty rates provided in subpart D section 385.22 of this part.

(b) *Rate calculation.* Royalty payments for Licensed Activity in this subpart shall be calculated as provided in this paragraph (b). If a Service Provider ~~includes~~ offers different Offerings, royalties must be calculated separately with respect to each Offering taking into consideration Service Provider Revenue and expenses associated with each Offering. For purposes of calculating rates pursuant to this section and all of its subparts, a Family Plan shall be treated as 1.5 subscribers per month, prorated in the case of a Family Plan in effect for only part of a calendar month and a Student Plan shall be treated as 0.50 subscribers per month, prorated in the case of a Student Plan End User who subscribed for only part of a calendar month. Artificial Accounts shall not be counted as subscribers.

(1) *Step 1:* Calculate the All-In Royalty Revenue Pool for the Offering. For each Accounting Period, the all-in royalty revenue pool for ~~all Offerings in this subpart (other than Plays)~~ each Offering subject to ~~subpart D of this part~~ section shall be ~~the greater result of (A) multiplying the applicable percent of Service Provider Revenue as set forth in in Column A of the table below and (B) the applicable percent of TCC or TCC amount as set forth in Column B of the table by 10.54%.~~

(2) *Step 2:* Determine the All-In Royalty Pool. For each Standalone Non-Portable Subscription Offerings—Streaming Only, Standalone Non-Portable Subscription Offerings—Mixed, Standalone Portable Subscription Offerings, Bundled Subscription Offerings, and Limited Offerings, the all-in royalty pool is amount is the greater of:

(i) The all-in revenue pool determined in Step 1 in paragraph (b)(1) of this section,  
and

(ii) The monthly all-in royalty floor, which is calculated by multiplying the per-subscriber minimum by the number of subscribers (or, in the case of a Bundled Subscription Offering, the number of Active Subscribers) in each month in the Accounting Period.

Offering	Column-A  % of Service Provider Revenue  <u>Per-Subscriber Minimum</u>	Column-B  TCC % or TCC Amount
<u>Standalone Portable Subscription Offering</u>	<u>80 cents per subscriber per month</u>	
Standalone Non-Portable Subscription Offering—Streaming Only	10.5 %	The lesser of 22 % of TCC for the Accounting Period or <del>50</del> 40 cents per subscriber per month
<del>Standalone Non-Portable Subscription Offering—Mixed</del>	10.5 %	The lesser of 21 % of TCC for the Accounting Period or 50 cents per subscriber per month
<del>Standalone Portable Subscription Offering</del>	10.5 %	The lesser of 21 % of TCC for the Accounting Period or 80 cents per subscriber per month
<u>Bundled Subscription</u>	<u>10.5 % Per-subscriber</u>	

Offering	Column A	Column B
	% of Service Provider Revenue	TCC % or TCC Amount
	<u>Per-Subscriber Minimum</u>	

Offering	amount applicable to the Subscription Service included in the bundle	21 % of TCC for the Accounting Period
Mixed Service Bundle	41.35%	21% of TCC for the Accounting Period
Limited Offering	40.5%	21% of TCC for the Accounting Period
Paid Locker Service	42%	20.65% of TCC for the Accounting Period
Purchased Content Locker Service	42%	22% of TCC for the Accounting Period
Free nonsubscription/ad-supported services free of any charge to the End User	40.5%	22% of TCC for the Accounting Period

~~(2)~~ Step 2 For non-subscription/ad-supported services provided free of any charge to the End User, the all-in royalty pool is amount is the greater of:

(i) The all-in revenue pool determined in Step 1 in paragraph (b)(1) of this section,  
and

(ii) 19.1% of TCC.

Computation of monthly all-in royalty floors. For purposes of this paragraph (b)(2), to determine the monthly all-in royalty floor, as applicable to any particular Offering for which a per-subscriber minimum applies, the total number of subscriber-months for the Accounting Period, shall be calculated by taking 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 an Offering subject to subpart D. The product of the total number of subscriber-months for the Accounting Period and the specified number of cents per subscriber shall be used as the subscriber-based component of the all-in royalty floor for the Accounting Period.

(3) Step 3: Subtract Applicable Performance Royalties. From the amount determined in ~~step 1 in paragraph (b)(1)~~ Step 2 in paragraph (b)(2) of this section, for each Offering of the Service Provider, subtract the total amount of Performance ~~Royalty~~ Royalties that the Service Provider has expensed or will expense pursuant to public performance licenses in connection with uses of musical works through that Offering during the Accounting Period that constitute Licensed Activity. Although this amount may be the total of the Service Provider's payments for that Offering for the Accounting Period, it will be less than the total of the Performance Royalties if the Service Provider is also engaging in public performance of musical works that does not constitute Licensed Activity. In the case in which the Service Provider is also engaging in the public performance of musical works that does not constitute Licensed Activity, the amount to be subtracted for Performance Royalties shall be the amount allocable to

Licensed Activity uses through the relevant Offering as determined in relation to all uses of musical works for which the Service Provider pays Performance Royalties for the Accounting Period. The Service Provider shall make this allocation on the basis of Plays of musical works or, where per-play information is unavailable because of bona fide technical limitations as described in step 3 in paragraph (b)(3) of this section, using the same alternative methodology as provided in step 4.

(3) ~~Step 3: Determine the Payable Royalty Pool. The payable royalty pool 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 in paragraph (b)(2) of this section, and~~

The royalty floor (if any) set forth in the following table:

Offering	Royalty Floor
<del>Standalone Non-Portable Subscription Offering—Streaming Only</del>	15 cents per subscriber per month
<del>Standalone Non-Portable Subscription Offering—Mixed</del>	30 cents per subscriber per month
<del>Standalone Portable Subscription Offering</del>	50 cents per subscriber per month
<del>Bundled Subscription Offering</del>	25 cents per month for each Active Subscriber during that month
<del>Mixed Service Bundle</del>	n/a
<del>Limited Offering</del>	n/a
<del>Paid Locker Service</del>	n/a
<del>Purchased Content Locker Service</del>	n/a
<del>Free nonsubscription/ad-supported services free of any charge to the End User</del>	n/a

~~Computation of royalty floors. For purposes of this paragraph (b)(3), to determine the royalty floor, as applicable to any particular Offering, the total number of subscriber-months for the Accounting Period, shall be calculated by taking 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 an Offering subject to subpart D, except in the case of a Bundled Subscription Offering where subscriber months shall be determined with respect to Active Subscribers. 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 royalty floor for the Accounting Period.~~

(4) *Step 4: Calculate the Per-Work Royalty Allocation.* This 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~~Step 3 in paragraph (b)(3) of this section must be allocated to each musical work used through the Offering. The allocation shall be accomplished by the mechanical licensing collective by (1) dividing the payable royalty pool determined in ~~step~~Step 3 for the Offering by the total number of Plays of all musical works through the Offering during the Accounting Period (other than Plays subject to subpart D of this part) to yield a per-Play allocation, and (2) identifying and locating copyright owners of each musical work and shares thereof, or determining whether such work is in the public domain, and (3) multiplying ~~that result~~the per-Play allocation by the number of Plays of each matched musical work or matched share of such work (other than Plays subject to subpart D of this part and/or Plays of public domain works) through the Offering during the Accounting Period. For purposes of determining the per-work royalty allocation in all calculations under this ~~step~~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 provided in paragraph (c) of this section.

~~Notwithstanding the foregoing, if the Service Provider is not capable of tracking Play information because of bona fide limitations of the available technology for Offerings of that nature or of devices useable with the Offering, the per-work royalty allocation may instead be accomplished in a manner consistent with the methodology used for making royalty payment allocations for the use of individual sound recordings.~~

(~~a~~c) *Overtime adjustment.* For purposes of the calculations in ~~step~~Step 4 in ~~this~~ paragraph (b)(4) of this section only, for sound recordings of musical works with a playing time of over 5 minutes, adjust the number of Plays as follows.

- (1) 5:01 to 6:00 minutes—Each Play = 1.2 Plays
- (2) 6:01 to 7:00 minutes—Each Play = 1.4 Plays
- (3) 7:01 to 8:00 minutes—Each Play = 1.6 Plays
- (4) 8:01 to 9:00 minutes—Each Play = 1.8 Plays
- (5) 9:01 to 10:00 minutes—Each Play = 2.0 Plays

(6) For playing times of greater than 10 minutes, continue to add 0.2 Plays for each additional minute or fraction thereof.

## **§385.22 Royalty rates and calculations – Mixed Service Bundles**

(a) *Applicable royalty.* Royalties payable by Service Providers for Mixed Service Bundles shall be calculated as provided in this section.

(b) Rate calculation. For each Accounting Period, 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 Mixed Service Bundle shall be determined as follows:

(1) Step 1: Calculate the All-In Revenue Pool for the Mixed Service Bundle. For each Accounting Period, multiply the total number of Plays of all musical works through the Mixed Service Bundle during the Accounting Period (other than Plays subject to subpart D of this part) by \$0.00085.

(2) Step 2: Subtract Applicable Performance Royalties. From the amount determined in Step 1 in paragraph (b)(1) of this section, for each Mixed Service Bundle of the Service Provider, subtract the total amount of Performance Royalties that the Service Provider has expensed or will expense pursuant to public performance licenses in connection with uses of musical works through that Mixed Service Bundle during the Accounting Period that constitute Licensed Activity. Although this amount may be the total of the Service Provider's payments for that Mixed Service Bundle for the Accounting Period, it will be less than the total of the Performance Royalties if the Service Provider is also engaging in public performance of musical works that does not constitute Licensed Activity. In the case in which the Service Provider is also engaging in the public performance of musical works that does not constitute Licensed Activity, the amount to be subtracted for Performance Royalties shall be the amount allocable to Licensed Activity uses through the relevant Mixed Service Bundle as determined in relation to all uses of musical works for which the Service Provider pays Performance Royalties for the Accounting Period. The Service Provider shall make this allocation on the basis of Plays of musical works.

(3) Step 3: Calculate the Per-Work Royalty Allocation. This 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 Mixed Service Bundle during the Accounting Period. To determine this amount, the result determined in Step 2 in paragraph (b)(2) of this section must be allocated to each musical work used through the Mixed Service Bundle. The allocation shall be accomplished by the mechanical licensing collective by (1) dividing the payable royalty pool determined in Step 2 for the Mixed Service Bundle by the total number of Plays of all musical works through the Offering during the Accounting Period (other than Plays subject to subpart D of this part) to yield a per-Play allocation, (2) identifying and locating copyright owners of each musical work and shares thereof, or determining whether such work is in the public domain, and (3) multiplying the per-Play allocation by the number of Plays of each matched musical work or matched share of such work (other than Plays subject to subpart D of this part and/or Plays of public domain works) through the Mixed Service Bundle during the Accounting Period.

#### **Subpart D – Promotional Offerings, Free Trial Offerings and Certain Purchased Content Locker Services**

##### **§385.30 Scope.**

This subpart establishes rates and terms of royalty payments for Promotional Offerings, Free Trial Offerings, and Certain Purchased Content Locker Services provided by subscription and non-subscription digital music Service Providers in accordance with the provisions of 17 U.S.C. 115.

### **§385.31 Royalty rates.**

(a) *Promotional Offerings.* For Promotional Offerings of audio-only Eligible Interactive Streaming and Eligible Limited Downloads of sound recordings embodying musical works that the Sound Recording Company authorizes royalty-free to the Service Provider, the royalty rate is zero.

(b) *Free Trial Offerings.* For Free Trial Offerings for which the Service Provider receives no monetary consideration, the royalty rate is zero.

(c) *Certain Purchased Content Locker Services.* For every Purchased Content Locker Service for which the Service Provider receives no monetary consideration, the royalty rate is zero.

(d) *Unauthorized use.* If a Copyright Owner or agent of the Copyright Owner sends written notice to a Licensee stating in good faith that a particular Offering subject to this subpart differs in a material manner from the terms governing that Offering, the Licensee must within 5 business days cease Streaming or otherwise making available that Copyright Owner's musical works and shall withdraw from the identified Offering any End User's access to the subject musical work.

# Exhibit A.3

## PART 385—RATES AND TERMS FOR USE OF NONDRAMATIC MUSICAL WORKS IN THE MAKING AND DISTRIBUTING OF PHYSICAL AND DIGITAL PHONORECORDS

### Subpart A—Regulations of General Application

#### §385.1 General.

(a) *Scope.* This part establishes rates and terms of royalty payments for the use of nondramatic musical works in making and distributing of physical and digital phonorecords in accordance with the provisions of 17 U.S.C. 115. This subpart contains regulations of general application to the making and distributing of phonorecords subject to the section 115 license.

(b) *Legal compliance.* Licensees relying on the compulsory license detailed in 17 U.S.C. 115 shall comply with the requirements of that section, the rates and terms of this part, and any other applicable regulations. This part describes rates and terms for the compulsory license only.

(c) *Interpretation.* This part is intended only to set rates and terms for situations in which the exclusive rights of a Copyright Owner are implicated and a compulsory license pursuant to 17 U.S.C. 115 is obtained. Neither the part nor the act of obtaining a license under 17 U.S.C. 115 is intended to express or imply any conclusion as to the circumstances in which a user must obtain a compulsory license pursuant to 17 U.S.C. 115.

(d) *Relationship to voluntary agreements.* The rates and terms of any license agreements entered into by Copyright Owners and Licensees relating to use of musical works within the scope of those license agreements shall apply *in lieu* of the rates and terms of this part.

#### §385.2 Definitions.

Unless otherwise specified, terms in this part shall have the same meaning given to them in 17 U.S.C. 115(e). For the purposes of this part, the following definitions apply:

*Accounting Period* means the monthly period specified in 17 U.S.C. 115(c)(2)(I) and in 17 U.S.C. 115(d)(4)(A)(i), and any related regulations, as applicable.

*Active Subscriber* means an End User of a Bundled Subscription Offering who has made at least one Play during the Accounting Period.

*Affiliate* means an entity controlling, controlled by, or under common control with another entity, except that an affiliate of a Sound Recording Company shall not include a Copyright Owner to the extent it is engaging in business as to musical works.

*Artificial Accounts* are accounts that are disabled or terminated for having engaged in User Manipulation or other fraudulent activity and for which any subscription revenues are refunded or otherwise not received by the Service Provider.

*Bundled Subscription Offering* means a Subscription Offering providing Licensed Activity consisting of Eligible Interactive Streams or Eligible Limited Downloads that is made available to End Users as a bundle with one or more other products or services (including products or services subject to other subparts), where End Users could obtain each product or service



comprising the bundle (including the Subscription Offering) on a standalone basis, and where End Users purchase the bundle in a single transaction without separate pricing for the product(s) or service(s) comprising the bundle (including the Subscription Offering).

*Copyright Owner(s)* are nondramatic musical works copyright owners who are entitled to royalty payments made under this part pursuant to the compulsory license under 17 U.S.C. 115.

*Digital Phonorecord Delivery* has the same meaning as in 17 U.S.C. 115(e)(10).

*Eligible Interactive Stream* means a Stream that is an interactive stream as defined in 17 U.S.C. 115(e)(13).

*Eligible Limited Download* means a transmission of a sound recording embodying a musical work to an End User of a digital phonorecord under 17 U.S.C. 115 that results in a Digital Phonorecord Delivery of that sound recording that is only accessible for listening for—

(1) An amount of time not to exceed one month from the time of the transmission (unless the Licensee, in lieu of retransmitting the same sound recording as another Eligible Limited Download, separately, and upon specific request of the End User made through a live network connection, reauthorizes use for another time period not to exceed one month), or in the case of a subscription plan, a period of time following the end of the applicable subscription no longer than a subscription renewal period or three months, whichever is shorter; or

(2) A number of times not to exceed 12 (unless the Licensee, in lieu of retransmitting the same sound recording as another Eligible Limited Download, separately, and upon specific request of the End User made through a live network connection, reauthorizes use of another series of 12 or fewer plays), or in the case of a subscription transmission, 12 times after the end of the applicable subscription.

*End User* means each unique person, other than Artificial Accounts, that (1) Pays a subscription fee for an Offering during the relevant Accounting Period or (2) Makes at least one Play of an Eligible Interactive Stream or Eligible Limited Download during the relevant Accounting Period.

*Family Plan* means a discounted Subscription Offering to be shared by two or more family members for a single subscription price.

*Free Trial Offering* means a subscription to a Service Provider's transmissions of sound recordings embodying musical works when

(1) Neither the Service Provider, the Sound Recording Company, the Copyright Owner, nor any person or entity acting on behalf of or *in lieu* of any of them receives any monetary consideration for the Offering;

(2) The free usage does not exceed 30 consecutive days per subscriber per two-year period;

(3) In connection with the Offering, the Service Provider is operating with appropriate musical license authority and complies with the recordkeeping requirements in § 385.4;

(4) Upon receipt by the Service Provider of written notice from the Copyright Owner or its agent stating in good faith that the Service Provider is in a material manner operating without appropriate license authority from the Copyright Owner under 17 U.S.C. 115, the Service Provider shall within 5 business days cease transmission of the sound recording embodying that musical work and withdraw it from the repertoire available as part of a Free Trial Offering;

(5) The Free Trial Offering is made available to the End User free of any charge; and

(6) The Service Provider offers the End User periodically during the free usage an opportunity to subscribe to a non-free Offering of the Service Provider.

*GAAP* means U.S. Generally Accepted Accounting Principles in effect at the relevant time, except that if the U.S. Securities and Exchange Commission permits or requires entities with securities that are publicly traded in the U.S. to employ International Financial Reporting Standards in lieu of Generally Accepted Accounting Principles, then that entity may employ International Financial Reporting Standards as “GAAP” for purposes of this subpart.

*Licensee* means any entity availing itself of the compulsory license under 17 U.S.C. 115 to use copyrighted musical works in the making or distributing of physical or digital phonorecords.

*Licensed Activity*, as the term is used in subparts C and D of this part, means covered activity, under voluntary or statutory license, *via* Digital Phonorecord Deliveries in the form of Eligible Interactive Streams, Eligible Limited Downloads, and Restricted Downloads.

*Limited Offering* means a Subscription Offering providing Licensed Activity consisting of Eligible Interactive Streams or Eligible Limited Downloads for which—

(1) An End User cannot choose to listen to a particular sound recording (*i.e.*, the Service Provider does not provide Eligible Interactive Streams of individual recordings that are on-demand, and Eligible Limited Downloads are rendered only as part of programs rather than as individual recordings that are on-demand); or

(2) The particular sound recordings available to the End User over a period of time are substantially limited relative to Service Providers in the marketplace providing access to a comprehensive catalog of recordings (*e.g.*, a product limited to a particular genre or permitting Eligible Interactive Streaming only from a monthly playlist consisting of a limited set of recordings).

*Locker Service* means an Offering providing digital access to sound recordings of musical works in the form of Eligible Interactive Streams, Permanent Downloads, Restricted Downloads or Ringtones where the Service Provider has reasonably determined that the End User has purchased or is otherwise in possession of the subject phonorecords of the applicable sound recording prior to the End User’s first request to use the sound recording via the Locker Service. The term Locker Service does not mean any part of a Service Provider’s products otherwise meeting this definition, but as to which the Service Provider has not obtained a section 115 license.

*Mixed Service Bundle* means an Offering providing Licensed Activity consisting of Eligible Interactive Streams or Eligible Limited Downloads that meets all of the following criteria:

(1) The Offering is made available to End Users only in combination (*i.e.*, the Offering is not available on a standalone basis) with one or more non-audio or non-audiovisual products or services (*e.g.*, two-day shipping) of more than token value as part of one transaction for which End Users make a payment without receiving pricing for the Offering separate from the product(s) or service(s) with which it is made available.

(2) The Offering is made available by a Service Provider that also offers End Users a separate, standalone Subscription Offering.

(3) The Offering offers End Users less functionality relative to that separate, standalone Subscription Offering. Such lesser functionality may include, but is not limited to, limitations on the ability of End Users to choose to listen to specific sound recordings on request or a limited catalog of sound recordings.

*Music Bundle* means two or more of physical phonorecords, Permanent Downloads or Ringtones delivered as part of one transaction (*e.g.*, download plus ringtone, CD plus downloads). In the case of Music Bundles containing one or more physical phonorecords, the Service Provider must sell the physical phonorecord component of the Music Bundle under a single catalog number, and the musical works embodied in the Digital Phonorecord Delivery configurations in the Music Bundle must be the same as, or a subset of, the musical works embodied in the physical phonorecords; provided that when the Music Bundle contains a set of Digital Phonorecord Deliveries sold by the same Sound Recording Company under substantially the same title as the physical phonorecord (*e.g.*, a corresponding digital album), the Service Provider may include in the same bundle up to 5 sound recordings of musical works that are included in the stand-alone version of the set of digital phonorecord deliveries but not included on the physical phonorecord. In addition, the Service Provider must permanently part with possession of the physical phonorecord or phonorecords it sells as part of the Music Bundle. In the case of Music Bundles composed solely of digital phonorecord deliveries, the number of digital phonorecord deliveries in either configuration cannot exceed 20, and the musical works embodied in each configuration in the Music Bundle must be the same as, or a subset of, the musical works embodied in the configuration containing the most musical works.

*Non-Licensed Work* means either (1) a work where musical works are not included as part of the work, or are not the main focus of the work (*e.g.*, podcasts, audiobooks, and spoken word recordings) or (2) a work where music is included but is not eligible to be licensed under section 115 (*e.g.*, music videos).

*Offering* means a Service Provider's engagement in Licensed Activity covered by subparts C and D of this part.

*Paid Locker Service* means a Locker Service for which the End User pays a fee to the Service Provider.

*Performance Royalty* means the license fee payable for the right to perform publicly musical works in any of the forms covered by subparts C and D of this part.

*Permanent Download* has the same meaning as in 17 U.S.C. 115(e)(24).

*Play* means an Eligible Interactive Stream, or a play of an Eligible Limited Download, lasting 30 seconds or more and, if a track lasts in its entirety under 30 seconds, an Eligible Interactive Stream or play of an Eligible Limited Download of the entire duration of the track. A Play excludes an Eligible Interactive Stream, or a play of an Eligible Limited Download, caused by User Manipulation. For purposes of the definition of “Play” only, “Eligible Interactive Stream” and “Eligible Limited Download” shall each be defined to include a sound recording embodying a musical work in the public domain, if such sound recording would otherwise qualify as an Eligible Interactive Stream or Eligible Limited Download if the musical work was not in the public domain.

*Promotional Offering* means a digital transmission of a sound recording, in the form of an Eligible Interactive Stream or an Eligible Limited Download, embodying a musical work, the primary purpose of which is to promote the sale or other paid use of that sound recording or to promote the artist performing on that sound recording and not to promote or suggest promotion or endorsement of any other good or service and

(1) A Sound Recording Company is lawfully distributing the sound recording through established retail channels or, if the sound recording is not yet released, the Sound Recording Company has a good faith intention to lawfully distribute the sound recording or a different version of the sound recording embodying the same musical work;

(2) For Eligible Interactive Streaming of segments of sound recordings not exceeding 90 seconds, the Sound Recording Company delivers or authorizes delivery of the segments for promotional purposes and neither the Service Provider nor the Sound Recording Company creates or uses a segment of a sound recording in violation of 17 U.S.C. 106(2) or 115(a)(2);

(3) The Promotional Offering is made available to an End User free of any charge; and

(4) The Service Provider provides to the End User at the same time as the Promotional Offering stream an opportunity to purchase the sound recording or the Service Provider periodically offers End Users the opportunity to subscribe to a paid Offering of the Service Provider.

*Purchased Content Locker Service* means a Locker Service made available to End User purchasers of Permanent Downloads, Ringtones, or physical phonorecords at no incremental charge above the otherwise applicable purchase price of the Permanent Downloads, Ringtones, or physical phonorecords acquired from a qualifying seller. With a Purchased Content Locker Service, an End User may receive one or more additional phonorecords of the purchased sound recordings of musical works in the form of Permanent Downloads or Ringtones at the time of purchase, or subsequently have digital access to the purchased sound recordings of musical works in the form of Eligible Interactive Streams, additional Permanent Downloads, Restricted Downloads, or Ringtones.

(1) A *qualifying seller* for purposes of this definition is the entity operating the Service Provider, including Affiliates, predecessors, or successors in interest, or—

(i) In the case of Permanent Downloads or Ringtones, a seller having a legitimate connection to the locker service provider pursuant to one or more written

agreements (including that the Purchased Content Locker Service and Permanent Downloads or Ringtones are offered through the same third party); or

(ii) In the case of physical phonorecords,

(A) The seller of the physical phonorecord has an agreement with the Purchased Content Locker Service provider establishing an integrated offer that creates a consumer experience commensurate with having the same Service Provider both sell the physical phonorecord and offer the integrated locker service; or

(B) The Service Provider has an agreement with the entity offering the Purchased Content Locker Service establishing an integrated offer that creates a consumer experience commensurate with having the same Service Provider both sell the physical phonorecord and offer the integrated locker service.

*Relevant Page* means an electronic display (for example, a web page or screen) from which a Service Provider's Offering providing Licensed Activity consisting of Eligible Interactive Streams or Eligible Limited Downloads is directly available to End Users, but only when the Offering and content directly relating to the Offering (e.g., an image of the artist, information about the artist or album, reviews, credits, and music player controls) comprises 75% or more of the space on that display, excluding any space occupied by advertising. For avoidance of doubt, content relating to the sale of Permanent Downloads and physical phonorecords is not content that directly relates to an Offering for purposes of determining whether an electronic display is a Relevant Page. An Offering is directly available to End Users from a page if End Users can receive sound recordings of musical works (in most cases this will be the page on which the Eligible Limited Download or Eligible Interactive Stream takes place).

*Restricted Download* means a Digital Phonorecord Delivery in a form that cannot be retained and replayed on a permanent basis. The term Restricted Download includes an Eligible Limited Download.

*Ringtone* means a phonorecord of a part of a musical work distributed as a Digital Phonorecord Delivery in a format to be made resident on a telecommunications device for use to announce the reception of an incoming telephone call or other communication or message or to alert the receiver to the fact that there is a communication or message.

*Service Provider* means that entity governed by subparts C and D of this part, which might or might not be the Licensee, that with respect to the section 115 license—

(1) Contracts with or has a direct relationship with End Users or otherwise controls the content made available to End Users;

(2) Is able to report fully on Service Provider Revenue from the provision of musical works embodied in phonorecords to the public, and to the extent applicable, verify Service Provider Revenue through an audit; and

(3) Is able to report fully on its usage of musical works, or procure such reporting and, to the extent applicable, verify usage through an audit.

*Service Provider Revenue.* (1) Subject to paragraphs (2) through (5) of this definition and subject to GAAP, *Service Provider Revenue* shall mean, for each Offering subject to § 385.21 of this Part:

(i) All revenue from End Users recognized by a Service Provider and directly derived from the provision of the Offering;

(ii) All revenue recognized by a Service Provider by way of sponsorship and commissions as a result of the inclusion of third-party “in-stream” or “in-download” advertising as part of the Offering, *i.e.*, advertising placed immediately at the start or end of, or during the actual delivery of, a musical work, by way of Eligible Interactive Streaming or Eligible Limited Downloads, except that notwithstanding the foregoing, and with respect to advertisements or sponsorships that are placed between content that constitutes Licensed Activity and content that constitutes non-Licensed Activity (*e.g.*, an advertisement placed between the performance of a sound recording of a musical work and the performance of Non-Licensed Work), only 50% of revenue from such advertising will be included; and

(iii) All revenue recognized by the Service Provider, including by way of sponsorship and commissions, as a result of the placement of third-party advertising on a Relevant Page of the Service Provider or on any page that is accessed automatically (such as a pop-up window) when an End User interacts with a Relevant Page; provided that, in case more than one Offering is available to End Users from a Relevant Page, any advertising revenue shall be allocated between or among the Service Providers on the basis of the relative amounts of the page they occupy.

(2) Service Provider Revenue shall:

(i) Include revenue recognized by the Service Provider, or by any associate, Affiliate, agent, or representative of the Service Provider *in lieu* of its being recognized by the Service Provider;

(ii) Include the value of any barter or other nonmonetary consideration, to the extent recognized by the Service Provider as revenue under GAAP; and

(iii) Except as expressly detailed in this part, not be subject to any other deduction or set-off other than for ~~Taxes~~, Third-Party Fees, and refunds to End Users for the Offering that the End Users were unable to use because of technical faults in the Offering or other bona fide refunds or credits issued to End Users in the ordinary course of business.

(3) Service Provider Revenue shall exclude revenue derived by the Service Provider solely in connection with activities other than Licensed Activity, including delivery of Non-Licensed Work. For the avoidance of doubt, in the case of advertising or sponsorship revenue, Service Provider Revenue shall (1) exclude revenue from advertisements or sponsorships that are embedded or served within a phonorecord that constitutes Non-Licensed Work and (2) include 50% of the revenue subject to the exception set out in paragraph (1)(ii) above.

(4) For purposes of paragraph (1) of this definition, advertising or sponsorship revenue shall be reduced by the actual cost of obtaining that revenue, not to exceed 15%.

(5) In instances in which a Service Provider provides a Bundled Subscription Offering, the revenue from End Users deemed to be recognized by the Service Provider for the



Bundled Subscription Offering for the purpose of paragraph (1) of this definition shall be calculated as follows:

(i) *Step 1:* The price of the Bundled Subscription Offering shall be divided by the sum of the standalone prices of each of the products or services (including the Subscription Offering) included in the Bundled Subscription Offering.

(ii) *Step 2:* The standalone price of the Subscription Offering included as part of the Bundled Subscription Offering shall be multiplied by the percentage calculated in Step 1.

(6) In instances in which a Service Provider makes a product or service (including a product or service subject to another subpart) available for a separate charge to End Users who also purchase a Subscription Offering (including a Bundled Subscription Offering), where End Users could not obtain that product or service on a standalone basis (*i.e.*, without also purchasing the Subscription Offering (including a Bundled Subscription Offering)), the revenue from End Users deemed to be recognized by the Service Provider for the Subscription Offering for the purpose of paragraph (1) of this definition shall exclude the separate charge for the product or service.

*Sound Recording Company* means a person or entity that:

(1) Is a copyright owner of a sound recording embodying a musical work;

(2) In the case of a sound recording of a musical work fixed before February 15, 1972, has rights to the sound recording, under chapter 14 of title 17, United States Code, that are equivalent to the rights of a copyright owner of a sound recording of a musical work under title 17, United States Code;

(3) Is an exclusive Licensee of the rights to reproduce and distribute a sound recording of a musical work; or

(4) Performs the functions of marketing and authorizing the distribution of a sound recording of a musical work under its own label, under the authority of a person identified in paragraph (1) through (3) of this section.

*Standalone Non-Portable Subscription Offering—Streaming Only* means a Subscription Offering through which an End User can listen to sound recordings only in the form of Eligible Interactive Streams and only from a non-portable device to which those Eligible Interactive Streams are originally transmitted while the device has a live network connection.

*Standalone Non-Portable Subscription Offering—Mixed* means a Subscription Offering through which an End User can listen to sound recordings either in the form of Eligible Interactive Streams or Eligible Limited Downloads but only from a non-portable device to which those Eligible Interactive Streams or Eligible Limited Downloads are originally transmitted.

*Standalone Portable Subscription Offering* means a Subscription Offering through which an End User can listen to sound recordings in the form of Eligible Interactive Streams or Eligible Limited Downloads from a portable device.

*Stream* means the digital transmission of a sound recording of a musical work to an End User—

(1) To allow the End User to listen to the sound recording, while maintaining a live network connection to the transmitting service, substantially at the time of transmission, except to the extent that the sound recording remains accessible for future listening from a Streaming Cache Reproduction;

(2) Using technology that is designed such that the sound recording does not remain accessible for future listening, except to the extent that the sound recording remains accessible for future listening from a Streaming Cache Reproduction; and

(3) That is subject to licensing as a public performance of the musical work.

*Streaming Cache Reproduction* means a reproduction of a sound recording embodying a musical work made on a computer or other receiving device by a Service Provider solely for the purpose of permitting an End User who has previously received a Stream of that sound recording to play the sound recording again from local storage on the computer or other device rather than by means of a transmission; provided that the End User is only able to do so while maintaining a live network connection to the Service Provider, and the reproduction is encrypted or otherwise protected consistent with prevailing industry standards to prevent it from being played in any other manner or on any device other than the computer or other device on which it was originally made.

*Student Plan* means a discounted Subscription Offering available on a limited basis to students.

*Subscription Offering* means an Offering, other than a Mixed Service Bundle, for which End Users are required to pay a fee to have access to the Offering for defined subscription periods of 3 years or less (in contrast to, for example, a service where the basic charge to users is a payment per download or per play), whether the End User makes payment for access to the Offering on a standalone basis or as part of a bundle with one or more other products or services.

~~*Taxes* means any applicable tax paid by a Service Provider in connection with an Offering.~~

*Third-Party Fees* means amounts charged by or payable to third parties (e.g., carriers) in connection with a Subscription Offering or Mixed Service Bundle, not to exceed 10% of the subscription fees paid by customers to a Service Provider for access to the Subscription Offering or Mixed Service Bundle; and amounts charged by or payable to app stores in connection with a Subscription Offering or Mixed Service Bundle, not to exceed 30% of the subscription fees paid by customers to Service Provider for access to the Subscription Offering or Mixed Service Bundle.

*Total Cost of Content* or *TCC* means the total amount expensed by a Service Provider or any of its Affiliates in accordance with GAAP for rights to make Eligible Interactive Streams or Eligible Limited Downloads of a musical work embodied in a sound recording through the Service Provider for the Accounting Period, which amount shall equal the Applicable Consideration for those rights at the time the Applicable Consideration is properly recognized as



an expense under GAAP. As used in this definition, “Applicable Consideration” means anything of value given for the identified rights to undertake the Licensed Activity, including, without limitation, ownership equity, monetary advances, barter or any other monetary and/or nonmonetary consideration, whether that consideration is conveyed via a single agreement, multiple agreements and/or agreements that do not themselves authorize the Licensed Activity but nevertheless provide consideration for the identified rights to undertake the Licensed Activity, and including any value given to an Affiliate of a Sound Recording Company for the rights to undertake the Licensed Activity. Value given to a Copyright Owner of musical works that is controlling, controlled by, or under common control with a Sound Recording Company for rights to undertake the Licensed Activity shall not be considered value given to the Sound Recording Company. For the avoidance of doubt, Applicable Consideration shall not include in-kind promotional consideration given to a Sound Recording Company (or Affiliate thereof) that is used to promote the sale or paid use of sound recordings embodying musical works or the paid use of music services through which sound recordings embodying musical works are available where the in-kind promotional consideration is given in connection with a use that qualifies for licensing under 17 U.S.C. 115.

*User Manipulation* means any behavior that artificially distorts the number of Plays or number of transmissions of Non-Eligible Works by fraudulent means, including but not limited to the use of manual (e.g., click farms) or automated (e.g., bots) means.

### **§385.3 Making payment of royalty fees.**

(a) *Payment to the mechanical licensing collective.* A Licensee must make the royalty payments owed under this part to the mechanical licensing collective, which is the collective designated by the Copyright Royalty Board to collect and distribute royalties under this part.

(b) *Late fees.* Except as otherwise specified in this subparagraph (b), a Licensee shall pay an annual late fee equal to the Internal Revenue Service underpayment rate specified in 26 U.S.C. § 6621(a)(2), to be applied as specified in 26 U.S.C. § 6622(a), for any payment owed to a Copyright Owner and remaining unpaid after the due date established in 17 U.S.C. 115(c)(2)(I) or 17 U.S.C. 115(d)(4)(A)(i), as applicable and detailed in part 210 of this title. Late fees shall not be owed for any adjustments to monthly reports of usage made in accordance with section 210.27(f) or (k), or for any adjustments to any annual reports of usage made in accordance with section 210.27(k)(6)(i), (ii) or (v). In the case of underpayments found after an audit pursuant to 17 U.S.C. 115(d)(4)(D), or an audit referenced in section 210.27(k)(6)(iv), interest on the underpayment shall be calculated at the post-judgment rate specified in 28 U.S.C. § 1961, accrued from and after the date the payment was originally due.

(1) *Accrual of late fees.* Late fees shall accrue from the due date until the mechanical licensing collective receives payment.

(2) *Waiver of late fees.* The mechanical licensing collective may waive or lower late fees for immaterial or inadvertent failures of a Licensee to make a timely payment.

**Subpart C—Eligible Interactive Streaming, Eligible Limited Downloads, Limited Offerings, Mixed Service Bundles, Bundled Subscription Offerings, Locker Services, and Other Delivery Configurations**

**§385.20 Scope.**

This subpart establishes rates and terms of royalty payments for subscription and non-subscription Offerings providing Licensed Activity consisting of Eligible Interactive Streams, Eligible Limited Downloads, and Restricted Downloads of musical works that is made available by digital music Service Providers in accordance with the provisions of 17 U.S.C. 115, exclusive of Offerings subject to subpart D of this part.

**§385.21 Royalty rates and calculations — Other than Mixed Service Bundles**

(a) *Applicable royalty.* Royalties payable by Service Providers for Offerings covered by this subpart shall be calculated as provided in this section, subject to the all-in royalty floors for specific types of services described in subsection (b) of this subpart, provided, however, that Mixed Service Bundles shall be subject to the royalty rates provided in section 385.22 of this part.

(b) *Rate calculation.* Royalty payments for Licensed Activity in this subpart shall be calculated as provided in this paragraph (b). If a Service Provider offers different Offerings, royalties must be calculated separately with respect to each Offering taking into consideration Service Provider Revenue and expenses associated with each Offering. For purposes of calculating rates pursuant to this section and all of its subparts, a Family Plan shall be treated as 1.5 subscribers per month, prorated in the case of a Family Plan in effect for only part of a calendar month and a Student Plan shall be treated as 0.50 subscribers per month, prorated in the case of a Student Plan End User who subscribed for only part of a calendar month. Artificial Accounts shall not be counted as subscribers.

(1) *Step 1:* Calculate the All-In Revenue Pool for the Offering. For each Accounting Period, the all-in revenue pool for each Offering subject to this section shall be result of multiplying the Service Provider Revenue by 10.54%.

(2) *Step 2:* Determine the All-In Royalty Pool. For each Standalone Non-Portable Subscription Offerings—Streaming Only, Standalone Non-Portable Subscription Offerings—Mixed, Standalone Portable Subscription Offerings, Bundled Subscription Offerings, and Limited Offerings, the all-in royalty pool is amount is the greater of:

(i) The all-in revenue pool determined in Step 1 in paragraph (b)(1) of this section, and

(ii) The monthly all-in royalty floor, which is calculated by multiplying the per-subscriber minimum by the number of subscribers (or, in the case of a Bundled Subscription Offering, the number of Active Subscribers) in each month in the Accounting Period.

Offering	Per-Subscriber Minimum
<i>Standalone Portable Subscription Offering</i>	80 cents per subscriber per month
<i>Standalone Non-Portable</i>	

Offering	Per-Subscriber Minimum
<i>Subscription Offering— Streaming Only</i>	40 cents per subscriber per month
<i>Bundled Subscription Offering</i>	Per-subscriber amount applicable to the Subscription Service included in the bundle

For non-subscription/ad-supported services provided free of any charge to the End User, the all-in royalty pool is amount is the greater of:

(i) The all-in revenue pool determined in Step 1 in paragraph (b)(1) of this section, and

(ii) 19.1% of TCC.

*Computation of monthly all-in royalty floors.* For purposes of this paragraph (b)(2), to determine the monthly all-in royalty floor, as applicable to any particular Offering for which a per-subscriber minimum applies, the total number of subscriber-months for the Accounting Period, shall be calculated by taking 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 an Offering subject to subpart D. The product of the total number of subscriber-months for the Accounting Period and the specified number of cents per subscriber shall be used as the subscriber-based component of the all-in royalty floor for the Accounting Period.

(3) *Step 3: Subtract Applicable Performance Royalties.* From the amount determined in Step 2 in paragraph (b)(2) of this section, for each Offering of the Service Provider, subtract the total amount of Performance Royalties that the Service Provider has expensed or will expense pursuant to public performance licenses in connection with uses of musical works through that Offering during the Accounting Period that constitute Licensed Activity. Although this amount may be the total of the Service Provider's payments for that Offering for the Accounting Period, it will be less than the total of the Performance Royalties if the Service Provider is also engaging in public performance of musical works that does not constitute Licensed Activity. In the case in which the Service Provider is also engaging in the public performance of musical works that does not constitute Licensed Activity, the amount to be subtracted for Performance Royalties shall be the amount allocable to Licensed Activity uses through the relevant Offering as determined in relation to all uses of musical works for which the Service Provider pays Performance Royalties for the Accounting Period. The Service Provider shall make this allocation on the basis of Plays of musical works.

(4) *Step 4: Calculate the Per-Work Royalty Allocation.* This 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 in paragraph (b)(3) of this section must be allocated to each musical work used through the Offering. The allocation shall be accomplished by the mechanical licensing collective by (1) dividing the payable royalty pool determined in Step 3 for the Offering by the total number of Plays of all musical works through the Offering during the Accounting Period (other than Plays subject to subpart D of this part) to yield a per-Play allocation, (2) identifying and locating copyright owners of each musical work and shares thereof, or determining whether such work is in the public domain, and (3) multiplying the per-Play allocation by the number of Plays of each matched musical work or matched share of such

work (other than Plays subject to subpart D of this part and/or Plays of public domain works) 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 provided in paragraph (c) of this section.

(c) *Overtime adjustment.* For purposes of the calculations in Step 4 in paragraph (b)(4) of this section only, for sound recordings of musical works with a playing time of over 5 minutes, adjust the number of Plays as follows.

- (1) 5:01 to 6:00 minutes—Each Play = 1.2 Plays
- (2) 6:01 to 7:00 minutes—Each Play = 1.4 Plays
- (3) 7:01 to 8:00 minutes—Each Play = 1.6 Plays
- (4) 8:01 to 9:00 minutes—Each Play = 1.8 Plays
- (5) 9:01 to 10:00 minutes—Each Play = 2.0 Plays

(6) For playing times of greater than 10 minutes, continue to add 0.2 Plays for each additional minute or fraction thereof.

## **§385.22 Royalty rates and calculations — Mixed Service Bundles**

(a) *Applicable royalty.* Royalties payable by Service Providers for Mixed Service Bundles shall be calculated as provided in this section.

(b) *Rate calculation.* For each Accounting Period, 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 Mixed Service Bundle shall be determined as follows:

(1) *Step 1:* Calculate the All-In Revenue Pool for the Mixed Service Bundle. For each Accounting Period, multiply the total number of Plays of all musical works through the Mixed Service Bundle during the Accounting Period (other than Plays subject to subpart D of this part) by \$0.00085.

(2) *Step 2:* Subtract Applicable Performance Royalties. From the amount determined in Step 1 in paragraph (b)(1) of this section, for each Mixed Service Bundle of the Service Provider, subtract the total amount of Performance Royalties that the Service Provider has expensed or will expense pursuant to public performance licenses in connection with uses of musical works through that Mixed Service Bundle during the Accounting Period that constitute Licensed Activity. Although this amount may be the total of the Service Provider's payments for that Mixed Service Bundle for the Accounting Period, it will be less than the total of the Performance Royalties if the Service Provider is also engaging in public performance of musical works that does not constitute Licensed Activity. In the case in which the Service Provider is also engaging in the public performance of musical works that does not constitute Licensed Activity, the amount to be subtracted for Performance Royalties shall be the amount allocable to Licensed Activity uses through the relevant Mixed Service Bundle as determined in relation to all uses of musical works for which the Service Provider pays Performance Royalties

for the Accounting Period. The Service Provider shall make this allocation on the basis of Plays of musical works.

(3) *Step 3: Calculate the Per-Work Royalty Allocation.* This 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 Mixed Service Bundle during the Accounting Period. To determine this amount, the result determined in Step 2 in paragraph (b)(2) of this section must be allocated to each musical work used through the Mixed Service Bundle. The allocation shall be accomplished by the mechanical licensing collective by (1) dividing the payable royalty pool determined in Step 2 for the Mixed Service Bundle by the total number of Plays of all musical works through the Offering during the Accounting Period (other than Plays subject to subpart D of this part) to yield a per-Play allocation, (2) identifying and locating copyright owners of each musical work and shares thereof, or determining whether such work is in the public domain, and (3) multiplying the per-Play allocation by the number of Plays of each matched musical work or matched share of such work (other than Plays subject to subpart D of this part and/or Plays of public domain works) through the Mixed Service Bundle during the Accounting Period.

## **Subpart D — Promotional Offerings, Free Trial Offerings and Certain Purchased Content Locker Services**

### **§385.30 Scope.**

This subpart establishes rates and terms of royalty payments for Promotional Offerings, Free Trial Offerings, and Certain Purchased Content Locker Services provided by subscription and non-subscription digital music Service Providers in accordance with the provisions of 17 U.S.C. 115.

### **§385.31 Royalty rates.**

(a) *Promotional Offerings.* For Promotional Offerings of audio-only Eligible Interactive Streaming and Eligible Limited Downloads of sound recordings embodying musical works that the Sound Recording Company authorizes royalty-free to the Service Provider, the royalty rate is zero.

(b) *Free Trial Offerings.* For Free Trial Offerings for which the Service Provider receives no monetary consideration, the royalty rate is zero.

(c) *Certain Purchased Content Locker Services.* For every Purchased Content Locker Service for which the Service Provider receives no monetary consideration, the royalty rate is zero.

(d) *Unauthorized use.* If a Copyright Owner or agent of the Copyright Owner sends written notice to a Licensee stating in good faith that a particular Offering subject to this subpart differs in a material manner from the terms governing that Offering, the Licensee must within 5 business days cease Streaming or otherwise making available that Copyright Owner's musical works and shall withdraw from the identified Offering any End User's access to the subject musical work.

# Exhibit B

## Exhibit B.2

**Before the  
UNITED STATES COPYRIGHT ROYALTY BOARD  
Washington, D.C.**

**In the Matter of:**

**DETERMINATION OF RATES  
AND TERMS FOR MAKING AND  
DISTRIBUTING PHONORECORDS  
(*Phonorecords IV*)**

**Docket No. 21-CRB-0001-PR  
(2023-2027)**

**AMENDED INDEX OF AMAZON.COM SERVICES LLC'S EXHIBITS**

<b>Exhibit No.</b>	<b>Sponsoring Witness</b>	<b>Description</b>	<b>Restricted/ Public</b>
Amazon Ex. 1	James Duffett-Smith	AMZN_Phono IV_00015250, [REDACTED]	RESTRICTED
Amazon Ex. 2	James Duffett-Smith	AMZN_Phono IV_00015006, [REDACTED]	RESTRICTED
Amazon Ex. 3	James Duffett-Smith	AMZN_Phono IV_00015265, [REDACTED]	RESTRICTED
Amazon Ex. 4	James Duffett-Smith; Amy Braun	AMZN PhonoIV 00003062 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 5	James Duffett-Smith	AMZN Phono IV 00009304, [REDACTED] [REDACTED]	RESTRICTED



Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 6	James Duffett-Smith	AMZN Phono IV 00002568 [REDACTED]	RESTRICTED
Amazon Ex. 7	James Duffett-Smith	AMZN Phono IV 00000116 [REDACTED]	RESTRICTED
Amazon Ex. 8	James Duffett-Smith	AMZN Phono IV 00004725 [REDACTED]	RESTRICTED
Amazon Ex. 9	James Duffett-Smith; Amy Braun	AMZN Phono IV 00002484 [REDACTED]	RESTRICTED
Amazon Ex. 10	James Duffett-Smith	AMZN Phono IV_00015199, U.S. Dep't of Justice, <i>Statement of the Department of Justice on the Closing of the Antitrust Division's Review of the ASCAP and BMI Consent Decrees</i> (Aug. 4, 2016)	PUBLIC
Amazon Ex. 11	James Duffett-Smith	AMZN Phono IV_00007392, NMPA, <i>"Selective Withdrawal" of New Media Rights from ASCAP and BMI</i> (Aug. 9, 2019)	PUBLIC
Amazon Ex. 12	James Duffett-Smith	AMZN Phono IV 00002785 [REDACTED]	RESTRICTED
Amazon Ex. 13	James Duffett-Smith	AMZN Phono IV 00015257 [REDACTED]	RESTRICTED

<b>Exhibit No.</b>	<b>Sponsoring Witness</b>	<b>Description</b>	<b>Restricted/ Public</b>
Amazon Ex. 14	James Duffett-Smith	AMZN_Phono IV_00015252, [REDACTED]	RESTRICTED
Amazon Ex. 15	James Duffett-Smith	AMZN_Phono IV_00009244, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 16	James Duffett-Smith	AMZN_Phono IV_00009363, [REDACTED]	RESTRICTED
Amazon Ex. 17	James Duffett-Smith	AMZN_Phono IV_00009297, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 18	James Duffett-Smith	AMZN_Phono IV_00018492, [REDACTED] [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 19	James Duffett-Smith	AMZN_Phono IV_00003833, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 20	James Duffett-Smith	AMZN_Phono IV_00008111, [REDACTED]	RESTRICTED
Amazon Ex. 21	James Duffett-Smith	AMZN_Phono IV_00015230, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 22	James Duffett-Smith	AMZN_Phono IV_00006188, [REDACTED] [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 23	James Duffett-Smith	AMZN_Phono IV_00007346, [REDACTED] [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 24	James Duffett-Smith	AMZN Phono IV 00004918, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 25	James Duffett-Smith	AMZN Phono IV 00005858, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 26	James Duffett-Smith	AMZN Phono IV 00005632, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 27	James Duffett-Smith	AMZN Phono IV 00006016, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 28	James Duffett-Smith	AMZN Phono IV 00006019, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 29	James Duffett-Smith	AMZN Phono IV 00007927, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 30	James Duffett-Smith	AMZN_Phono IV_00003696, [REDACTED]	RESTRICTED
Amazon Ex. 31	James Duffett-Smith	AMZN Phono IV 00012208, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 32	James Duffett-Smith	AMZN Phono IV 00002522 [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 33	James Duffett-Smith	AMZN Phono IV 00008661, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 34	James Duffett-Smith	AMZN Phono IV 00008309, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 35	James Duffett-Smith	AMZN Phono IV 00004036, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 35.1	James Duffett-Smith	AMZN Phono IV 00004037, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 36	James Duffett-Smith	AMZN Phono IV 00003961, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 36.1	James Duffett-Smith	AMZN Phono IV 00003962, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 37	James Duffett-Smith	AMZN Phono IV 00003739, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 37.1	James Duffett-Smith	AMZN Phono IV 00003740, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 37.2	James Duffett-Smith	AMZN Phono IV 00003742, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 38	James Duffett-Smith	AMZN Phono IV 00007125, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 38.1	James Duffett-Smith	AMZN Phono IV 00007127, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 39	James Duffett-Smith	AMZN Phono IV 00007036, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 39.1	James Duffett-Smith	AMZN Phono IV 00007039, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 39.2	James Duffett-Smith	AMZN Phono IV 00007041, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 40	James Duffett-Smith	AMZN Phono IV 00006928, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 40.1	James Duffett-Smith	AMZN Phono IV 00006931, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 41	James Duffett-Smith	AMZN Phono IV 00006698, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 41.1	James Duffett-Smith	AMZN Phono IV 00006699, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 42	James Duffett-Smith	AMZN Phono IV 00006633, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 42.1	James Duffett-Smith	AMZN Phono IV 00006634, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 43	James Duffett-Smith	AMZN Phono IV 00007445, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 44	James Duffett-Smith	AMZN Phono IV 00009074, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 45	James Duffett-Smith	AMZN Phono IV 00009109, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 46	James Duffett-Smith	AMZN Phono IV 00008716, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 47	James Duffett-Smith	AMZN_Phono IV_00009336, [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 48	James Duffett-Smith	AMZN Phono IV 00004063, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 48.1	James Duffett-Smith	AMZN Phono IV_00004066, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 49	James Duffett-Smith	AMZN Phono IV 00003805, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 49.1	James Duffett-Smith	AMZN Phono IV 00003807, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 49.2	James Duffett-Smith	AMZN Phono IV 00003809, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 50	James Duffett-Smith	AMZN Phono IV 00009310, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 51	James Duffett-Smith	AMZN Phono IV 00003736, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 52	James Duffett-Smith	AMZN Phono IV 00009369, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 53	James Duffett-Smith	AMZN Phono IV_00009318, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 54	James Duffett-Smith	AMZN Phono IV 00003935, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 55	James Duffett-Smith	AMZN Phono IV 00007479, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 55.1	James Duffett-Smith	AMZN Phono IV 00007481, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 56	James Duffett-Smith	AMZN Phono IV 00004027, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 57	James Duffett-Smith	AMZN Phono IV 00008112, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 58	James Duffett-Smith	AMZN Phono IV 00009360, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 59	James Duffett-Smith	AMZN Phono IV_00007206, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 59.1	James Duffett-Smith	AMZN_Phono IV_00007210, [REDACTED]	RESTRICTED
Amazon Ex. 59.2	James Duffett-Smith	AMZN Phono IV 00007211, [REDACTED] [REDACTED]	RESTRICTED



Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 59.3	James Duffett-Smith	AMZN Phono IV 00007213, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 60	James Duffett-Smith	AMZN Phono IV 00007150, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 60.1	James Duffett-Smith	AMZN Phono IV 00007156, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 60.2	James Duffett-Smith	AMZN Phono IV 00007168, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 61	James Duffett-Smith	AMZN Phono IV 00009219, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 61.1	James Duffett-Smith	AMZN Phono IV 00009231, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 61.2	James Duffett-Smith	AMZN Phono IV 00009242, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 62	James Duffett-Smith	AMZN Phono IV 00006589, July [REDACTED] [REDACTED]	RESTRICTED

<b>Exhibit No.</b>	<b>Sponsoring Witness</b>	<b>Description</b>	<b>Restricted/ Public</b>
Amazon Ex. 62.1	James Duffett-Smith	AMZN Phono IV 00006609, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 63	James Duffett-Smith	AMZN Phono IV 00009272, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 64	James Duffett-Smith	AMZN Phono IV 00003954, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 65	James Duffett-Smith	AMZN Phono IV 00003839, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 66	James Duffett-Smith	AMZN Phono IV 00007224, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 67	James Duffett-Smith	AMZN Phono IV 00009365, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 68	James Duffett-Smith	AMZN Phono IV 00006770, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 69	James Duffett-Smith	AMZN Phono IV 00014021, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 69.1	James Duffett-Smith	AMZN Phono IV 00014028, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 69.2	James Duffett-Smith	AMZN Phono IV 00014038, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 69.3	James Duffett-Smith	AMZN_Phono IV_00014046, [REDACTED]	RESTRICTED
Amazon Ex. 70	James Duffett-Smith	AMZN Phono IV_00014010, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 71	James Duffett-Smith	AMZN Phono IV 00013993, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 72	James Duffett-Smith	AMZN Phono IV 00013708, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 73	James Duffett-Smith	AMZN Phono IV_00007420, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 73.1	James Duffett-Smith	AMZN Phono IV 00007423, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 74	James Duffett-Smith	AMZN Phono IV 00004653, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 75	James Duffett-Smith	AMZN Phono IV 00007516, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 75.1	James Duffett-Smith	AMZN Phono IV 00007517, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 76	James Duffett-Smith	AMZN Phono IV 00007414, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 77	James Duffett-Smith	AMZN Phono IV 00004524, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 78	James Duffett-Smith	AMZN Phono IV 00007426, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 78.1	James Duffett-Smith	AMZN Phono IV 00007427, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 79	James Duffett-Smith	AMZN Phono IV 00006112, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 79.1	James Duffett-Smith	AMZN Phono IV 00006113, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 79.2	James Duffett-Smith	AMZN Phono IV 00006124. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 80	James Duffett-Smith	AMZN Phono IV 00007788, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 80.1	James Duffett-Smith	AMZN Phono IV 00007790. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 81	James Duffett-Smith	AMZN Phono IV 00005129, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 82	James Duffett-Smith	AMZN Phono IV 00005109, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 82.1	James Duffett-Smith	AMZN Phono IV 00005114. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 83	James Duffett-Smith	AMZN Phono IV 00004605, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 84	James Duffett-Smith	AMZN Phono IV 00007925. [REDACTED] [REDACTED]	RESTRICTED

<b>Exhibit No.</b>	<b>Sponsoring Witness</b>	<b>Description</b>	<b>Restricted/ Public</b>
Amazon Ex. 85	James Duffett-Smith	AMZN Phono IV 00005605, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 86	James Duffett-Smith	AMZN Phono IV 00011685, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 87	James Duffett-Smith	AMZN Phono IV 00010632, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 88	James Duffett-Smith	AMZN Phono IV 00002564 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 89	James Duffett-Smith	AMZN Phono IV 00007433, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 90	James Duffett-Smith	AMZN Phono IV 00005984, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 91	James Duffett-Smith	AMZN Phono IV 00014368, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 92	James Duffett-Smith	AMZN Phono IV 00015404, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 93	James Duffett-Smith	AMZN_Phono IV_00008486, Aug. 27, 2019 Ltr. from D. Aguirre to S. Worth at 1, Royalty Accounting for Prime Music (Aug. 27, 2019)	PUBLIC
Amazon Ex. 94	James Duffett-Smith	AMZN_Phono IV_00007321, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 95	James Duffett-Smith	AMZN_Phono IV_00007522, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 96	James Duffett-Smith	AMZN_Phono IV_00008489, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 97	James Duffett-Smith	AMZN_Phono IV_00003114 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 98	James Duffett-Smith	AMZN_Phono IV_00003115 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 99	James Duffett-Smith	AMZN_Phono IV_00003117 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 100	James Duffett-Smith	AMZN_Phono IV_00003118 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 101	James Duffett-Smith	AMZN_Phono IV_00003119 [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 102	James Duffett-Smith	AMZN Phono IV 00003121 [REDACTED]	RESTRICTED
Amazon Ex. 103	James Duffett-Smith	AMZN Phono IV 00003122 [REDACTED]	RESTRICTED
Amazon Ex. 104	James Duffett-Smith	AMZN Phono IV 00003124 [REDACTED]	RESTRICTED
Amazon Ex. 105	James Duffett-Smith	AMZN Phono IV 00003125 [REDACTED]	RESTRICTED
Amazon Ex. 106	James Duffett-Smith	AMZN_Phono IV_00004075, [REDACTED]	RESTRICTED
Amazon Ex. 107	James Duffett-Smith; Amy Braun	AMZN Phono IV_00008128, [REDACTED]	RESTRICTED
Amazon Ex. 107.1	James Duffett-Smith; Amy Braun	AMZN Phono IV 00047731, [REDACTED]	RESTRICTED
Amazon Ex. 108	James Duffett-Smith	AMZN Phono IV 00007196, [REDACTED]	RESTRICTED
Amazon Ex. 109	N/A	Exhibit 109 intentionally omitted	N/A
Amazon Ex. 110	N/A	Exhibit 110 intentionally omitted	N/A
Amazon Ex. 111	N/A	Exhibit 111 intentionally omitted	N/A



Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 112	N/A	Exhibit 112 intentionally omitted	N/A
Amazon Ex. 113	N/A	Exhibit 113 intentionally omitted	N/A
Amazon Ex. 114	Leslie Marx	PAN PHONO4 00001507. [REDACTED]	RESTRICTED
Amazon Ex. 115	Amy Braun	AMZN Phono IV 00000779 [REDACTED]	RESTRICTED
Amazon Ex. 116	Amy Braun	AMZN Phono IV 00007802. [REDACTED]	RESTRICTED
Amazon Ex. 116.1	Amy Braun	AMZN Phono IV 00007814. [REDACTED]	RESTRICTED
Amazon Ex. 117	Amy Braun	AMZN Phono IV 00002457 [REDACTED]	RESTRICTED
Amazon Ex. 118	Amy Braun	AMZN Phono IV 00002440 [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 119	Amy Braun	AMZN Phono IV 00007914, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 119.1	Amy Braun	AMZN Phono IV 00007916, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 119.2	Amy Braun	AMZN Phono IV 00007919, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 119.3	Amy Braun	AMZN Phono IV_00007922, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 120	Amy Braun	AMZN Phono IV 00002545 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 121	Amy Braun	AMZN Phono IV 00002795 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 122	Amy Braun	AMZN Phono IV 00002825 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 123	Amy Braun	AMZN Phono IV 00002754 [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 124	Amy Braun	AMZN Phono IV 00008786, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 125	N/A	Exhibit 125 intentionally omitted	N/A
Amazon Ex. 126	Amy Braun	AMZN Phono IV 00047763, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 127	Amy Braun	AMZN Phono IV 00004127, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 127.1	Amy Braun	AMZN Phono IV 00004133, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 128	Amy Braun	AMZN Phono IV 00014114, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 129	Amy Braun	AMZN Phono IV 00010575, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 129.1	Amy Braun	AMZN Phono IV_00010577, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 130	Amy Braun	AMZN Phono IV 00004137, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 130.1	Amy Braun	AMZN Phono IV 00004149. [REDACTED]	RESTRICTED
Amazon Ex. 131	Amy Braun	AMZN Phono IV 00007281. [REDACTED]	RESTRICTED
Amazon Ex. 131.1	Amy Braun	AMZN Phono IV 00007282. [REDACTED]	RESTRICTED
Amazon Ex. 132	Amy Braun	AMZN Phono IV 00009648. [REDACTED]	RESTRICTED
Amazon Ex. 133	Amy Braun	AMZN Phono IV 00047804. [REDACTED]	RESTRICTED
Amazon Ex. 134	Amy Braun	AMZN Phono IV 00012292. [REDACTED]	RESTRICTED
Amazon Ex. 134.1	Amy Braun	AMZN Phono IV 00012327. [REDACTED]	RESTRICTED
Amazon Ex. 135	N/A	Exhibit 135 intentionally omitted	N/A

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 136	Amy Braun	AMZN Phono IV 00007844. [REDACTED]	RESTRICTED
Amazon Ex. 137	Amy Braun	AMZN Phono IV 00006084. [REDACTED]	RESTRICTED
Amazon Ex. 138	Amy Braun	AMZN Phono IV 00014200. [REDACTED]	RESTRICTED
Amazon Ex. 139	Amy Braun	AMZN Phono IV 00014061. [REDACTED]	RESTRICTED
Amazon Ex. 140	Amy Braun	AMZN Phono IV 00003845. [REDACTED]	RESTRICTED
Amazon Ex. 141	Amy Braun	AMZN Phono IV 00008840. [REDACTED]	RESTRICTED
Amazon Ex. 141.1	Amy Braun	AMZN Phono IV 00008846. [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 142	Amy Braun	AMZN Phono IV 00003973. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 143	Amy Braun	AMZN_Phono IV_00047972, [REDACTED]	RESTRICTED
Amazon Ex. 144	Amy Braun	AMZN Phono IV 00000158 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 145	Amy Braun	AMZN Phono IV 00000133 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 146	Amy Braun	AMZN Phono IV 00047800. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 147	Amy Braun	AMZN Phono IV 00047796. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 148	Amy Braun	AMZN Phono IV 00009927. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 149	Amy Braun	AMZN Phono IV 00004572. [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 149.1	Amy Braun	AMZN Phono IV_00004575, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 150	Amy Braun	AMZN Phono IV 00014064, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 151	Amy Braun	AMZN Phono IV 00002449 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 152	Amy Braun	AMZN Phono IV 00002433 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 153	Amy Braun	AMZN Phono IV 00002452 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 154	Amy Braun	AMZN Phono IV_00047973, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 155	Amy Braun	AMZN Phono IV 00000791 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 156	Amy Braun	AMZN Phono IV 00001609 [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 157	Amy Braun	AMZN Phono IV 00007373. [REDACTED]	RESTRICTED
Amazon Ex. 157.1	Amy Braun	AMZN Phono IV 00007374. [REDACTED]	RESTRICTED
Amazon Ex. 158	Amy Braun	AMZN Phono IV 00000809 [REDACTED]	RESTRICTED
Amazon Ex. 159	Amy Braun	AMZN Phono IV 00047771. [REDACTED]	RESTRICTED
Amazon Ex. 160	Amy Braun	AMZN Phono IV 00008129. [REDACTED]	RESTRICTED
Amazon Ex. 161	Amy Braun	AMZN Phono IV 00003106 [REDACTED]	RESTRICTED
Amazon Ex. 162	Amy Braun	AMZN Phono IV_00014371, [REDACTED]	RESTRICTED
Amazon Ex. 163	Kajal Gayadien	AMZN Phono IV 00003132. [REDACTED]	RESTRICTED



Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 164	Kajal Gayadien	AMZN Phono IV 00047806, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 165	Kajal Gayadien	AMZN Phono IV 00015280, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 166	Kajal Gayadien	AMZN Phono IV 00015062, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 167	Kajal Gayadien	AMZN Phono IV 00015027, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 168	Kajal Gayadien	AMZN Phono IV 00015007, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 169	Kajal Gayadien	AMZN Phono IV_00000585, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 170	Kajal Gayadien	AMZN Phono IV 0000000000678 (from -730), [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 171	Kajal Gayadien	AMZN_Phono IV_00015113, [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 172	Kajal Gayadien	AMZN_Phono IV_00000557, [REDACTED]	RESTRICTED
Amazon Ex. 173	Kajal Gayadien	AMZN_Phono IV_00015112, [REDACTED]	RESTRICTED
Amazon Ex. 174	Kajal Gayadien	AMZN00004915, [REDACTED]	RESTRICTED
Amazon Ex. 175	Kajal Gayadien	AMZN00004685, [REDACTED]	RESTRICTED
Amazon Ex. 176	Kajal Gayadien	AMZN_Phono IV_00015256, [REDACTED]	RESTRICTED
Amazon Ex. 177	Kajal Gayadien	AMZN_Phono IV_00015251, [REDACTED]	RESTRICTED
Amazon Ex. 178	Kajal Gayadien	AMZN_Phono IV_00015005, [REDACTED]	RESTRICTED
Amazon Ex. 179	Tami Hurwitz	AMZN_Phono IV_00015267, [REDACTED]	RESTRICTED
Amazon Ex. 180	Tami Hurwitz	AMZN_Phono IV_00015263, [REDACTED]	RESTRICTED
Amazon Ex. 181	Tami Hurwitz	AMZN_Phono IV_00015255, [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 182	Tami Hurwitz	AMZN Phono IV 00015114, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 183	Tami Hurwitz	AMZN Phono IV 00009258, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 184	Tami Hurwitz	AMZN Phono IV 00015386, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 185	Tami Hurwitz	AMZN Phono IV_00015161, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 186	Tami Hurwitz	AMZN Phono IV 00015152, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 187	Tami Hurwitz	AMZN Phono IV_00009372, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 188	Tami Hurwitz	AMZN Phono IV 00015424 (at -435), [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 189	Tami Hurwitz	AMZN Phono IV 00015151, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 190	Tami Hurwitz	AMZN_Phono IV_00015225, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 191	Tami Hurwitz	AMZN_Phono IV_00015186, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 192	Tami Hurwitz	AMZN_Phono IV_00047964, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 193	Tami Hurwitz	AMZN_Phono IV_00015237, [REDACTED]	RESTRICTED
Amazon Ex. 194	Tami Hurwitz	AMZN_Phono IV_00015264, [REDACTED]	RESTRICTED
Amazon Ex. 195	Tami Hurwitz	AMZN_Phono IV_00015266, [REDACTED]	RESTRICTED
Amazon Ex. 196	Tami Hurwitz	AMZN_Phono IV_00015184, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 197	Tami Hurwitz	AMZN_Phono IV_00009336, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 198	Tami Hurwitz	AMZN_Phono IV_00015150, [REDACTED]	RESTRICTED
Amazon Ex. 199	Tami Hurwitz	AMZN_Phono IV_00015254, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 200	Tami Hurwitz	AMZN_Phono IV_00009453, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 201	Tami Hurwitz	AMZN_Phono IV_00015253, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 202	Tami Hurwitz	AMZN Phono IV 00009400, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 203	Tami Hurwitz	AMZN Phono IV_00003598, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 204	Tami Hurwitz	AMZN Phono IV 00015240, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 205	Kajal Gayadien	AMZN Phono IV 00015532.001, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 206	Kajal Gayadien	AMZN Phono IV 00015566, [REDACTED] [REDACTED]	RESTRICTED

# Exhibit B.4

**Before the  
UNITED STATES COPYRIGHT ROYALTY BOARD  
Washington, D.C.**

**In the Matter of:**

**DETERMINATION OF RATES  
AND TERMS FOR MAKING AND  
DISTRIBUTING PHONORECORDS  
(Phonorecords IV)**

**Docket No. 21-CRB-0001-PR  
(2023-2027)**

**AMENDED INDEX OF AMAZON.COM SERVICES LLC'S EXHIBITS**

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 1	James Duffett-Smith	<a href="#">AMZN Phono IV_00015250.</a> [REDACTED]	RESTRICTED
Amazon Ex. 2	James Duffett-Smith	<a href="#">AMZN Phono IV_00015006.</a> [REDACTED]	RESTRICTED
Amazon Ex. 3	James Duffett-Smith	<a href="#">AMZN Phono IV_00015265.</a> [REDACTED]	RESTRICTED
Amazon Ex. 4	James Duffett-Smith; Amy Braun	AMZN PhonoIV 00003062 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 5	James Duffett-Smith	<a href="#">AMZN Phono IV 00009304.</a> [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 6	James Duffett-Smith	AMZN Phono IV 00002568 [REDACTED]	RESTRICTED
Amazon Ex. 7	James Duffett-Smith	AMZN Phono IV 00000116 [REDACTED]	RESTRICTED
Amazon Ex. 8	James Duffett-Smith	AMZN Phono IV 00004725 [REDACTED]	RESTRICTED
Amazon Ex. 9	James Duffett-Smith; Amy Braun	AMZN Phono IV 00002484 [REDACTED]	RESTRICTED
Amazon Ex. 10	James Duffett-Smith	<u>AMZN Phono IV 00015199</u> , U.S. Dep’t of Justice, <i>Statement of the Department of Justice on the Closing of the Antitrust Division’s Review of the ASCAP and BMI Consent Decrees</i> (Aug. 4, 2016)	PUBLIC
Amazon Ex. 11	James Duffett-Smith	<u>AMZN Phono IV 00007392</u> , NMPA, “ <i>Selective Withdrawal</i> ” of <i>New Media Rights from ASCAP and BMI</i> (Aug. 9, 2019)	PUBLIC
Amazon Ex. 12	James Duffett-Smith	AMZN Phono IV 00002785 [REDACTED]	RESTRICTED
Amazon Ex. 13	James Duffett-Smith	AMZN Phono IV 00015257 [REDACTED]	RESTRICTED



Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 14	James Duffett-Smith	<u>AMZN Phono IV 00015252,</u> [REDACTED]	RESTRICTED
Amazon Ex. 15	James Duffett-Smith	<u>AMZN Phono IV 00009244,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 16	James Duffett-Smith	<u>AMZN Phono IV 00009363,</u> [REDACTED]	RESTRICTED
Amazon Ex. 17	James Duffett-Smith	<u>AMZN Phono IV 00009297,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 18	James Duffett-Smith	<u>AMZN Phono IV 00018492,</u> [REDACTED] [REDACTED] Strategy”)	RESTRICTED
Amazon Ex. 19	James Duffett-Smith	<u>AMZN Phono IV 00003833,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 20	James Duffett-Smith	<u>AMZN Phono IV 00008111,</u> [REDACTED]	RESTRICTED
Amazon Ex. 21	James Duffett-Smith	<u>AMZN Phono IV 00015230,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 22	James Duffett-Smith	<u>AMZN Phono IV 00006188,</u> [REDACTED] [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 23	James Duffett-Smith	<u>AMZN Phono IV 00007346,</u> [REDACTED] [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 24	James Duffett-Smith	AMZN Phono IV 00004918, [REDACTED]	RESTRICTED
Amazon Ex. 25	James Duffett-Smith	AMZN Phono IV 00005858, [REDACTED]	RESTRICTED
Amazon Ex. 26	James Duffett-Smith	AMZN Phono IV 00005632, [REDACTED]	RESTRICTED
Amazon Ex. 27	James Duffett-Smith	AMZN Phono IV 00006016, [REDACTED]	RESTRICTED
Amazon Ex. 28	James Duffett-Smith	AMZN Phono IV 00006019, [REDACTED]	RESTRICTED
Amazon Ex. 29	James Duffett-Smith	AMZN Phono IV 00007927, [REDACTED]	RESTRICTED
Amazon Ex. 30	James Duffett-Smith	AMZN Phono IV 00003696, [REDACTED]	RESTRICTED
Amazon Ex. 31	James Duffett-Smith	AMZN Phono IV 00012208, [REDACTED]	RESTRICTED
Amazon Ex. 32	James Duffett-Smith	AMZN Phono IV 00002522, [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 33	James Duffett-Smith	AMZN Phono IV 00008661, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 34	James Duffett-Smith	AMZN Phono IV 00008309, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 35	James Duffett-Smith	AMZN Phono IV 00004036, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 35.1	James Duffett-Smith	AMZN Phono IV 00004037, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 36	James Duffett-Smith	AMZN Phono IV 00003961, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 36.1	James Duffett-Smith	AMZN Phono IV 00003962, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 37	James Duffett-Smith	AMZN Phono IV 00003739, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 37.1	James Duffett-Smith	AMZN Phono IV 00003740, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 37.2	James Duffett-Smith	AMZN Phono IV 00003742. [REDACTED]	<u>RESTRICTED</u>
Amazon Ex. 38	James Duffett-Smith	AMZN Phono IV 00007125. [REDACTED]	RESTRICTED
Amazon Ex. 38.1	James Duffett-Smith	AMZN Phono IV 00007127. [REDACTED]	RESTRICTED
Amazon Ex. 39	James Duffett-Smith	AMZN Phono IV 00007036. [REDACTED]	RESTRICTED
Amazon Ex. 39.1	James Duffett-Smith	AMZN Phono IV 00007039. [REDACTED]	<u>RESTRICTED</u>
Amazon Ex. 39.2	James Duffett-Smith	AMZN Phono IV 00007041. [REDACTED]	RESTRICTED
Amazon Ex. 40	James Duffett-Smith	AMZN Phono IV 00006928. [REDACTED]	RESTRICTED
Amazon Ex. 40.1	James Duffett-Smith	AMZN Phono IV 00006931. [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 41	James Duffett-Smith	<u>AMZN Phono IV 00006698,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 41.1	James Duffett-Smith	<u>AMZN Phono IV 00006699,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 42	James Duffett-Smith	<u>AMZN Phono IV 00006633,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 42.1	James Duffett-Smith	<u>AMZN Phono IV 00006634,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 43	James Duffett-Smith	<u>AMZN Phono IV 00007445,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 44	James Duffett-Smith	<u>AMZN Phono IV 00009074,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 45	James Duffett-Smith	<u>AMZN Phono IV 00009109,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 46	James Duffett-Smith	<u>AMZN Phono IV 00008716,</u> [REDACTED] [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 47	James Duffett-Smith	<u>AMZN Phono IV 00009336,</u> [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 48	James Duffett-Smith	AMZN Phono IV 00004063, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 48.1	James Duffett-Smith	AMZN Phono IV 00004066, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 49	James Duffett-Smith	AMZN Phono IV 00003805, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 49.1	James Duffett-Smith	AMZN Phono IV 00003807, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 49.2	James Duffett-Smith	AMZN Phono IV 00003809, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 50	James Duffett-Smith	AMZN Phono IV 00009310, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 51	James Duffett-Smith	AMZN Phono IV 00003736, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 52	James Duffett-Smith	AMZN Phono IV 00009369, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 53	James Duffett-Smith	AMZN Phono IV 00009318, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 54	James Duffett-Smith	AMZN Phono IV 00003935, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 55	James Duffett-Smith	AMZN Phono IV 00007479, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 55.1	James Duffett-Smith	AMZN Phono IV 00007481, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 56	James Duffett-Smith	AMZN Phono IV 00004027, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 57	James Duffett-Smith	AMZN Phono IV 00008112, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 58	James Duffett-Smith	AMZN Phono IV 00009360, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 59	James Duffett-Smith	AMZN Phono IV 00007206, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 59.1	James Duffett-Smith	AMZN Phono IV 00007210, [REDACTED]	RESTRICTED
Amazon Ex. 59.2	James Duffett-Smith	AMZN Phono IV 00007211, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 59.3	James Duffett-Smith	AMZN Phono IV 00007213. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 60	James Duffett-Smith	AMZN Phono IV 00007150. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 60.1	James Duffett-Smith	AMZN Phono IV 00007156. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 60.2	James Duffett-Smith	AMZN Phono IV 00007168. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 61	James Duffett-Smith	AMZN Phono IV 00009219. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 61.1	James Duffett-Smith	AMZN Phono IV 00009231. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 61.2	James Duffett-Smith	AMZN Phono IV 00009242. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 62	James Duffett-Smith	AMZN Phono IV 00006589. [REDACTED] [REDACTED]	RESTRICTED



Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 62.1	James Duffett-Smith	AMZN Phono IV 00006609, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 63	James Duffett-Smith	AMZN Phono IV 00009272, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 64	James Duffett-Smith	AMZN Phono IV 00003954, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 65	James Duffett-Smith	AMZN Phono IV 00003839, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 66	James Duffett-Smith	AMZN Phono IV 00007224, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 67	James Duffett-Smith	AMZN Phono IV 00009365, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 68	James Duffett-Smith	AMZN Phono IV 00006770, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 69	James Duffett-Smith	AMZN Phono IV 00014021, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 69.1	James Duffett-Smith	AMZN Phono IV 00014028. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 69.2	James Duffett-Smith	AMZN Phono IV 00014038. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 69.3	James Duffett-Smith	AMZN Phono IV 00014046. [REDACTED]	RESTRICTED
Amazon Ex. 70	James Duffett-Smith	AMZN Phono IV 00014010. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 71	James Duffett-Smith	AMZN Phono IV 00013993. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 72	James Duffett-Smith	AMZN Phono IV 00013708. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 73	James Duffett-Smith	AMZN Phono IV 00007420. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 73.1	James Duffett-Smith	AMZN Phono IV 00007423. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 74	James Duffett-Smith	AMZN Phono IV 00004653. [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 75	James Duffett-Smith	AMZN Phono IV 00007516, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 75.1	James Duffett-Smith	AMZN Phono IV 00007517, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 76	James Duffett-Smith	AMZN Phono IV 00007414, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 77	James Duffett-Smith	AMZN Phono IV 00004524, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 78	James Duffett-Smith	AMZN Phono IV 00007426, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 78.1	James Duffett-Smith	AMZN Phono IV 00007427, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 79	James Duffett-Smith	AMZN Phono IV 00006112, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 79.1	James Duffett-Smith	AMZN Phono IV 00006113, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 79.2	James Duffett-Smith	AMZN Phono IV 00006124. [REDACTED]	RESTRICTED
Amazon Ex. 80	James Duffett-Smith	AMZN Phono IV 00007788. [REDACTED]	RESTRICTED
Amazon Ex. 80.1	James Duffett-Smith	AMZN Phono IV 00007790. [REDACTED]	RESTRICTED
Amazon Ex. 81	James Duffett-Smith	AMZN Phono IV 00005129. [REDACTED]	RESTRICTED
Amazon Ex. 82	James Duffett-Smith	AMZN Phono IV 00005109. [REDACTED]	RESTRICTED
Amazon Ex. 82.1	James Duffett-Smith	AMZN Phono IV 00005114. [REDACTED]	RESTRICTED
Amazon Ex. 83	James Duffett-Smith	AMZN Phono IV 00004605. [REDACTED]	RESTRICTED
Amazon Ex. 84	James Duffett-Smith	AMZN Phono IV 00007925. [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 85	James Duffett-Smith	AMZN Phono IV 00005605, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 86	James Duffett-Smith	AMZN Phono IV 00011685, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 87	James Duffett-Smith	AMZN Phono IV 00010632, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 88	James Duffett-Smith	AMZN Phono IV 00002564, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 89	James Duffett-Smith	AMZN Phono IV 00007433, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 90	James Duffett-Smith	AMZN Phono IV 00005984, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 91	James Duffett-Smith	AMZN Phono IV 00014368, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 92	James Duffett-Smith	AMZN Phono IV 00015404, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 93	James Duffett-Smith	<u>AMZN Phono IV 00008486</u> , Aug. 27, 2019 Ltr. from D. Aguirre to S. Worth at 1, Royalty Accounting for Prime Music (Aug. 27, 2019)	PUBLIC
Amazon Ex. 94	James Duffett-Smith	<u>AMZN Phono IV 00007321</u> , [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 95	James Duffett-Smith	<u>AMZN Phono IV 00007522</u> , [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 96	James Duffett-Smith	<u>AMZN Phono IV 00008489</u> , [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 97	James Duffett-Smith	AMZN Phono IV_00003114 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 98	James Duffett-Smith	AMZN Phono IV_00003115 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 99	James Duffett-Smith	AMZN Phono IV 00003117 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 100	James Duffett-Smith	AMZN Phono IV 00003118 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 101	James Duffett-Smith	AMZN Phono IV 00003119 [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 102	James Duffett-Smith	AMZN Phono IV 00003121 [REDACTED]	RESTRICTED
Amazon Ex. 103	James Duffett-Smith	AMZN Phono IV 00003122 [REDACTED]	RESTRICTED
Amazon Ex. 104	James Duffett-Smith	AMZN Phono IV 00003124 [REDACTED]	RESTRICTED
Amazon Ex. 105	James Duffett-Smith	AMZN Phono IV 00003125 [REDACTED]	RESTRICTED
Amazon Ex. 106	James Duffett-Smith	<u>AMZN Phono IV 00004075</u> , [REDACTED]	RESTRICTED
Amazon Ex. 107	James Duffett-Smith; Amy Braun	<u>AMZN Phono IV 00008128</u> , [REDACTED]	RESTRICTED
Amazon Ex. 107.1	James Duffett-Smith; Amy Braun	<u>AMZN Phono IV 00047731</u> , [REDACTED]	RESTRICTED
Amazon Ex. 108	James Duffett-Smith	<u>AMZN Phono IV 00007196</u> , [REDACTED]	RESTRICTED
Amazon Ex. 109	N/A	Exhibit 109 intentionally omitted	N/A
Amazon Ex. 110	N/A	Exhibit 110 intentionally omitted	N/A
Amazon Ex. 111	N/A	Exhibit 111 intentionally omitted	N/A

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 112	N/A	Exhibit 112 intentionally omitted	N/A
Amazon Ex. 113	N/A	Exhibit 113 intentionally omitted	N/A
Amazon Ex. 114	Leslie Marx	PAN PHONO4 00001507. [REDACTED]	RESTRICTED
Amazon Ex. 115	Amy Braun	AMZN Phono IV 00000779 [REDACTED]	RESTRICTED
Amazon Ex. 116	Amy Braun	AMZN Phono IV 00007802. [REDACTED]	RESTRICTED
Amazon Ex. 116.1	Amy Braun	AMZN Phono IV 00007814. [REDACTED]	RESTRICTED
Amazon Ex. 117	Amy Braun	AMZN Phono IV 00002457 [REDACTED]	RESTRICTED
Amazon Ex. 118	Amy Braun	AMZN Phono IV 00002440 [REDACTED]	RESTRICTED



Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 119	Amy Braun	AMZN Phono IV 00007914, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 119.1	Amy Braun	AMZN Phono IV 00007916, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 119.2	Amy Braun	AMZN Phono IV 00007919, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 119.3	Amy Braun	AMZN Phono IV 00007922, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 120	Amy Braun	AMZN Phono IV 00002545 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 121	Amy Braun	AMZN Phono IV 00002795 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 122	Amy Braun	AMZN Phono IV 00002825 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 123	Amy Braun	AMZN Phono IV 00002754 [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 124	Amy Braun	AMZN Phono IV 00008786. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 125	N/A	Exhibit 125 intentionally omitted	N/A
Amazon Ex. 126	Amy Braun	AMZN Phono IV 00047763. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 127	Amy Braun	AMZN Phono IV 00004127. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 127.1	Amy Braun	AMZN Phono IV 00004133. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 128	Amy Braun	AMZN Phono IV 00014114. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 129	Amy Braun	AMZN Phono IV 00010575. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 129.1	Amy Braun	AMZN Phono IV_00010577. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 130	Amy Braun	AMZN Phono IV 00004137. [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 130.1	Amy Braun	AMZN Phono IV 00004149. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 131	Amy Braun	AMZN Phono IV 00007281. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 131.1	Amy Braun	AMZN Phono IV 00007282. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 132	Amy Braun	AMZN Phono IV 00009648. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 133	Amy Braun	AMZN Phono IV 00047804. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 134	Amy Braun	AMZN Phono IV 00012292. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 134.1	Amy Braun	AMZN Phono IV 00012327. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 135	N/A	Exhibit 135 intentionally omitted	N/A

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 136	Amy Braun	AMZN Phono IV 00007844. [REDACTED]	RESTRICTED
Amazon Ex. 137	Amy Braun	AMZN Phono IV 00006084. [REDACTED]	RESTRICTED
Amazon Ex. 138	Amy Braun	AMZN Phono IV 00014200. [REDACTED]	<u>RESTRICTED</u>
Amazon Ex. 139	Amy Braun	AMZN Phono IV 00014061. [REDACTED]	RESTRICTED
Amazon Ex. 140	Amy Braun	AMZN Phono IV 00003845. [REDACTED]	RESTRICTED
Amazon Ex. 141	Amy Braun	AMZN Phono IV 00008840. [REDACTED]	RESTRICTED
Amazon Ex. 141.1	Amy Braun	AMZN Phono IV 00008846. [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 142	Amy Braun	AMZN Phono IV 00003973. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 143	Amy Braun	AMZN Phono IV 00047972. [REDACTED]	RESTRICTED
Amazon Ex. 144	Amy Braun	AMZN Phono IV 00000158 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 145	Amy Braun	AMZN Phono IV 00000133 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 146	Amy Braun	AMZN Phono IV 00047800. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 147	Amy Braun	AMZN Phono IV 00047796. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 148	Amy Braun	AMZN Phono IV 00009927. [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 149	Amy Braun	AMZN Phono IV 00004572. [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 149.1	Amy Braun	AMZN Phono IV_00004575, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 150	Amy Braun	AMZN Phono IV_00014064, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 151	Amy Braun	AMZN Phono IV_00002449 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 152	Amy Braun	AMZN Phono IV_00002433 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 153	Amy Braun	AMZN Phono IV_00002452 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 154	Amy Braun	AMZN Phono IV_00047973, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 155	Amy Braun	AMZN Phono IV_00000791 [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 156	Amy Braun	AMZN Phono IV_00001609 [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 157	Amy Braun	AMZN Phono IV 00007373. [REDACTED]	RESTRICTED
Amazon Ex. 157.1	Amy Braun	AMZN Phono IV 00007374. [REDACTED]	RESTRICTED
Amazon Ex. 158	Amy Braun	AMZN Phono IV 00000809 [REDACTED]	RESTRICTED
Amazon Ex. 159	Amy Braun	AMZN Phono IV 00047771. [REDACTED]	RESTRICTED
Amazon Ex. 160	Amy Braun	AMZN Phono IV 00008129. [REDACTED]	RESTRICTED
Amazon Ex. 161	Amy Braun	AMZN Phono IV 00003106 [REDACTED]	RESTRICTED
Amazon Ex. 162	Amy Braun	AMZN Phono IV_00014371. [REDACTED]	RESTRICTED
Amazon Ex. 163	Kajal Gayadien	AMZN Phono IV 00003132. [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 164	Kajal Gayadien	AMZN Phono IV 00047806, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 165	Kajal Gayadien	AMZN Phono IV 00015280, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 166	Kajal Gayadien	AMZN Phono IV 00015062, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 167	Kajal Gayadien	AMZN Phono IV 00015027, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 168	Kajal Gayadien	AMZN Phono IV 00015007, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 169	Kajal Gayadien	AMZN Phono IV_00000585, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 170	Kajal Gayadien	AMZN Phono IV 0000000000678 (from -730), [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 171	Kajal Gayadien	AMZN Phono IV_00015113, [REDACTED]	RESTRICTED



Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 172	Kajal Gayadien	<u>AMZN Phono IV_00000557,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 173	Kajal Gayadien	<u>AMZN Phono IV_00015112,</u> [REDACTED]	RESTRICTED
Amazon Ex. 174	Kajal Gayadien	<u>AMZN00004915,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 175	Kajal Gayadien	<u>AMZN00004685,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 176	Kajal Gayadien	<u>AMZN Phono IV_00015256,</u> [REDACTED]	RESTRICTED
Amazon Ex. 177	Kajal Gayadien	<u>AMZN Phono IV_00015251,</u> [REDACTED]	RESTRICTED
Amazon Ex. 178	Kajal Gayadien	<u>AMZN Phono IV_00015005,</u> [REDACTED]	RESTRICTED
Amazon Ex. 179	Tami Hurwitz	<u>AMZN Phono IV_00015267,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 180	Tami Hurwitz	<u>AMZN Phono IV_00015263,</u> [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 181	Tami Hurwitz	<u>AMZN Phono IV_00015255,</u> [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 182	Tami Hurwitz	AMZN Phono IV 00015114, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 183	Tami Hurwitz	AMZN Phono IV 00009258, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 184	Tami Hurwitz	AMZN Phono IV 00015386, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 185	Tami Hurwitz	AMZN Phono IV 00015161, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 186	Tami Hurwitz	AMZN Phono IV 00015152, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 187	Tami Hurwitz	AMZN Phono IV 00009372, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 188	Tami Hurwitz	AMZN Phono IV 00015424 (at -435), [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 189	Tami Hurwitz	AMZN Phono IV 00015151, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 190	Tami Hurwitz	AMZN Phono IV 00015225, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 191	Tami Hurwitz	AMZN Phono IV 00015186, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 192	Tami Hurwitz	AMZN Phono IV_00047964, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 193	Tami Hurwitz	AMZN Phono IV_00015237, [REDACTED]	RESTRICTED
Amazon Ex. 194	Tami Hurwitz	AMZN Phono IV_00015264, [REDACTED]	RESTRICTED
Amazon Ex. 195	Tami Hurwitz	AMZN Phono IV_00015266, [REDACTED]	RESTRICTED
Amazon Ex. 196	Tami Hurwitz	AMZN Phono IV_00015184, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 197	Tami Hurwitz	AMZN Phono IV_00009336, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 198	Tami Hurwitz	AMZN Phono IV_00015150, [REDACTED]	RESTRICTED
Amazon Ex. 199	Tami Hurwitz	AMZN Phono IV_00015254, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 200	Tami Hurwitz	AMZN Phono IV_00009453, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 201	Tami Hurwitz	AMZN Phono IV_00015253, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 202	Tami Hurwitz	AMZN Phono IV_00009400, [REDACTED] [REDACTED]	RESTRICTED

Exhibit No.	Sponsoring Witness	Description	Restricted/ Public
Amazon Ex. 203	Tami Hurwitz	AMZN Phono IV_00003598, [REDACTED] [REDACTED]	RESTRICTED
Amazon Ex. 204	Tami Hurwitz	AMZN Phono IV 00015240, [REDACTED] [REDACTED]	RESTRICTED
<u>Amazon Ex. 205</u>	<u>Kajal Gayadien</u>	AMZN Phono IV 00015532.001, [REDACTED] [REDACTED]	<u>RESTRICTED</u>
<u>Amazon Ex. 206</u>	<u>Kajal Gayadien</u>	AMZN Phono IV 00015566, [REDACTED] [REDACTED]	<u>RESTRICTED</u>

# Exhibit C

# Exhibit C.2

**Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
The Library of Congress**

**In the Matter of:**

**DETERMINATION OF RATES  
AND TERMS FOR MAKING AND  
DISTRIBUTING PHONORECORDS  
(*Phonorecords IV*)**

**Docket No. 21-CRB-0001-PR  
(2023-2027)**

**AMENDED WRITTEN DIRECT TESTIMONY OF LESLIE M. MARX, PHD**

**March 8, 2022**

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# I. Introduction

## I.A. Qualifications

- (1) My name is Leslie Marx. I am the Robert A. Bandeen Professor of Economics at the Fuqua School of Business at Duke University. In addition, I am a Partner at Bates White, LLC, a professional services firm that performs economic and statistical analysis in a variety of industries and forums. I specialize in microeconomics, particularly the fields of industrial organization and applied game theory. I received my PhD in Economics from Northwestern University and my BS in Mathematics from Duke University, where I graduated summa cum laude and was the valedictorian.
- (2) Prior to joining the faculty at Duke, I was an Associate Professor of Economics and Management at the W.E. Simon Graduate School of Business Administration at the University of Rochester. I have taught PhD-level courses in game theory and industrial organization and MBA courses on managerial decision analysis, managerial economics, managerial game theory, and environmental economics.
- (3) From 2005 to 2006, I was the Chief Economist for the Federal Communications Commission. Among other things, a focus of my work was competition issues in media markets and markets for multichannel video programming distribution.
- (4) I was qualified as an expert in economics and industrial organization in the Phonorecords III proceeding, during which I submitted written direct, rebuttal, and remand testimony and provided live testimony before the Copyright Royalty Board (Board).<sup>1</sup> I have also been qualified as an expert in a number of other proceedings involving the music industry. In *In re Petition of Pandora Media, Inc.*, I served as a testifying expert on behalf of Pandora in its litigation with the American Society of Composers, Authors and Publishers (ASCAP). I provided an opinion regarding reasonable royalty terms for Pandora's blanket license for the ASCAP repertory based on an analysis of the extent to which relevant benchmarks reflected competitive fair market value. The Court ultimately adopted key aspects of my analysis and set a rate within the range of rates that I proposed. I have also testified before the Copyright Board of Canada in a music royalty proceeding.
- (5) Throughout my career, I have pursued a research program focusing on auctions, procurement, cartels, and collusive behavior. My research incorporates my training in economic theory and econometrics. I have authored papers in many areas relevant to competition policy, including papers examining the conduct of the vitamins cartel, papers related to collusion at auctions, and papers on coordinated

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<sup>1</sup> Determination of Royalty Rates and Terms for Making and Distributing Phonorecords (Phonorecords III), Case No. 16-CRB-0003-PR (Copyright Royalty Board, February 5, 2019) [hereinafter "Phono III Final Determination"].

effects related to merger analysis. These and other of my professional papers have been published in peer-reviewed publications, as shown in my attached curriculum vitae. I am the coauthor of a book published by MIT Press titled *The Economics of Collusion: Cartels and Bidding Rings*.<sup>2</sup>

- (6) In addition to my teaching responsibilities at Duke University, I have taught economics to federal judges. I have twice been paired with another economist to teach the sessions on “Cartels” and “Agreement and Facilitation Practices” at the Antitrust Law & Economics Institute for Judges, cosponsored by the American Bar Association (ABA) Section of Antitrust Law and the Law & Economics Center at George Mason University School of Law. I have also taught sessions on the economics of cartels and the economics of mergers to participants in the ABA’s Antitrust Master’s Program.
- (7) Additional information about my previous testifying experience and my professional experience as an economist, including publications and affiliations, is included in my curriculum vitae, attached as Appendix A.

## **I.B. Scope of charge**

- (8) I was retained by counsel for Amazon.com Services LLC (“Amazon”) to help determine the reasonable terms and rates for interactive streaming royalty payments under Section 115 of the Copyright Act for the period 2023–2027. Section 115 grants a compulsory license that allows for the making and distributing of physical and digital phonorecords of a songwriter’s work, once a phonorecord of that work has been distributed to the public with the permission of that artist. Songwriters are due “mechanical royalties” under this license. Mechanical royalties are one component, together with performance royalties, of the royalties that interactive streaming services pay to holders of musical works rights.
- (9) I was asked for my opinions on reasonable musical works royalty rate structures and royalty rates for interactive streaming services, as well as appropriate alternative prongs to serve as royalty “backstops” for services offered by Amazon. In making my determination, I was advised that the reasonable terms and rates for interactive streaming mechanical royalty payments should satisfy a “willing buyer/willing seller” standard, as defined in the 2018 Music Modernization Act.<sup>3</sup>

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<sup>2</sup> Robert C. Marshall and Leslie M. Marx, *Economics of Collusion* (Boston: MIT Press, 2012).

<sup>3</sup> Music Modernization Act, 17 USC § 115 (2018).

- (10) I filed my original Written Direct Testimony in this matter on October 13, 2021. I have prepared this Amended Written Direct Testimony that incorporates additional MLC royalty rate data that were submitted by Dr. Eisenach.<sup>4</sup> Section XI.D contains additional detail on these data.

## I.C. Summary of opinions

- (11) My primary conclusions can be summarized as follows:
- The growth of interactive streaming has led to a resurgence of revenues for the music industry, which had been declining prior to interactive streaming due to piracy. After a decade-long decline in recorded music industry revenues attributable to piracy, US recorded music industry revenue stabilized and then grew alongside the growth of interactive streaming. Owners of musical works copyrights have benefitted from a re-monetization of their catalogs from interactive streaming, and publishing catalogs have seen high valuations in recent sales.
  - Despite their rapid growth in subscribers and revenue, interactive streaming services have struggled with profitability. [REDACTED]. Spotify has also reported negative profits.
  - A willing buyer/willing seller standard, which governs this proceeding, refers to transactions that occur between a willing buyer and a willing seller in an effectively competitive market. An effectively competitive market, although not perfectly competitive, is not distorted by substantial market power.
  - Labels and publishers possess substantial market power against interactive streaming services. The complementary oligopoly power of labels and publishers mean that the rates that they charge interactive streaming services in an unregulated market are not effectively competitive and need to be adjusted to determine rates under a willing buyer/willing seller standard.
  - An increase in mechanical royalty rates is not necessary to make songwriting a viable profession. Songwriters earn money from all musical works royalties, including performance royalties, not just mechanical royalties. Any perceived undercompensation of songwriting can be more efficiently corrected in ways other than increasing mechanical royalty rates.
  - Economic efficiency dictates a percent-of-revenue rate structure when practical. Both copyright owners and services benefit from a rate structure that maximizes available surplus to be divided between them. A percent-of-revenue rate aligns the incentives of services and copyright owners

<sup>4</sup> Written Direct Testimony of Jeffrey A. Eisenach (on behalf of Copyright Owners), October 13, 2021 [hereinafter “Eisenach WDT”], Appendix C.

with surplus maximization, reflecting what willing buyers and willing sellers would negotiate in an effectively competitive market, when it can be practically implemented.

- If backstops to a percent-of-revenue rate are required, they must account for the particulars of service offerings. Backstops to percent-of-revenue rates can protect against revenue misattribution. Such backstops should be targeted toward particular categories of streaming services. An all-in per-subscriber fee provides a reasonable backstop for paid subscription services, while a total content cost (TCC) backstop is more appropriate for free, ad-supported services.
- Reasonable backstops focus on all-in musical works royalties and not mechanical-only royalties. Economic decisions are driven by total payments to musical works rightsholders and total payments to sound recording rightsholders, whatever their sub-components.
- Amazon Music Prime has features that make it not well suited to either percent-of-revenue or per-subscriber rates. A per-play rate is a more appropriate rate structure for that service. For Amazon Music Prime, a percent-of-revenue rate is difficult to apply due to difficulties in attributing revenue to a narrow catalog interactive streaming service that is bundled with a wide range of non-music goods. In addition, per-subscriber rates pose challenges due to wide variation in usage among users. A per-play rate, [REDACTED], is better suited to the characteristics of Amazon Music Prime.
- A benchmarking approach can be useful to determine willing buyer/willing seller rates. I identify several comparable markets that, when properly adjusted for market power, yield reasonable all-in musical works rates for interactive streaming services.
- My benchmark approach yields a range of willing buyer/willing seller percent-of-revenue musical works rates from 6.0% to 11.6% and Amazon Music Prime per-play rates from \$0.00045 to \$0.0009. Figure 1 summarizes the results of my preferred benchmark, including backstops.

**Figure 1: Musical works headline rates and backstops for all-in musical works royalties based on preferred benchmark**

Service type	Musical works rate	Backstop
Standalone portable	10.54%	\$0.80 per subscriber
Free non-subscription/ad-supported	10.54%	19.0% TCC
Bundled subscription	10.54%	Backstop that would apply to the music component of the bundle if it were offered on a standalone basis
Standalone Non-Portable Streaming	10.54%	\$0.40 per subscriber
Amazon Music Prime	\$0.00085 per play	N/A

- (12) The rest of this report more fully states and explains the opinions that I am offering in this matter and the bases for them.



## II. Music distribution and its evolution

- (13) Consumers access recorded music through a variety of distribution channels—most notably streaming services, which have grown dramatically over the last decade, but also digital downloads, terrestrial and satellite radio, CDs, and even vinyl records, which saw a 29% sales increase in 2020 alone.<sup>5</sup> The ways in which people access music have changed dramatically in recent years alongside changes in technology. Over the last decade, music streaming has become the dominant distribution channel for recorded music, driving revenue growth in an industry whose revenue had—prior to the rise of music streaming—been steadily declining.<sup>6</sup>

### II.A. Current recorded music distribution channels

- (14) Interactive streaming first began to attract a significant number of subscribers in the United States in 2011. By 2016, roughly 39% of recorded music revenue in the United States came from interactive streaming services, according to the Recording Industry Association of America (RIAA).<sup>7</sup> Just four years later, in 2020, interactive streaming represented roughly 73% of recorded music revenue.<sup>8</sup> During this time, driven primarily by the rise in music streaming, total recorded music revenue in the United States rose from \$7.5 billion to \$12.2 billion.<sup>9</sup> Figure 2 summarizes estimated recorded music revenue in the United States by distribution channel in 2016 and 2020.

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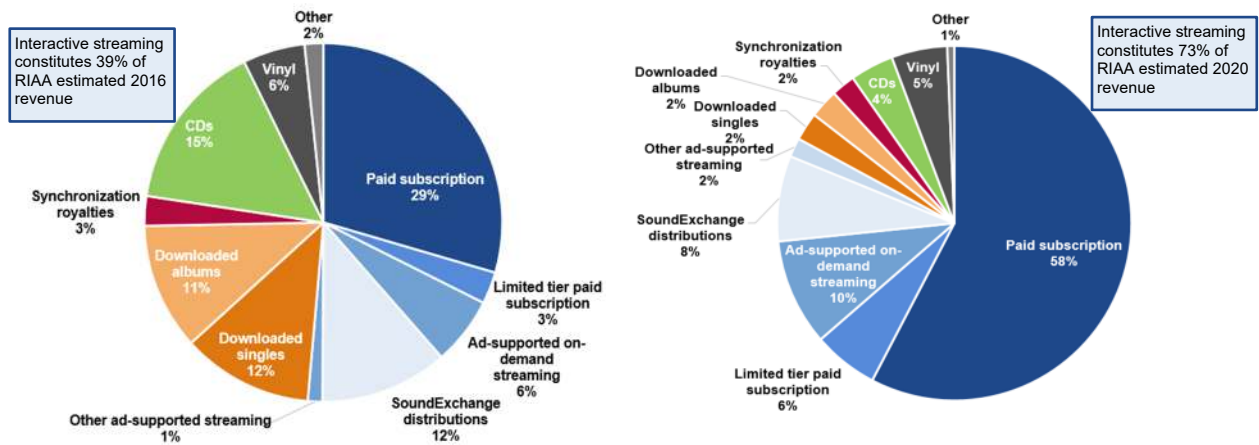
<sup>5</sup> Calculated using RIAA sales data. *See also* Noah Yoo, “Vinyl Record Sales Increased Almost 30% in 2020, RIAA Says,” *Pitchfork*, February 26, 2021.

<sup>6</sup> *See* Figure 4.

<sup>7</sup> Joshua P. Friedlander, “News and Notes on 2016 RIAA Shipment and Revenue Statistics,” Recording Industry Association of America, 2017, p. 4, <https://www.riaa.com/wp-content/uploads/2017/03/RIAA-2016-Year-End-News-Notes.pdf>.

<sup>8</sup> Joshua P. Friedlander, “Year-End 2020 RIAA Revenue Statistics” Recording Industry Association of America, 2021, p. 3, <https://www.riaa.com/wp-content/uploads/2021/02/2020-Year-End-Music-Industry-Revenue-Report.pdf>.

<sup>9</sup> *See* Figure 4.

**Figure 2: RIAA estimated US recorded music revenue by distribution channel, 2016 and 2020**

Sources: Joshua P. Friedlander, “Year-End 2020 RIAA Revenue Statistics,” Recording Industry Association of America, 2021, <https://www.riaa.com/wp-content/uploads/2021/02/2020-Year-End-Music-Industry-Revenue-Report.pdf>; Joshua P. Friedlander, “News and Notes on 2016 RIAA Shipment and Revenue Statistics,” Recording Industry Association of America, 2017, <https://www.riaa.com/wp-content/uploads/2017/03/RIAA-2016-Year-End-News-Notes.pdf>.

Notes:

1. Revenue is based on value of shipments at recommended or estimated list price, or wholesale value for formats with no retail value equivalent.
2. “Limited-tier paid subscription streaming” includes streaming services with interactivity limitations by availability, device restriction, catalog limitations, on-demand access, or other factors. “SoundExchange distributions” are estimated payments to performers and copyright holders for digital and customized radio services under statutory licenses. “Other” includes ringtones and ringbacks, kiosks, music video downloads, physical music videos, cassettes, DVD audio, super audio CDs (SACDs), and other digital and physical music sales.
3. RIAA does not track terrestrial radio revenue or live music revenue; thus, those distribution channels are not included in this figure.

- (15) In this section, I describe the various channels of music distribution in more detail and introduce some of the nomenclature I will be using throughout this report.

### II.A.1. Streaming services

- (16) Music streaming services allow users to play music to a variety of devices over the internet without having to download a music file onto their device. Some streaming services allow users to download songs locally in a limited way to play music when an internet connection is not available.<sup>10</sup>
- (17) Streaming services can be classified as interactive or non-interactive. Interactive streaming services generally allow users to play the exact songs that they request from a library of offerings.<sup>11</sup> Examples

<sup>10</sup> This is defined by statute as a “limited download” that is accessible to listening for a limited period of time—typically one month—or on a limited number of occasions—typically twelve. Phono III Final Determination, p. 2032.

<sup>11</sup> Scope of Exclusive Rights in Sound Recordings, 17 USC § 114 (“An “interactive service” is one that enables a member of the public to receive a transmission of a program specially created for the recipient, or on request, a transmission of a particular sound recording, whether or not as part of a program, which is selected by or on behalf of the recipient. The ability of individuals to request that particular sound recordings be performed for reception by the public at large, or in the case of a subscription service, by all subscribers of the service, does not make a service interactive, if the

of this kind of service include Amazon Music Unlimited (“Unlimited”), Spotify, and Apple Music.<sup>12</sup> Non-interactive streaming services generally do not allow users to choose specific songs, but rather provide them with “pre-programmed or semi-random combination of tracks, the specific selection and order of which remain unknown to the listener (i.e. no pre-published playlist).”<sup>13</sup> Non-interactive streaming makes up a much smaller share of RIAA estimated recorded music revenue than interactive streaming.<sup>14</sup>

- (18) Streaming services generate revenue primarily by charging users subscription fees and by collecting advertising revenue. “Premium” services are often ad-free, while free ad-supported services rely on advertisements to generate revenue.<sup>15</sup>

## II.A.2. Purchased music

- (19) Purchased music, which includes digital singles and albums as well as physical CDs and vinyl records, was once the dominant distribution channel for recorded music, but now makes up a relatively small portion of US recorded music revenue. As shown in Figure 2, revenue for digital and physical music purchases declined from 45% of RIAA estimated US recorded music revenue in 2016 to only about 15% in 2020.<sup>16</sup>

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programming on each channel of the service does not substantially consist of sound recordings that are performed within 1 hour of the request or at a time designated by either the transmitting entity or the individual making such request. If an entity offers both interactive and non-interactive services (either concurrently or at different times), the noninteractive component shall not be treated as part of an interactive service.”).

<sup>12</sup> Amazon Music Free includes functionality that takes it outside the scope of a Section 114 non-interactive license, but in most respects it is a non-interactive service. See Section IV.C.

<sup>13</sup> “Licensing 101,” *SoundExchange*, accessed October 2, 2021, <https://www.soundexchange.com/service-provider/licensing-101/> (“Noninteractive services are very generally defined as those in which the user experience mimics a radio broadcast. That is, the users may not choose the specific track or artist they wish to hear, but are provided a pre-programmed or semi-random combination of tracks, the specific selection and order of which remain unknown to the listener (i.e., no pre-published playlist).”).

<sup>14</sup> Non-interactive streaming services make up a portion of the 8% of revenue attributed to “SoundExchange distributions” in the first half of 2020 in Figure 2. Interactive streaming services made up 73% of RIAA estimated recorded music revenue in the first half of 2020. See Figure 2, which shows that 58% of revenue is associated with paid subscriptions, 6% with limited tier subscriptions, and 10% with ad-supported on-demand streaming.

<sup>15</sup> Examples of premium services are Amazon Music Unlimited and Spotify Premium. Examples of ad-supported services are Amazon Music Free and Spotify Free. Most ad-supported services are free, although in August 2021, Spotify piloted a low-cost ad-supported subscription tier, Spotify Plus. Jon Porter, “Spotify Is Testing a Less Restrictive Ad-Supported Tier Costing \$0.99 a Month,” *The Verge*, August 3, 2021, <https://www.theverge.com/2021/8/3/22607203/spotify-plus-ad-supported-tier-unlimited-skips-on-demand-listening>.

<sup>16</sup> “Digital purchases” includes “Download single,” “Download album,” and “Other digital” distribution channels. “Physical purchases” includes “CD,” “Vinyl,” and “Other physical” distribution channels. Joshua P. Friedlander, “Year-End 2020 RIAA Revenue Statistics,” Recording Industry Association of America, 2021, <https://www.riaa.com/wp-content/uploads/2021/02/2020-Year-End-Music-Industry-Revenue-Report.pdf>.

Recorded music revenue for digital purchases declined from 24% of RIAA estimated recorded music revenue in 2016 to only 5% in 2020. Recorded music revenue for physical purchases declined from 21% of RIAA estimated recorded music revenue in 2016 to only 9% in 2020. See Figure 2.

- (20) Physical purchases tend to bundle an album of songs onto one CD or record, whereas digital purchases tend to allow per-song purchasing. Unlike in the case of streaming, purchased music conveys an ownership right rather than just temporary access.

### II.A.3. Other ways of accessing music

- (21) Although terrestrial radio is not included in the revenue breakdown in Figure 2, it continues to be a major source of music for listeners. As of December 2020, there were 6,699 commercial FM radio stations in the United States.<sup>17</sup> [REDACTED]
- (22) Satellite radio offers largely ad-free music, as well as other content, to paid subscribers. SiriusXM, the only satellite radio service in the United States, has more than 350 channels, over 90 of which are music channels.<sup>19</sup> As with terrestrial radio, listeners have no control over exactly which songs they listen to on satellite radio, beyond picking a station.
- (23) [REDACTED] According to one report:  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]
- (24) In recent years, online video platforms, particularly YouTube, have also served as a major source of music for listeners. According to Google, 2 billion people stream music videos on YouTube each month.<sup>21</sup> [REDACTED]

<sup>17</sup> Federal Communications Commission, “Broadcast Station Totals as of December 31, 2020,” news release, January 5, 2021, <https://docs.fcc.gov/public/attachments/DOC-369041A1.pdf>.

<sup>18</sup> Edison Research, “Share of Ear: Americans’ Share of Time Spent Listening to Audio Sources Q4 2020,” 2020.

<sup>19</sup> “SiriusXM Channel Lineup,” SiriusXM.com, accessed October 2, 2021, [https://www.siriusxm.com/content/dam/sxm-com/pdf/lineup/SXM\\_Web\\_Line\\_Ups\\_5-4-HI.pdf](https://www.siriusxm.com/content/dam/sxm-com/pdf/lineup/SXM_Web_Line_Ups_5-4-HI.pdf).

<sup>20</sup> Gabriel Schulman, “Music Publishing in the US,” IBISWorld Industry Report 51223, February 2021.

<sup>21</sup> Lyor Cohen, “Why Marketers Should Care about the Music Industry’s Latest Transformation,” *Think Global*, November 2020, <https://www.thinkwithgoogle.com/marketing-strategies/video/music-industry-changes/>.

<sup>22</sup> Edison Research, “Share of Ear: Americans’ Share of Time Spent Listening to Audio Sources Q4 2020,” 2020. Rights holders receive synchronization royalties from YouTube (known as “micro-sync” royalties) when videos that use their music generate ad revenue. Seth Lorinczi, “YouTube 101: A Beginner’s Guide,” *Songtrust* (blog), June 12, 2020, <https://blog.songtrust.com/youtube-101-a-beginners-guide>. Additionally, YouTube shares subscription revenues from its YouTube Premium service with content creators on its site. “YouTube Partner Earnings Overview,” accessed October 2,

## II.A.4. Blurred distinctions between channels

- (25) For royalty purposes, each distribution channel is classified in a particular category that entails paying a particular set of royalties—some statutory, some negotiated, and some negotiated under court oversight. However, the distinctions between distribution channels are sometimes blurred. For instance, although interactive streaming services are sometimes characterized as promoting “lean forward” or “active” listening in contrast to the “lean back” or “passive” listening associated with non-interactive streaming services, over time interactive streaming services have incorporated more features associated with “lean back” listening.<sup>23</sup> Amazon’s paid subscription interactive streaming service, Unlimited, offers its subscribers “lean forward” interactive streaming but also includes radio and playlist services that are more akin to “lean back” non-interactive streaming services such as Pandora’s non-interactive service.<sup>24</sup> Another of Amazon’s services covered by this proceeding, Amazon Music Free (“Free”), is essentially “lean back.”<sup>25</sup> Many terrestrial radio stations now offer their content via online streaming, allowing people to listen in over the internet rather than a traditional radio receiver.<sup>26</sup>
- (26) A large share of plays on Amazon’s interactive streaming services are “lean back” plays. Figure 3 shows the percentage of programmed plays for each of Amazon’s interactive streaming services from 2017 to 2021.<sup>27</sup> I describe the differences between these services in more detail in Section IV below.

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2021, <https://support.google.com/youtube/answer/72902?hl=en>. YouTube reported paying more than \$3 billion to the music industry in 2019. Susan Wojcicki, “YouTube at 15: My Personal Journey and the Road Ahead,” *YouTube Official Blog*, February 14, 2020, <https://blog.youtube/news-and-events/youtube-at-15-my-personal-journey>.

<sup>23</sup> In late 2017, one industry observer noted, “For the best part of a decade Pandora had almost all of the market to itself, but it is now buckling under the impact of on-demand streaming. Pandora was meant to be different to Spotify, and it was, until Spotify started stealing Pandora’s clothes. Pandora grew its user base by delivering a lean back, but personalized listening experience. Radio on its users’ terms. Spotify soon recognized the value of lean back listening, bringing in a vast selection of curated playlists, directly and via partners. Beats Music followed suit and soon became the foundation for Apple Music’s curated streaming proposition.” “Pandora’s Loss Is Sirius XM’s Gain,” *Music Industry blog*, November 9, 2017, <https://musicindustryblog.wordpress.com/tag/semi-interactive-radio/>.

<sup>24</sup> Amazon, “What are the Differences Between the Amazon Music Subscriptions?,” accessed on August 11, 2021, <https://www.amazon.com/gp/help/customer/display.html?nodeId=GW3PHAUCZM8L7W9L>.

<sup>25</sup> See Section IV.C.

<sup>26</sup> Web V Determination, No. 19-CRB-0005-WR (CRB July 22, 2021) [hereinafter “Web V Determination”], at 249 (“Based on the entirety of the record in this proceeding and for the foregoing reasons, the Judges do not find that a separate rate category for simulcasters is warranted. Additionally, significant evidence in the record persuades the Judges that simulcasters and other commercial webcasters compete in the same submarket and therefore should be subject to the same rate.”).

<sup>27</sup> “Programmed plays” are defined as plays of songs on a programmed playlist, algorithmic playlist, music station, or algorithmic station. Unlimited’s auto play feature is also treated as a programmed play.

**Figure 3: Percentage of programmed plays by Amazon music service, 2017–2021**

Service	2017	2018	2019	2020	2021
Amazon Music Unlimited					
Amazon Music Prime					
Amazon Music Free					

Source: Amazon data.

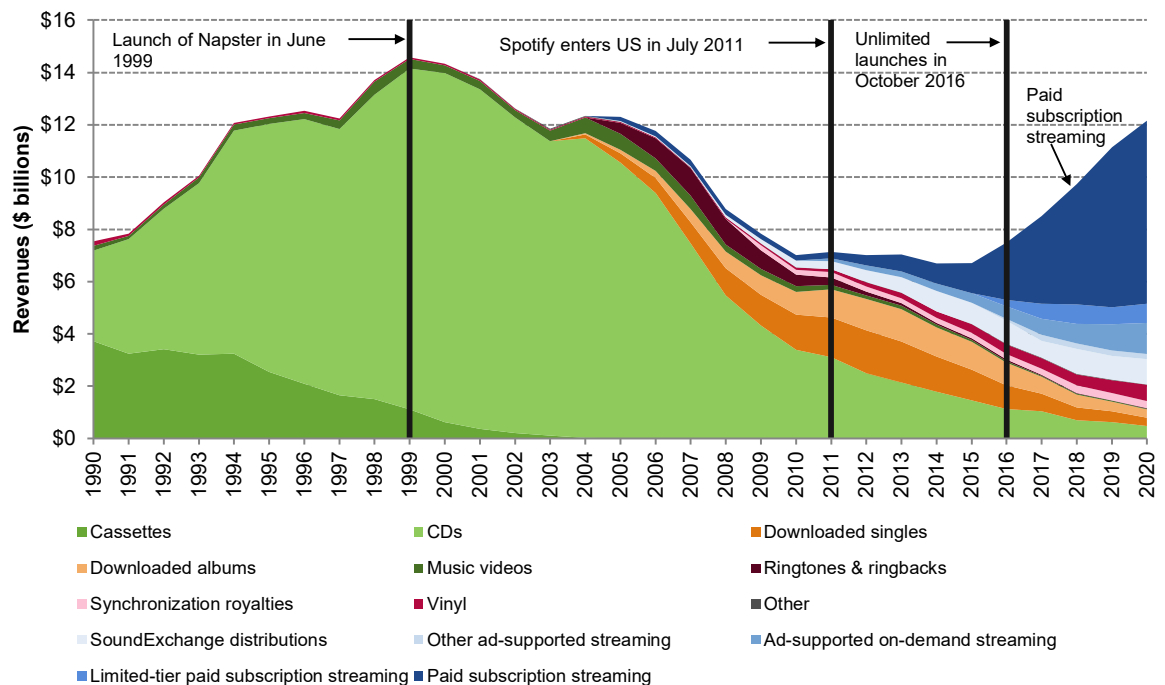
Notes:

1. 2021 data are through July only.
2. “Programmed plays” are defined as plays of songs on a programmed playlist, algorithmic playlist, music station, or algorithmic station. Unlimited’s auto play feature is also treated as a programmed play.
3. Free is entirely programmed and does not appear that way in the table only because of internal testing done by Amazon Music.

## II.B. Changes in music distribution over time

- (27) The last two decades have seen a dramatic shift in the form of music distribution from physical media, such as CDs and cassettes, to digital content. The first transition was from physical media to permanent digital downloads (PDDs). More recently, the shift has been away from both physical media and PDDs to streaming services. As shown in Figure 4 below, revenue attributed to all forms of streaming rose dramatically from 2011 to 2020, according to RIAA estimates.<sup>28</sup>

<sup>28</sup> Joshua P. Friedlander, “News and Notes on 2015 RIAA Shipment and Revenue Statistics,” Recording Industry Association of America, 2016, <http://www.riaa.com/wp-content/uploads/2016/03/RIAA-2015-Year-End-shipments-memo.pdf>, Figure 1; Joshua P. Friedlander, “Year-End 2020 RIAA Revenue Statistics,” Recording Industry Association of America, 2021, <https://www.riaa.com/wp-content/uploads/2021/02/2020-Year-End-Music-Industry-Revenue-Report.pdf>.

**Figure 4: US recorded music industry revenue by distribution channel over time, 1990–2020**

Source: "US Sales Database," RIAA, accessed October 2, 2021, <https://www.riaa.com/u-s-sales-database/>.

Notes:

1. Revenue is based on value of shipments at recommended or estimated list price, or wholesale value for formats with no retail value equivalent.
2. Other definitions: "Limited-tier paid subscription streaming" includes streaming services with interactivity limitations by availability, device restriction, catalog limitations, on demand access, or other factors. "SoundExchange distributions" are estimated payments to performers and copyright holders for digital radio services. "Other" includes DVD audio, SACDs, kiosks, and other digital music licensing.
3. RIAA does not track terrestrial radio revenue or live music revenue; thus, those distribution channels are not included in this figure.

- (28) Figure 4 also shows that the recorded music industry in the United States experienced a decline in revenue from 1999 through 2010 that stabilized and then reversed with the rise of streaming. The decline in revenue began after the advent of Napster in 1999 and did not halt and reverse until the growth of interactive streaming services beginning in 2011.<sup>29</sup> In recent years, recorded music revenue has increased substantially, driven by revenue from interactive streaming services. Thanks to streaming, "the music industry is healthier than it's been in more than a decade."<sup>30</sup> The continuing

<sup>29</sup> Napster was a peer-to-peer file-sharing service that popularized illegal sharing of music. See Jeff Tyson, "How the Old Napster Worked," HowStuffWorks, accessed April 6, 2021, <https://computer.howstuffworks.com/napster.htm> ("The problem that the music industry had with Napster was that it was a big, automated way to copy copyrighted material. It is a fact that thousands of people were, through Napster, making thousands of copies of copyrighted songs, and neither the music industry nor the artists got any money in return for those copies."). It was shut down in its original form after a series of lawsuits and is now the name of an online streaming service owned by Rhapsody. Napster, "About Us: We Are Napster," accessed April 6, 2021, <https://us.napster.com/about>.

<sup>30</sup> Frank Pallota, "The Music Industry Was Left for Dead a Few Years Ago. Now It's Booming Again," *CNN Business*, February 28, 2020, <https://www.cnn.com/2020/02/28/media/music-industry-streaming/index.html> ("The music industry today is healthier than it's been in more than a decade," Josh Friedlander, the senior vice president of research at the

shift from “offline” to “online” music “ultimately benefits the industry given the recurring nature and higher ARPU of paid streaming.”<sup>31</sup>

## II.B.1. Decline of piracy

- (29) While technology has created new music distribution channels, it also facilitated the piracy of musical works. Music piracy is a de facto distribution channel that does not contribute to music revenue but instead decreases revenue generated by other channels. Some forms of piracy include downloading music from an illegal file-sharing site, peer-to-peer file sharing, and using stream-ripping software or mobile apps to copy music.<sup>32</sup>
- (30) Piracy has had a substantial impact on music revenue. As shown in Figure 4 above, the original launch of the file-sharing service Napster in 1999, which facilitated a rise in piracy, coincided with a sharp decline in US recorded music industry revenue, widely attributed to piracy.<sup>33</sup> This rapid decline ceased and then reversed alongside the rise of streaming services. By 2020, recorded music revenues had grown sharply for six consecutive years, driven primarily by revenue from interactive streaming services.<sup>34</sup>
- (31) Streaming services help mitigate piracy.<sup>35</sup> Interactive streaming provides easy access to music via a user-friendly interface and the ability to stream specific songs on demand, as well as music discovery algorithms and other added features. Free ad-supported services in particular may provide an alternative to piracy for low willingness to pay (WTP) consumers.<sup>36</sup> One 2018 survey found a 44% reduction in the number of people who illegally download music in the United Kingdom in the previous five years, attributed in part to the rise of music streaming.<sup>37</sup>

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Recording Industry Association of America, told CNN Business. ‘Revenues from streaming services are more than offsetting decreases in physical sales and digital downloads.’ Friedlander added ‘it’s hard to overstate the impact streaming music has had on the music industry.’).

<sup>31</sup> “Music in the Air,” *Goldman Sachs Equity Research*, May 14, 2020, <https://www.goldmansachs.com/insights/pages/infographics/music-in-the-air-2020/report.pdf>, p. 4.

<sup>32</sup> “About Piracy,” *RIAA Resources & Learning*, accessed October 2, 2021, <https://www.riaa.com/resources-learning/about-piracy/>.

<sup>33</sup> David Goldman, “Music’s Lost Decade: Sales Cut in Half,” *CNN*, February 3, 2010, [https://money.cnn.com/2010/02/02/news/companies/napster\\_music\\_industry/](https://money.cnn.com/2010/02/02/news/companies/napster_music_industry/).

<sup>34</sup> See Figure 4.

<sup>35</sup> See IFPI, “IFPI Digital Music Report 2015,” September 2015, <https://www.riaa.com/wp-content/uploads/2015/09/Digital-Music-Report-2015.pdf>, p. 15 (“Streaming services have also, along with copyright enforcement strategies, helped migrate consumers to licensed services by offering a convenient alternative to piracy.”).

<sup>36</sup> For example, a 2017 survey of people’s reasons for using illegal file-sharing services to stream or download music or radio in the United States found that 66% of respondents did so because it was “cheaper/free,” while only 33% noted that it was “more convenient.” “Reasons for Using Illegal File Sharing Services to Stream or Download Music or Radio in the United States in 2017,” Statista, September 2017, accessed October 5, 2021, <https://www.statista.com/statistics/758917/reasons-illegal-file-sharing-services-download-stream-radio-music/>.

<sup>37</sup> Andre Paine, “‘Spotify Has Everything’: Piracy Drops as Streaming Wins over Illegal Downloaders,” *Music Week*, August 2, 2018, <http://www.musicweek.com/digital/read/spotify-has-everything-piracy-drops-as-streaming-wins-over->



- (32) Despite this progress, music piracy still exists and can rebound. For instance, the global COVID-19 pandemic reportedly triggered a return to “old school” torrenting piracy in the United States, with music-related visits to torrent sites growing by 15.6% from February to March 2020.<sup>38</sup>
- (33) A recent survey conducted by Robert Klein (the “Klein Survey”) that “seeks to understand the music streaming listening habits of Amazon Music customers”<sup>39</sup> finds that over [REDACTED] of the surveyed Unlimited subscribers accessed music through piracy prior to subscribing to the service.<sup>40</sup> He also finds that over [REDACTED] of the surveyed Unlimited subscribers would return to piracy as their method of accessing music if they “could no longer stream music with Amazon Music Unlimited, or any other on-demand streaming service.”<sup>41</sup>

## II.B.2. Re-monetization of old catalogs

- (34) Streaming has allowed a re-monetization of old catalogs of music that had already generated substantial revenue through CD, cassette, and record sales.<sup>42</sup> Iconic bands that profited from high record sales in the prestreaming world have been paid again for the same music since entering the streaming world.<sup>43</sup> For example, The Beatles entered major streaming services in December 2015 and averaged 1.5 billion streams a year on Spotify alone in the next three years.<sup>44</sup> The total stream count for The Beatles is 11 billion on Spotify alone, similar to Queen (14 billion), Linkin Park (11 billion), Red Hot Chili Peppers (9 billion), Michael Jackson (8 billion), Metallica (7 billion), Green Day (6 billion) and Prince (2 billion), all which saw high CD, cassette, and record sales in the prestreaming era.<sup>45</sup> Prince was streamed 17 million times in one week after his catalog was added to streaming services.<sup>46</sup>

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illegal-downloaders/073373 (“[...]10% of those surveyed download music illegally, down from 18% five years ago....The increasing take-up of streaming services – both ad-funded and premium – has seen off a good deal of piracy. YouGov found that 63% of people who have stopped illegally downloading music now use streaming services.”). 44.4% =  $(18\% - 10\%) \div 18\%$ .

<sup>38</sup> Tim Ingham, “Music Piracy Is Going Old School in the Age of COVID-19,” *RollingStone*, May 4, 2020, <https://www.rollingstone.com/pro/features/music-piracy-is-going-old-school-in-the-age-of-covid-19-993412/>.

<sup>39</sup> Written Direct Testimony of Robert L. Klein (on behalf of Amazon Digital Services LLC), October 13, 2021 [hereinafter “Klein WDT”], ¶12.

<sup>40</sup> Klein WDT, Table 22.

<sup>41</sup> Klein WDT, Table 37.

<sup>42</sup> Ben Sisario, “This Man Is Betting \$1.7 Billion on the Rights to Your Favorite Songs,” *New York Times*, December 18, 2020, <https://www.nytimes.com/2020/12/18/arts/music/merck-mercuriadis-hipgnosis.html> (“Mercuriadis’s pitch to investors is that the royalty streams of proven hits are a more stable investment than gold or oil, given the inelastic demand for music—a premise that has largely held up during the pandemic.”).

<sup>43</sup> This applies to both musical works and sound recording royalties.

<sup>44</sup> “Streaming Masters—The Beatles,” *ChartMasters*, November 5, 2018, <https://chartmasters.org/2018/11/streaming-masters-the-beatles/>.

<sup>45</sup> “Most Streamed Artists Ever on Spotify,” *ChartMasters*, accessed October 9, 2021, <https://chartmasters.org/most-streamed-artists-ever-on-spotify/>.

<sup>46</sup> Nicole Bitette, “Prince’s Music Sales and Streams Skyrocketed in the Year Since His Death,” *New York Daily News*,

- (35) The Klein Survey found that over [REDACTED] of the surveyed Unlimited subscribers would “listen to digital music files, CDs, or vinyl records [they] already have” if on-demand streaming were no longer available.<sup>47</sup> In contrast to streaming music, these alternative ways to access already purchased music do not generate additional revenue streams for rightsholders.
- (36) In recent years, private-equity investors have been investing in musical works as an asset class, purchasing whole catalogs of existing songs, expecting to profit from the royalty flow from online streaming of original recordings and covers.<sup>48</sup> For instance, Hipgnosis Songs Fund has spent about \$1.7 billion since 2018 purchasing the rights—mostly publishing rights, but some sound recording rights as well—to more than 57,000 songs, among which are the song catalogs of Shakira, Neil Young, The Red Hot Chili Peppers, and Mark Robson.<sup>49</sup> In addition, during the last 12 months, Primary Wave Music acquired 80% of the publishing catalog of Stevie Nicks for \$100 million;<sup>50</sup> Bob Dylan sold his full catalog to Universal Music Publishing Group for an estimated \$300 million;<sup>51</sup> Warner Chappell Music purchased part of Bruno Mars’ publishing catalog and Warner Music Group

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April 21, 2021, <https://www.nydailynews.com/entertainment/music/prince-music-sales-skyrocketed-death-article-1.3080565>.

<sup>47</sup> Klein WDT, Table 37.

<sup>48</sup> Faith Blackinton, “What’s Behind the Boom in Iconic Boomer Musicians Selling Their Songs,” CNBC, April 4, 2021, <https://www.cnbc.com/2021/04/04/why-theres-a-boom-in-boomer-rock-stars-selling-their-songs.html> (“The deals also come at a time when streaming music—for all of its controversy and skepticism on the part of the musicians themselves about getting a raw deal—has proved to be an economic juggernaut, at least for the record companies. In 2020, Goldman Sachs forecast that global music revenue would reach \$142 billion by the end of the decade, reflecting an 84% increase when compared to the 2019 level of \$77 billion and streaming capture 1.2 billion users by 2030, four times its 2019 level, and primarily benefiting companies like Sony, which bought Simon’s catalog, and Universal, which acquired Dylan’s songs.”).

Ben Sisario, “This Man Is Betting \$1.7 Billion on the Rights to Your Favorite Songs,” *New York Times*, December 18, 2020, <https://www.nytimes.com/2020/12/18/arts/music/merck-mercuriadis-hipgnosis.html> (“Thanks to plentiful investment coffers, rosy projections about online streaming and, less happily, the need of many artists to raise cash during the pandemic, there has been a flurry of deals this year, often at staggering prices. Stevie Nicks sold a majority share in her catalog for \$80 million. Bob Dylan signed away his entire corpus of more than 600 copyrights for a sum estimated at \$300 million to \$400 million.”).

<sup>49</sup> Ben Sisario, “This Man Is Betting \$1.7 Billion on the Rights to Your Favorite Songs,” *New York Times*, December 18, 2020, <https://www.nytimes.com/2020/12/18/arts/music/merck-mercuriadis-hipgnosis.html>.

Reid Nakamura, “Red Hot Chili Peppers to Sell Catalog for \$150 Million,” *MSN.com*, May 4, 2021, <https://www.msn.com/en-us/music/news/red-hot-chili-peppers-to-sell-catalog-for-24150-million/ar-BB1gkgXb?ocid=BingNewsSearch>.

Hipgnosis Songs Fund, “Our Purpose and Business Model,” *Hipgnosissongs.com*, accessed October 4, 2021, <https://www.hipgnosissongs.com/about/our-purpose-business-model/> (“Every Song has two copyrights: Composition (lyrics & melody), held by the Songwriter and Sound Recording (the sound heard), held by those involved in the recording of the Song. Royalties stemming from the Composition Copyright are referred to as Publishing Rights (aka Songwriter Rights). Hipgnosis Songs Fund focuses primarily on acquiring these, but owns selective Sound Recording Rights as well.”).

<sup>50</sup> Jem Aswad, “Stevie Nicks Sells Majority Stake in Publishing Catalog to Primary Wave,” *Variety*, December 4, 2020, <https://www.rollingstone.com/pro/news/stevie-nicks-fleetwood-mac-catalog-primary-wave-1098850/>.

<sup>51</sup> Ben Sisario, “Bob Dylan Sells His Songwriting Catalog in Blockbuster Deal,” *New York Times*, December 7, 2020, <https://www.nytimes.com/2020/12/07/arts/music/bob-dylan-universal-music.html>.

the entire recording catalog of David Guetta, the latter for an estimated \$100 million;<sup>52</sup> Sony Music Publishing acquired Paul Simon’s entire song catalog.<sup>53</sup>

## II.C. Recent developments

### II.C.1. Music Modernization Act

- (37) In 2018, Congress enacted the Orrin G. Hatch–Bob Goodlatte Music Modernization Act (MMA), the most significant piece of legislation dealing with music rights since the Digital Millennium Copyright Act in 1998.<sup>54</sup> Title I of the MMA establishes a blanket licensing system for digital music providers to make and distribute digital phonorecords including interactive streams.<sup>55</sup> It also creates a “mechanical licensing collective” to administer the blanket license, identify rightsholders, and distribute royalties to copyright owners.<sup>56</sup> Finally, as discussed in more detail in Section VIII below, it changes the standard to be applied by the Board in rate-setting proceedings for mechanical license fees for interactive streaming services from the “801(b)” standard that applied in all prior Phonorecords proceedings, to a “willing buyer/willing seller” (WBWS) standard, which the Board has historically applied in setting sound recording royalties for non-interactive streaming services (most recently, in the “Web V” proceeding).<sup>57</sup>

### II.C.2. Impact of COVID-19 pandemic

- (38) The COVID-19 pandemic has been estimated to have caused a 25% decline in global music industry revenue in 2020, mostly through a 75% drop in live music revenue, offset to some extent by slight growth in recorded music revenue.<sup>58</sup> If anything, interactive streaming adoption seems to have

<sup>52</sup> Ed Christman, “Bruno Mars Sells Part of Song Catalog to Warner Chappell Music,” *Billboard*, May 24, 2021, <https://www.billboard.com/articles/business/publishing/9577451/bruno-mars-warner-chappell-song-catalog-sale-wmg/>.

Tim Ingham, “Warner Music Scoops Up David Guetta’s Catalog for \$100 Million,” *Rolling Stone*, June 17, 2021, <https://www.rollingstone.com/pro/news/david-guetta-warner-music-catalog-1185704/>.

<sup>53</sup> Katie Tsai, “Sony Music acquires singer Paul Simon’s song catalog,” *CNBC*, March 31, 2021, <https://www.cnn.com/2021/03/31/sony-music-acquires-singer-paul-simons-song-catalog.html>.

<sup>54</sup> The Digital Millennium Copyright Act is a copyright law passed in 1998 that implemented two 1996 treaties of the World Intellectual Property Organization. The act was designed to combat piracy, criminalizing actions aimed at circumventing controls put in place to protect copyrighted works. Kim Zetter, “Hacker Lexicon: What Is the Digital Millennium Copyright Act?,” *Wired*, June 6, 2016, <https://www.wired.com/2016/06/hacker-lexicon-digital-millennium-copyright-act/>. See also “The Digital Millennium Copyright Act of 1998: US Copyright Office Summary,” December 1998, <https://www.copyright.gov/legislation/dmca.pdf>.

<sup>55</sup> “The Music Modernization Act: Title I, Musical Works Modernization Act,” accessed on October 2, 2021, <https://www.copyright.gov/music-modernization/115/>.

<sup>56</sup> “The Music Modernization Act: Title I, Musical Works Modernization Act,” accessed on October 2, 2021, <https://www.copyright.gov/music-modernization/115/>.

<sup>57</sup> Web V Determination, at 2 (“The Act requires that the Judges ‘establish rates and terms that most clearly represent the rates and terms that would have been negotiated in the marketplace between a willing buyer and a willing seller.’”).

<sup>58</sup> Goldman Sachs, “Music In the Air,” Goldman Sachs Equity Research, May 14, 2020,

accelerated as a result of the pandemic, however. In the United States, in 2020, paid interactive streaming subscriptions had their highest ever single-year increase, growing to 75.5 million subscribers from 60.4 million in 2019.<sup>59</sup> And while the overall US economy suffered in 2020 as a result of the pandemic, the recorded music industry experienced another year of growth, almost entirely due to the success of interactive streaming.<sup>60</sup>

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<https://www.goldmansachs.com/insights/pages/infographics/music-in-the-air-2020/report.pdf>, p. 4-5.

<sup>59</sup> See Figure 5.

<sup>60</sup> See Figure 4.

### III. Interactive streaming industry

- (39) Revenue growth in the recorded music industry in the United States has been driven in recent years by the success of five large and a variety of smaller interactive streaming services. Competition among and investment by these streaming services have enhanced the music listening experience relative to that of past decades. Interactive streaming subscribers today are able to listen through a variety of devices (mobile phone, computer, tablet, car apps) with easy-to-use interfaces, and are routinely provided suggestions, playlists, and other content personalized to their own music taste and listening habits.

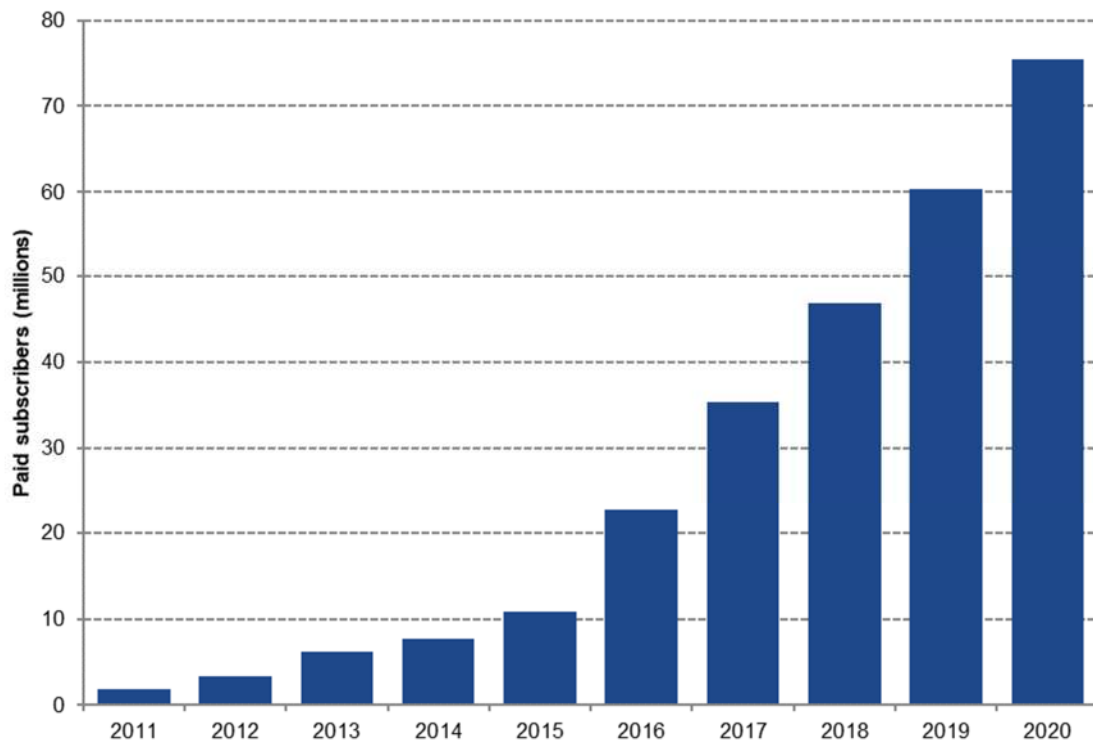
#### III.A. Growth in subscribers and listening

- (40) Increased revenue from interactive streaming services in the United States has been driven by an increase in interactive streaming subscribers in the United States. As shown in Figure 5, from 2016 to 2020, the number of subscribers of paid interactive streaming services increased by almost 250% in the United States to approximately 75 million (as compared with the approximately 120 million households in the United States in 2020).<sup>61</sup> This rise has driven increased music revenue in general and publishing revenue in particular.<sup>62</sup>

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<sup>61</sup> “QuickFacts: Population, Census, April 1, 2020,” US Census Bureau, accessed October 3, 2021, <https://www.census.gov/quickfacts/fact/table/US/POP010220> (showing 120,756,048 US households for 2015-2019).

<sup>62</sup> See Figure 4 above and Figure 14 below.

**Figure 5: US paid interactive streaming subscribers, 2011–2020**

Source: Joshua P. Friedlander, “Year-End 2020 RIAA Revenue Statistics,” Recording Industry Association of America, 2021, <https://www.riaa.com/wp-content/uploads/2021/02/2020-Year-End-Music-Industry-Revenue-Report.pdf>; Joshua P. Friedlander, “News and Notes on 2015 RIAA Shipment and Revenue Statistics,” Recording Industry Association of America, 2016, <https://www.riaa.com/wp-content/uploads/2016/03/RIAA-2015-Year-End-shipments-memo.pdf>; Joshua P. Friedlander, “News and Notes on 2014 RIAA Shipment and Revenue Statistics,” Recording Industry Association of America, 2015, [https://www.riaa.com/wp-content/uploads/2015/09/2013-2014\\_RIAA\\_YearEndShipmentData.pdf](https://www.riaa.com/wp-content/uploads/2015/09/2013-2014_RIAA_YearEndShipmentData.pdf).

Notes:

1. Excludes “limited tier” streaming subscribers.
2. Subscriber numbers are annual averages.

- (41) In the last five years in particular, interactive streaming has been the fastest growing way in which Americans listen to audio. Edison Research’s “Share of Ear” survey, recording the aggregate time spent listening to various audio sources, shows that [REDACTED]

**Figure 6: Share of time spent listening to audio sources by US listeners, 2016–2020**



### **III.B. Interactive streaming firms in United States**

- (42) The interactive streaming market is highly competitive and is expected to remain so.<sup>63</sup> In the United States, the five largest interactive streaming services are those offered by Amazon, Spotify, Apple, Google, and Pandora. Other interactive streaming providers in the United States include Tidal, Napster, Deezer, and Soundcloud. The Klein Survey found that respondents who streamed music

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<sup>63</sup> See Written Direct Testimony of Tami Hurwitz, October 13, 2021 [hereinafter, “Hurwitz WDT”], ¶¶87-88 (“[REDACTED]”).  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] See also Goldman Sachs, “Music In the Air,” Goldman Sachs Equity Research, May 14, 2020, <https://www.goldmansachs.com/insights/pages/infographics/music-in-the-air-2020/report.pdf>, p. 31 (“We believe the market will remain highly competitive in the coming years given the global expansion of ByteDance’s Resso, the recently announced expansion of Apple Music into 52 new markets (albeit small) and the surge in smart speaker listening amid COVID-19 benefitting Amazon Music.”).

from one of Amazon’s services in “the past month” have also streamed music from [REDACTED]

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### III.B.1. Amazon

- (43) While mainly known for its online retail business, Amazon entered the interactive streaming business with Amazon Music Prime (“Prime Music”) in 2014, offering a limited library of songs to its Amazon Prime subscribers at no additional cost.<sup>65</sup> It has since expanded its offerings to include a paid subscription service and an ad-supported free service offered to non-Prime subscribers. Unlimited, its paid subscription service, debuted in 2016, while Free, its free ad-supported service, debuted in 2019.<sup>66</sup> I describe the Amazon interactive streaming offerings in more detail in Section IV below.

### III.B.2. Spotify

- (44) Spotify was one of the first major interactive streaming services, first offering service in the United States in 2011.<sup>67</sup> It offers interactive streaming through a paid subscription service and an ad-supported free tier with more limited functionality.<sup>68</sup> Although the subscription-based Spotify Premium is one of the most popular paid services in the United States based on the number of subscribers, it has lost market share as other services have entered the streaming market.<sup>69</sup>

### III.B.3. Apple

- (45) Apple began distributing music with the launch of its iTunes Store in 2003, where it sold PDDs alongside other digital media.<sup>70</sup> Apple launched its interactive streaming service, Apple Music, in

<sup>64</sup> Klein WDT, Table 2.

<sup>65</sup> Edward C. Baig, “New Amazon Prime Benefit: Music,” *USA Today*, June 13, 2014, <https://www.usatoday.com/story/tech/2014/06/12/amazon-prime-adds-prime-music/10359025/>.

<sup>66</sup> Dan Seifert, “Amazon’s Full On-Demand Streaming Music Service Launches Today,” *The Verge*, October 12, 2016, <https://www.theverge.com/2016/10/12/13244158/amazon-music-unlimited-launch-echo-availability-price>; Todd Spangler, “Amazon Music Expands Access to Free Streaming Service, Spotify Stock Falls,” *Variety*, November 18, 2019, <https://variety.com/2019/digital/news/amazon-music-free-streaming-1203408520/>.

<sup>67</sup> Ben Sisario, “New Service Offers Music in Quantity, Not by Song,” *New York Times*, July 13, 2011, <https://www.nytimes.com/2011/07/14/technology/spotify-music-streaming-service-comes-to-us.html>.

<sup>68</sup> According to Spotify’s royalty rate data, Spotify offers a bundled service, a standalone non-portable service, and a standalone portable subscription service, in addition to its free ad-supported service. Spotify’s Premium service offers additional features that its free service lacks, such as the ability to download music or listen to music in “[h]ighest music quality.” For a full list of additional features of Spotify’s Premium service, see <https://support.spotify.com/us/article/premium-plans/>.

<sup>69</sup> Dylan Smith, “Spotify Is Slowly Losing Market Share to Rivals YouTube Music, Tencent Music, Amazon, and Others—Report,” *Digital Music News*, July 14, 2021, <https://www.digitalmusicnews.com/2021/07/14/spotify-market-share-analysis/>. See also Patrick Seitz, “Spotify Losing Market Share to Faster-Growing Subscription Music Rivals,” *Investor’s Business Daily*, July 12, 2021, <https://www.investors.com/news/technology/spotify-stock-streaming-music-leader-losing-market-share/#:~:text=Spotify%20lost%20two%20percentage%20points,is%20other%20services%20grew%20faster>.

<sup>70</sup> Apple Press Release, “Apple Launches the iTunes Music Store,” April 28, 2003,



2015; that quickly grew to become one of the most popular interactive streaming services in the United States.<sup>71</sup>

### III.B.4. Google

- (46) Google’s video subsidiary, YouTube, has long hosted music-associated video content, including label-produced music videos as well as user-created videos and music recordings.<sup>72</sup> Google launched its first interactive streaming service, Google Play Music, in 2013.<sup>73</sup> It launched a separate streaming service, YouTube Music, in 2015.<sup>74</sup> In December 2020, Google discontinued the Google Play Music service and moved those users to the YouTube Music interactive streaming service.<sup>75</sup> YouTube Music offers on-demand streaming with a free, ad-supported tier as well as a premium, ad-free tier.<sup>76</sup>

### III.B.5. Pandora

- (47) Pandora first entered music streaming in 2005 with a free non-interactive streaming service that played songs based on an algorithm attuned to the user’s preferences.<sup>77</sup> In 2016, Pandora launched Pandora Plus, an ad-free paid service that gives users some access to offline listening and unlimited station skips.<sup>78</sup> In 2017, it added Pandora Premium, a subscription-based interactive streaming service that allows on-demand listening and custom playlists.<sup>79</sup> Pandora also offers Pandora Premium Access,

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<https://www.apple.com/newsroom/2003/04/28Apple-Launches-the-iTunes-Music-Store/>.

<sup>71</sup> Alyssa Newcomb, “Apple Music Launch: Hands on with Apple’s New Streaming Service,” ABC News, June 30, 2015, <https://abcnews.go.com/Technology/apple-music-launch-hands-apples-streaming-service/story?id=32126427>; see Figure 8.

<sup>72</sup> Andrew Ross Sorkin and Jeremy Peters, “Google to Acquire YouTube for \$1.65 Billion,” *New York Times*, October 9, 2006, <https://www.nytimes.com/2006/10/09/business/09cnd-deal.html>.

<sup>73</sup> Ron Amadeo, “RIP Google Play Music, 2011–2020,” *ARS Technica*, October 28, 2020, <https://arstechnica.com/gadgets/2020/10/rip-google-play-music-2011-2020/>.

<sup>74</sup> Cody Lee, “YouTube Launches Standalone YouTube Music App,” *iDownload* (blog), November 12, 2015, <https://www.idownloadblog.com/2015/11/12/youtube-music-app-for-ios/>.

<sup>75</sup> Rita El Khoury, “Google Play Music Is Now Officially Dead, Dead, Dead (Update: ... Dead),” *Android Police*, December 3, 2020, <https://www.androidpolice.com/2020/12/03/google-play-music-is-now-officially-dead-dead-dead/>.

<sup>76</sup> “Get Started with YouTube Music,” YouTube Music Help, accessed October 3, 2021, <https://support.google.com/youtubemusic/answer/6313529>.

<sup>77</sup> Stephanie Clifford, “Pandora’s Long Strange Trip. Online Radio That’s Cool, Addictive, Free, and—Just Maybe—A Lasting Business,” February 6, 2020, <https://www.inc.com/magazine/20071001/pandoras-long-strange-trip.html>.

<sup>78</sup> Kelly Laffey, “‘What Is the Difference between Pandora Plus and Pandora Premium?’: Here’s What Pandora’s Paid Service Tiers Offer,” *Business Insider*, February 12, 2020, <https://www.businessinsider.com/what-is-the-difference-between-pandora-plus-and-pandora-premium>; See also Micah Singleton, “Pandora Launches Pandora Plus, an Improved Version of Its \$5 Subscription Service,” *The Verge*, September 15, 2016, <https://www.theverge.com/2016/9/15/12924910/pandora-plus-improved-subscription-service>. Based on Pandora royalty rate files, Pandora Plus is classified as a limited offering interactive service.

<sup>79</sup> Chris Welch, “Pandora Premium Is Now Available to All Users for \$10 Monthly,” *The Verge*, April 18, 2017, <https://www.theverge.com/2017/4/18/15336888/pandora-premium-music-service-now-available-all-users>. See also Kelly Laffey, “‘What Is the Difference between Pandora Plus and Pandora Premium?’: Here’s What Pandora’s Paid Service Tiers Offer,” *Business Insider*, February 12, 2020, <https://www.businessinsider.com/what-is-the-difference-between-pandora-plus-and-pandora-premium>. Based on Pandora royalty rate files, Pandora Premium is classified as a

which allows listeners limited-time access to on-demand content after interacting with an advertisement.<sup>80</sup> In 2019, the satellite radio company SiriusXM acquired Pandora.<sup>81</sup>

### **III.B.6. Comparison of major interactive streaming services**

- (48) All the major paid subscription interactive streaming services offer similar pricing and catalog size, as shown in Figure 7.

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standalone portable subscription interactive service.

<sup>80</sup> “Premium Access,” Pandora Help, accessed October 5, 2021, <https://help.pandora.com/s/article/Pandora-Premium-Sessions-1519949303783>. Based on Pandora royalty rate files, Pandora Premium Access is classified as a limited offering interactive streaming service.

<sup>81</sup> SiriusXM, “Sirius XM Completes Acquisition of Pandora,” press release, February 1, 2019, <https://investor.siriusxm.com/investor-overview/press-releases/press-release-details/2019/SiriusXM-Completes-Acquisition-of-Pandora/default.aspx>.

**Figure 7: Major US interactive streaming paid subscription services compared**

Service	Monthly subscription price	Catalog size
Spotify Premium	Individual: \$9.99 Duo: \$12.99 Family: \$15.99 Student: \$4.99	~70 million songs
Apple Music	Individual: \$9.99 Family: \$14.99 Student: \$4.99	~75 million songs
Amazon Music Unlimited	Individual: \$9.99 Individual (Prime): \$7.99 Family: \$14.99 Student: \$4.99 Single device: \$3.99	~75 million songs
YouTube Music Premium	Individual: \$9.99 Family: \$14.99 Student: \$4.99	~80 million songs
Pandora Premium	Individual: \$9.99 Family: \$14.99 Student: \$4.99 Military: \$7.99	See note <sup>82</sup>

Sources: "Pick your Premium," Spotify Premium, Spotify, accessed October 2, 2021, <https://www.spotify.com/us/premium/#plans>; Mansoor Iqbal, "Spotify Revenue and Usage Statistics (2021)," BusinessofApps, accessed September 23, 2021, <https://www.businessofapps.com/data/spotify-statistics/>; "Apple Music," Apple, accessed October 2, 2021, <https://www.apple.com/apple-music/>; "Amazon Music Unlimited FAQ," Amazon Music, Amazon, accessed October 2, 2021, <https://www.amazon.com/b?node=15730321011>; "Amazon Music Unlimited," Amazon Music, Amazon, accessed April 6, 2021, [https://www.amazon.com/music/unlimited/ref=sv\\_dmusic\\_amu\\_flyout\\_individual?pldnSite=1](https://www.amazon.com/music/unlimited/ref=sv_dmusic_amu_flyout_individual?pldnSite=1); "YouTube Music," YouTube, accessed October 2, 2021, <https://www.youtube.com/musicpremium>; Kris Holt, "YouTube Music with Offline Listening Comes to Wear OS 2," Engadget, September 27, 2021, <https://www.engadget.com/youtube-music-wear-os-2-smartwatches-150012827.html>; "Choose How You Want to Listen," Pandora, accessed October 2, 2021, <https://www.pandora.com/plans>.

Figure 8 below shows the estimated US subscribers and subscriber share of the major paid interactive streaming services in 2020 Q1.<sup>83</sup>

<sup>82</sup> Pandora does not publicly post the number of songs in its catalog, but one blog describes Pandora Premium's catalog as "comparable" to Spotify's. The same blog notes that while Spotify "holds a slim lead in sheer numbers... there is essentially no difference between the two." Ryan Waniata and Quentyn Kennemer, "Spotify vs. Pandora," Digital Trends Media Group (blog), February 7, 2021, <https://www.digitaltrends.com/music/spotify-vs-pandora/>. *See also* "How Many Songs in Pandora Premium Catalog?" Pandora Community, updated December 31, 2019, <https://community.pandora.com/t5/My-Collection/How-many-songs-in-Pandora-Premium-Catalog/td-p/8815>. When a customer asked how many songs they have access to with Pandora Premium, a Pandora moderator stated that "[u]nfortunately, we won't be able to provide the exact number of songs in the Pandora catalog."

<sup>83</sup> File name: [REDACTED]  
[REDACTED]  
[REDACTED]

**Figure 8: Major interactive streaming services by US subscriber share, 2020 Q1**

Service	Subscribers	Share
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]



### III.B.7. Others

- (49) Other interactive streaming services available in the United States include Tidal, Napster, Deezer, and SoundCloud. In addition, ByteDance, the owner of TikTok, has entered the interactive music streaming space with a service called Resso, currently testing in a few markets internationally and potentially expanding globally.<sup>84</sup>
- (50) A number of other streaming services have come and gone over the years, including Groove music, Grooveshark, Guvera, Rara, Batanga Radio, WiMP, Thumbplay, Rdio, and thesixtyone.<sup>85</sup>

<sup>84</sup> Aniruddha Ganguly, “ByteDance’s Resso Stirs Up Competition in Music Streaming Space,” Nasdaq, December 12, 2019, <https://www.nasdaq.com/articles/bytedances-resso-stirs-up-competition-in-music-streaming-space-2019-12-12>; See also Ingrid Lunden and Manish Singh, “Resso, ByteDance’s Music Streaming App, Officially Launches in India, sans Tencent-Backed Universal Music,” *TechCrunch*, March 4, 2020, <https://techcrunch.com/2020/03/04/resso-music-india-bytedance/>; See also Goldman Sachs, “Music in the Air,” Goldman Sachs Equity Research, May 14, 2020, <https://www.goldmansachs.com/insights/pages/infographics/music-in-the-air-2020/report.pdf>, p. 31 (“We believe the market will remain highly competitive in the coming years given the potential global expansion of ByteDance’s Resso, the recently announced expansion of Apple Music into 52 new markets (albeit small) and the surge in smart speaker listening amid COVID-19 benefiting Amazon Music.”).

<sup>85</sup> “Groove Music and Spotify: FAQ,” Microsoft support, accessed October 12, 2021, <https://support.microsoft.com/en-us/windows/groove-music-and-spotify-faq-7f5e6c92-c662-0e14-a866-45ad8782dd91>; Sam Byford, “Grooveshark is dead,” *The Verge*.com, April 30, 2015, <https://www.theverge.com/2015/4/30/8526105/grooveshark-shuts-down-settles-with-labels>; Michael Bailey, “Guvera ceases operations, co-founder Claes Loberg leaves,” *Financial Review*, May 12, 2017, <https://www.afr.com/technology/guvera-ceases-operations-cofounder-claes-loberg-leaves-20170512-gw40oq>; Tim Ingham, “Rara will be shut or sold as CEO Jez Bell exits,” *Music Business Worldwide*, March 13, 2015, <https://www.musicbusinessworldwide.com/rara-must-be-sold-or-closed-as-ceo-exits/>; “bRadio”, bRadio, accessed on October 12, 2021, <http://www.bradiio.com/>; Coral Williamson, “Wimp and Tidal services merge,” *MusicWeek*, March 23, 2015, <https://www.musicweek.com/digital/read/wimp-and-tidal-services-merge/061258>; “Clear Channel Radio Announces Acquisition of Thumbplay’s Cloud-Based Music Business,” *Business Wire*, March 1, 2011, <https://www.businesswire.com/news/home/20110228007392/en/Clear-Channel-Radio-Announces-Acquisition-Thumbplay%E2%80%99s-Cloud-Based>; Jackie Dana, “thesixtyone.com: a lesson in hubris,” *Festival Peak*, January 15, 2016, <https://festivalpeak.com/thesixtyone-com-a-lesson-in-hubris-48dab1865c0>; Ingrid Lunden, “Pandora To Buy Rdio Assets For \$75M In Cash, Rdio Files Ch.11, Will Shutter Service,” *The Crunch.com*, November 16, 2015, <https://techcrunch.com/2015/11/16/confirmed-pandora-buys-key-rdio-assets-for-75m-in-cash-rdio-files-ch-11-to-shut-down/>.

### III.C. Investments and innovations by interactive streaming services

- (51) Alongside their growth and expansion, interactive streaming services have made numerous improvements to their products and increased their integration with a variety of listening devices. In this section I list some of these innovations, focusing on interactive streaming innovations created by Amazon, for which I currently have access to more information than I do for the other streaming services, though in many cases other services have created similar enhancements.<sup>86</sup>

#### III.C.1. Consumer-facing innovations

- (52) Since 2017, Amazon has made numerous consumer-facing innovations and improvements to its services.<sup>87</sup> Some examples include:
- **Amazon Music HD:** In September 2019, Amazon released a new subscription tier allowing subscribers access to millions of songs in high definition and ultra-high definition (HD).<sup>88</sup> In May 2021, Amazon made high-definition audio available to Unlimited Subscribers at no extra cost.<sup>89</sup>

<sup>86</sup> See, e.g., “Apple Music announces Spatial Audio with Dolby Atmos; will bring Lossless Audio to entire catalog,” Apple, Newsroom, May 17, 2021, <https://www.apple.com/newsroom/2021/05/apple-music-announces-spatial-audio-and-lossless-audio/> (“Apple today announced Apple Music is bringing industry-leading sound quality to subscribers with the addition of Spatial Audio with support for Dolby Atmos. Spatial Audio gives artists the opportunity to create immersive audio experiences for their fans with true multidimensional sound and clarity.”); “6 New Features to ‘Unwrap’ in Your Spotify 2020 Wrapped,” Spotify, Newsroom, December 1, 2020, <https://newsroom.spotify.com/2020-12-01/6-new-features-to-unwrap-in-your-spotify-2020-wrapped/> (“New personalized playlists will help you make the most of what you listened to this year. These range from Your Top Songs, the songs you loved most this year in one convenient place, to Missed Hits, our Wrapped discovery playlist where we recommend popular similar 2020 releases you didn’t listen to that we think you might like.”); “Youtube Music,” Google Play, Apps, accessed October 9, 2021, <https://play.google.com/store/apps/details?id=com.google.android.apps.youtube.music&hl=en&gl=us> (“Personalized playlists and Mixes made just for you, built around your favorite types of music... Song lyrics so you can sing along to your favorites.... Compatible with Google Maps, Waze, Google Assistant, and more.”).

<sup>87</sup> In addition, Amazon has continued to invest in algorithms and curation for creating stations and playlists. See, e.g., Ashley King, “Amazon Is Patenting Technology That Predicts Future Hits and Popular Artists,” *Digital Music News*, January 29, 2020, <https://www.digitalmusicnews.com/2020/01/29/amazon-music-patent-predicts-hits/>; Kyle Rooney, “Amazon Music Launches ‘Rap Rotation’ Playlist,” *Hot New Hip Hop*, June 17, 2019, <https://www.hotnewhiphop.com/amazon-music-launches-rap-rotation-playlist-news.83087.html>; Chris Eggertsen, “Amazon Music’s New R&B Discovery Playlist Launches with Ari Lennox ‘Walk on By’ Cover,” *Billboard*, September 6, 2019, <https://www.billboard.com/articles/business/streaming/8529338/amazon-music-rb-rotation-playlist-ari-lennox/>.

Several of these features are mentioned in the Klein Survey as “[i]mportant criteria in decision to choose a music streaming service.” Klein WDT, Table 21, Table 36, Table 42. See also Hurwitz WDT, ¶¶ 31-45.

<sup>88</sup> Amazon, “Amazon Music Introduces Highest Quality Audio for Streaming with Amazon Music HD,” news release, September 17, 2019, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-introduces-highest-quality-audio-streaming-amazon>. See also Darrell Etherington, “Amazon Launches Amazon Music HD with Lossless Audio Streaming,” *Tech Crunch*, September 17, 2019, <https://techcrunch.com/2019/09/17/amazon-launches-amazon-music-hd-with-lossless-audio-streaming/>.

<sup>89</sup> Amazon, “Amazon Music HD for All, Now at No Extra Cost,” press release, May 17, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-hd-all-now-no-extra-cost>.

- **X-Ray:** In November 2020, Amazon added a feature to its streaming services called X-Ray, which shows facts, trivia, and other insights about a song as it is playing.<sup>90</sup>
- **DJ Mode:** In June 2021, Amazon launched “DJ Mode,” which allows subscribers to select stations for on-demand streaming with DJ commentary from artists and hosts.<sup>91</sup>
- **Car Mode:** In April 2021, Amazon introduced “Car Mode,” a simplified version of the Amazon Music app that interacts with vehicle displays and has larger buttons for easier use while driving.<sup>92</sup>
- **Merchandise availability:** In March 2021, Amazon announced that Amazon Music users would have the ability to buy artist merchandise directly through the Amazon Music app.<sup>93</sup> The merchandise, ranging from t-shirts and other apparel to coffee mugs and vinyl records, appears alongside songs on pages of participating artists.<sup>94</sup>
- **In-app music video streaming:** In 2020, Amazon began offering in-app music video streaming to certain subscribers.<sup>95</sup>
- **Podcasts:** In September 2020, Amazon Music announced the launch of podcasts in the United States, United Kingdom, Germany, and Japan, across all tiers of its streaming service at no additional cost.<sup>96</sup>
- **Hands-free listening:** In September 2017, Amazon added Alexa voice controls to the mobile music app, enabling customers to request music by a song’s lyrics, genre, decade, mood, tempo,

<sup>90</sup> Jon Porter, “Amazon Music Adds Behind-the-Scenes Trivia for Songs with New X-Ray Features,” *The Verge*, November 20, 2020, <https://www.theverge.com/2020/11/20/21583123/amazon-music-x-ray-trivia-song-tracks>.

<sup>91</sup> Amazon, “Amazon Music Launches DJ Mode: The Brand New, On-Demand Listening Experience Blends Music with Commentary from Artists and Hosts, Bringing Fans Even Closer to the Music They Love,” news release, June 10, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-launches-dj-mode-brand-new-demand-listening>.

<sup>92</sup> Ian Campbell, “Amazon Music Now Has a Car Mode for Easier Use While Driving,” *The Verge*, April 7, 2021, <https://www.theverge.com/2021/4/7/22372235/amazon-music-car-mode-driving-bigger-text-buttons-alexa>.

<sup>93</sup> Amazon, “Amazon Music Launches New Shopping Experience, Making It Easier for Fans to Find Merch from Their Favorite Artists,” news release, March 10, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-launches-new-shopping-experience-making-it-easier>.

<sup>94</sup> Some of the artist offerings are exclusive to Amazon, and the “majority” are available for Prime shipping to Prime members. Amazon, “Amazon Music Launches New Shopping Experience, Making It Easier for Fans to Find Merch from Their Favorite Artists,” news release, March 10, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-launches-new-shopping-experience-making-it-easier>. See also Chris Eggertson, “Amazon Music Launches In-App Merch Integration, Exclusive Artist Collections,” *Billboard*, March 10, 2021, <https://www.billboard.com/articles/business/9537487/amazon-music-merch-integration-streaming-selena-gomez/>.

<sup>95</sup> At the time of its launch, music video streaming was available only to Amazon Unlimited and Amazon HD members. I discuss these subscription plans in greater detail in Section IV. Chris Welch, “Amazon Music Unlimited Now Lets You Stream Music Videos,” *The Verge*, December 1, 2020, <https://www.theverge.com/2020/12/1/21776080/amazon-music-unlimited-videos-now-available>.

<sup>96</sup> Amazon, “Amazon Music Launches Podcasts for Customers Across the U.S., U.K., Germany and Japan,” news release, September 16, 2020, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-launches-podcasts-customers-across-us-uk-germany>.

or activity.<sup>97</sup> In May 2018, Amazon enhanced this feature—customers previously had tap-to-talk functionality but could now activate Alexa by voice alone.<sup>98</sup>

- **Song ID:** In March 2019, Amazon added a feature that allowed listeners to request that Alexa announce the title and artist of a song before it played on an Echo device.<sup>99</sup>
- **New release notifications:** In November 2018, Amazon added a feature that enabled Echo users to ask Alexa to notify them when their favorite artists release a new song or album.<sup>100</sup>

### III.C.2. Artist-facing innovations

(53) Amazon has also added enhancement directed at artists, including:

- **Breakthrough:** In July 2020, Amazon added the Breakthrough program, aimed at supporting developing artists by working with them to create video and audio content and market their work.<sup>101</sup>
- **Amazon Music for Artists:** In March 2020, Amazon launched a mobile app to help artists analyze their streaming performance and audience.<sup>102</sup> The data go back to 2018 and are updated multiple times per day.<sup>103</sup>

<sup>97</sup> Amazon, “Amazon Music Brings Alexa to Mobile Music Streaming,” news release, September 26, 2017, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-brings-alexa-mobile-music-streaming>. See also Richard Trenholm, “Alexa Now Works in Amazon Music on iPhone and Android,” *CNET*, September 26, 2017, <https://www.cnet.com/news/alexa-now-works-in-amazon-music-on-iphone-and-android-ios-echo-siri/>.

<sup>98</sup> Sarah Perez, “Amazon Music’s App Adds Hands-Free Listening, Courtesy of Alexa,” *Tech Crunch*, May 24, 2018, <https://techcrunch.com/2018/05/24/amazon-musics-app-adds-hands-free-listening-courtesy-of-alexa/>. Alexa is Amazon’s voice artificial intelligence and virtual assistant. Anyone with internet access and a device that is connected to Alexa can pose questions or make requests. As Amazon puts it, “Alexa can play your favorite song, read the latest headlines, dim the lights in your living room, and more.” “Alexa Features,” Amazon, accessed October 3, 2021, <https://www.amazon.com/b?ie=UTF8&node=21576558011>.

<sup>99</sup> Angela Moscaritolo, “What’s That Song? Amazon Music Song ID Can Help,” *PC Mag*, March 6, 2019, <https://www.pcmag.com/news/whats-that-song-amazon-music-song-id-can-help>.

<sup>100</sup> Angela Moscaritolo, “Alexa Can Notify You about New Releases from Your Favorite Artists,” *PC Mag*, November 6, 2018, <https://www.pcmag.com/news/alexa-can-notify-you-about-new-releases-from-your-favorite-artists#:~:text=If%2C%20for%20instance%2C%20you',Player%20by%20pressing%20the%20%22Follow%22>.

<sup>101</sup> Amazon, “Amazon Music Announces Breakthrough, a New Global Developing Artist Program,” news release, July 15, 2020, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-announces-breakthrough-new-global-developing-artist>.

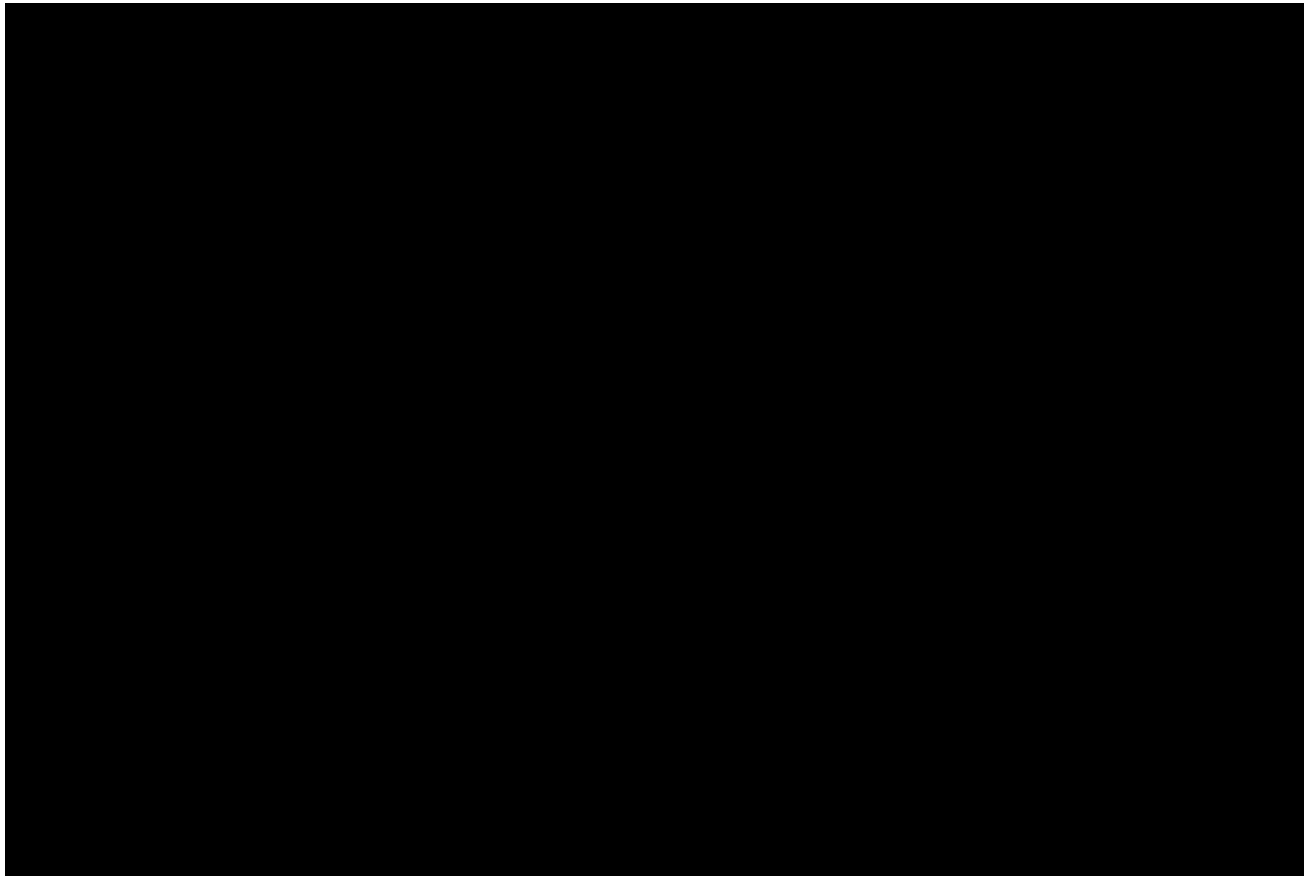
<sup>102</sup> Variety, “Amazon Music for Artists’ Mobile App Launches,” *Variety*, March 13, 2020, <https://variety.com/2020/music/news/amazon-music-for-artists-mobile-app-launches-1203533116/>.

<sup>103</sup> Variety, “Amazon Music for Artists’ Mobile App Launches,” *Variety*, March 13, 2020, <https://variety.com/2020/music/news/amazon-music-for-artists-mobile-app-launches-1203533116/>.

### III.C.3. R&D spending

- (54) In 2017, the year following the introduction of its Unlimited service, Amazon Music spent nearly [REDACTED] of its revenue on R&D.<sup>104</sup> Since then, Amazon Music [REDACTED] it invests in R&D.

**Figure 9: R&D spending by Amazon on music services, worldwide**



- (55) Other interactive streaming services also invest heavily in research and development. In 2019, Spotify reported spending €615 million (approximately \$713 million) on R&D globally, an amount that has grown every year since 2015.<sup>105</sup> In the same year, Pandora reported spending \$280 million on

<sup>104</sup> [REDACTED]

<sup>105</sup> Spotify, Annual Report (Form 20-F) (December 31, 2019), 8. *See also* “615 Million EUR to USD - Euro to US Dollar,” Converter X, accessed October 3, 2021, <https://www.currencyconverterx.com/EUR/USD/615000000>.



engineering, design, and development globally, twice as much as it spent the previous year and more than three times as much as it did in 2016.<sup>106</sup>

### III.D. Interactive streaming profits

- (56) While interactive streaming revenues have increased dramatically in recent years, the industry has struggled with profitability. Spotify, despite being the largest service globally, has not posted an annual profit in its 12 years since launch.<sup>107</sup> Spotify ended 2020 with an overall loss, despite an unprecedented growth in subscriptions attributed to the coronavirus pandemic.<sup>108</sup>
- (57) Figure 10 shows worldwide revenue and profit margin for Unlimited from 2018 to 2020. [REDACTED]

<sup>106</sup> This corresponds to the engineering, design, and development spending of the parent company, Sirius XM. Sirius XM, Annual Report (Form 10-K)(December 31, 2019), p. 33, <https://www.sec.gov/Archives/edgar/data/908937/000090893720000011/siri-20191231x10k.htm>. Sirius XM, Annual Report (Form 10-K) (December 31, 2018), p. 28, <https://www.sec.gov/Archives/edgar/data/908937/000090893719000008/siri-20181231x10k.htm>. “Engineering, design and development spending” was \$280 million, \$123 million, and \$82 million in 2019, 2018, and 2016, respectively.

<sup>107</sup> Tim Ingham, “Loss-making Spotify will continue to put growth ahead of profit for ‘next few years,’” *Music Business Worldwide*, May 6, 2020, <https://www.musicbusinessworldwide.com/loss-making-spotify-will-continue-to-focus-on-growth-over-profit-for-next-few-years/>.

<sup>108</sup> Anne Steele, “Spotify Adds Subscribers with Focus on Podcasts,” *Wall Street Journal*, February 3, 2021, <https://www.wsj.com/articles/spotify-adds-subscribers-with-focus-on-podcasts-11612350000>.

**Figure 10: Worldwide revenue and profit margin for Amazon Music Unlimited, 2018–2020**

### III.E. Rise of podcasting

- (58) Podcasts are one of the fastest growing areas in audio entertainment. In 2020, over 100 million Americans, or 37% of the population, were monthly podcast listeners.<sup>109</sup> This was up from 32% in 2019 and only 12% a decade prior.<sup>110</sup> In recent years, consumers have increasingly turned to interactive streaming services for podcast discovery and playback, as well as for podcasts that are exclusive to a particular service.<sup>111</sup> A survey in February 2020 found that Spotify, Apple Podcasts,

<sup>109</sup> Anna Washenko, “Infinite Dial 2020: For the First Time, More than 100 Million Americans Are Monthly Podcast Listeners,” *RAIN News*, March 19, 2020, <https://rainnews.com/infinite-dial-2020-for-the-first-time-more-than-100-million-americans-are-monthly-podcast-listeners/>.

<sup>110</sup> Anna Washenko, “Infinite Dial 2020: For the First Time, More than 100 Million Americans Are Monthly Podcast Listeners,” *RAIN News*, March 19, 2020, <https://rainnews.com/infinite-dial-2020-for-the-first-time-more-than-100-million-americans-are-monthly-podcast-listeners/>.

<sup>111</sup> Mark Sweney, “Spotify Credits Podcast Popularity for 24% Growth in Subscribers,” *The Guardian*, February 3, 2021, <https://www.theguardian.com/technology/2021/feb/03/spotify-podcast-popularity-24-percent-growth-subscribers>. Filipe Esposito, “Analyst Says Spotify Is Close to Overtaking Apple Podcasts in Number of Users,” *9TO5Mac*, September 21, 2021, <https://9to5mac.com/2021/09/21/analyst-says-spotify-is-close-to-overtaking-apple-podcasts-in-number-of-users/>.

Google Podcasts, and Pandora were the four most popular apps used to listen to podcasts in the United States.<sup>112</sup>

- (59) Spotify has been investing in its non-music content, acquiring three podcasting companies for nearly \$400 million in 2019 and purchasing *The Ringer* sports website and podcasting network for between €130 and €180 million in 2020.<sup>113</sup> Spotify also made headlines in 2020 after signing a deal reportedly valued at more than \$100 million to be the exclusive host of *The Joe Rogan Experience* podcast.<sup>114</sup> Amazon added podcasts to its streaming platform in 2020.<sup>115</sup>

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<sup>112</sup> “Spotify Listening Is Changing, Gen Z Brand Expectations and How Over-50s View Retail,” *eMarketer*, August 3, 2020, <https://www.emarketer.com/content/podcast-spotify-listening-changing-gen-z-brand-expectations-how-over-50s-view-retail>.

<sup>113</sup> Lauren Feiner, “Spotify Makes Another Podcast Acquisition, Buying Bill Simmons’ *The Ringer*,” *CNBC*, February 5, 2020, <https://www.cnbc.com/2020/02/05/spotify-spot-earnings-spotify-acquires-the-ringer-to-boost-podcasts.html>. See also Todd Spangler, “Spotify Is Paying Up to \$196 Million in Cash to Acquire Bill Simmons’ *The Ringer*,” *Variety*, February 12, 2020, <https://variety.com/2020/digital/news/spotify-acquires-the-ringer-196-million-cash-bill-simmons-1203502471/>.

<sup>114</sup> Anne Steele, “Spotify Strikes Podcast Deal with Joe Rogan Worth More than \$100 Million,” *Wall Street Journal*, May 19, 2020, <https://www.wsj.com/articles/spotify-strikes-exclusive-podcast-deal-with-joe-rogan-11589913814>.

<sup>115</sup> Sarah Perez, “Amazon Music Adds Podcasts, Including Its Own Original Shows,” *TechCrunch*, September 16, 2020, <https://techcrunch.com/2020/09/16/amazon-music-adds-podcasts-including-its-own-original-shows/>.

## IV. Amazon's music offerings

- (60) Amazon operates [REDACTED] interactive streaming services in the United States [REDACTED],<sup>116</sup> as well as an online music store offering permanent digital downloads, physical CDs, and vinyl records. Amazon offers three music streaming services in the United States: Unlimited, Prime Music, and Free. In addition to these options for downloading and streaming music, Amazon also facilitates the listening and use of both its own and other streaming services through its Amazon Echo smart speakers.
- (61) Figure 11 below shows the number of US subscribers (or users, in the case of Prime and Free) by Amazon service from October 2016 through June 2021.

**Figure 11: Amazon Music US users, by service, October 2016–June 2021**



- (62) Figure 12 summarizes the features included with each Amazon streaming service. I discuss each service in more detail in the subsequent sections.

**Figure 12: Amazon streaming service features by service**

Feature	Free	Prime Music	Unlimited
Available titles	Limited catalog of pre-set playlists	2 million songs	75 million songs
Playlists	Top playlists	Thousands of playlists	Thousands of playlists
Stations	Thousands of stations	Thousands of stations, including personalized streaming stations	Thousands of stations, including personalized streaming stations
Podcasts	Yes	Yes	Yes
HD streaming	No	No	Yes
3D Echo playback	No	No	Yes. 3D audio is available on Amazon Echo Studio device only.
Ad-free unlimited plays	No	Yes	Yes
Streaming limits	One device at a time.	One device at a time.	One device at a time for those on the Individual or Single-device plan. Six devices at a time for those on the Family Plan.
Alexa interaction	Yes	Yes	Yes
Offline playback	No	Yes	Yes, except for Single-Device Plans and 3D audio.

Sources: Amazon, “What Are the Differences Between the Amazon Music Subscriptions?” accessed August 11, 2021, <https://www.amazon.com/gp/help/customer/display.html?nodeId=GW3PHAUCZM8L7W9L>, unless otherwise footnoted; Amazon, “Amazon Music Launches Podcasts for Customers Across the U.S., U.K., Germany and Japan,” news release, September 16, 2020, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-launches-podcasts-customers-across-us-uk-germany>; Amazon, “Amazon Music HD for All, Now at No Extra Cost,” May 17, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-hd-all-now-no-extra-cost>; Duffett-Smith WDT, ¶ 22 (“Free is a limited-catalog, lean-back service that offers a variety of pre-set playlists.”).

## IV.A. Amazon Music Unlimited

- (63) Unlimited is Amazon’s paid subscription service, offering unlimited, ad-free access to a catalog of over 70 million songs in HD and more than 7 million songs in ultra-HD.<sup>117</sup> The service offers online streaming and offline listening via limited downloads.<sup>118</sup> It also offers subscribers access to “lean back” listening via thousands of playlists and streaming stations, including personalized streaming stations and customized playlists.<sup>119</sup>

<sup>116</sup> Hurwitz WDT, ¶ 89.

<sup>117</sup> Amazon, “Amazon Music HD for All, Now at No Extra Cost,” news release, May 17, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-hd-all-now-no-extra-cost>.

<sup>118</sup> Amazon, “Downloading Music,” accessed October 9, 2021, [https://www.amazon.com/gp/help/customer/display.html?ref\\_=hp\\_bc\\_nav&nodeId=G4PKCR76YF6ALNQU](https://www.amazon.com/gp/help/customer/display.html?ref_=hp_bc_nav&nodeId=G4PKCR76YF6ALNQU).

<sup>119</sup> “Lean forward” or active listeners are those who actively seek out a track through search or playing it from their library of saved tracks. “Lean back” or passive listeners are those who play tracks through a radio station, algorithmic playlist, or platform editorial (i.e., programmed plays). See “What Are Active and Passive Streams?” Music Insights, accessed October 12, 2021, <https://help.musicinsights.com/hc/en-us/articles/360007993973-What-are-Active-and-Passive-streams->.

- (64) In September 2019, Amazon offered an upgraded version of Unlimited, Amazon Music HD, for an additional \$5 per month.<sup>120</sup> Amazon Music HD granted access to tens of millions of songs in HD quality (16-bit, 44.1kHz) and millions more in ultra-HD quality (24-bit, up to 192kHz).<sup>121</sup> Amazon has since discontinued Amazon Music HD as a separate tier and folded its offerings into the standard Unlimited service.<sup>122</sup> Amazon announced that all Unlimited subscribers would have access to its HD music library in May 2021, the same day that Apple announced that a similar high-quality audio experience would be available to its subscribers at no additional cost.<sup>123</sup>
- (65) Within its Unlimited service, Amazon offers a number of different pricing plans, shown in Figure 13.

**Figure 13: Amazon Music Unlimited pricing plans**

Plan	Standard price	Prime member price	Student price
Individual	\$9.99/month	\$7.99/month (\$79/year)	\$4.99/month \$0.99/month with Prime for first year
Family plan	\$14.99/month	\$14.99/month (\$149/year)	N/A
Single device	\$3.99/month	\$3.99/month	N/A

Sources: "Amazon Music Unlimited FAQ," Amazon, accessed July 8, 2021, <https://www.amazon.com/b?ie=UTF8&node=15730321011>; "Amazon Prime Student," Amazon, accessed October 2, 2021, <https://www.amazon.com/Amazon-Student/b?ie=UTF8&node=668781011>.

- (66) A family plan allows up to six people to share a single plan. Users retain separate accounts and music libraries, with only the primary subscriber paying.<sup>124</sup> A single device plan offers owners of Amazon Echo and Fire TV devices the ability to access the complete Unlimited library on a single device for

<sup>120</sup> Darrell Etherington, “Amazon Launches Amazon Music HD with Lossless Audio Streaming,” TechCrunch, September 17, 2019, <https://techcrunch.com/2019/09/17/amazon-launches-amazon-music-hd-with-lossless-audio-streaming/>.

<sup>121</sup> Darrell Etherington, “Amazon Launches Amazon Music HD with Lossless Audio Streaming,” TechCrunch, September 17, 2019, <https://techcrunch.com/2019/09/17/amazon-launches-amazon-music-hd-with-lossless-audio-streaming/>.

<sup>122</sup> Hurwitz WDT, ¶ 91 (“[I]n May 2021, Amazon folded its HD tier into the Unlimited offering after press coverage revealed that Apple would add HD to its offering at no extra cost. [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]”). See also Amazon, “Amazon Music HD for All, Now at No Extra Cost,” news release, May 17, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-hd-all-now-no-extra-cost>.

<sup>123</sup> Amazon, “Amazon Music HD for All, Now at No Extra Cost,” news release, May 17, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-hd-all-now-no-extra-cost>; Apple, “Apple Music Announces Spatial Audio with Dolby Atmos; Will Bring Lossless Audio to Entire Catalog,” news release, May 17, 2021, <https://www.apple.com/newsroom/2021/05/apple-music-announces-spatial-audio-and-lossless-audio/>.

<sup>124</sup> “Amazon Music Unlimited FAQ,” Amazon, accessed July 8, 2021, <https://www.amazon.com/b?ie=UTF8&node=15730321011>.

\$3.99 per month. Prime member prices are available to members of Amazon’s Prime membership program.

## IV.B. Amazon Music Prime

- (67) Amazon first entered interactive streaming in 2014 with its Prime Music service.<sup>125</sup> Prime Music features ad-free playback along with curated playlists and radio-like stations, with limited downloads available for offline playback.<sup>126</sup> Unlike full catalog interactive streaming services like Apple Music and Spotify Premium, which offer more than 70 million songs, Prime Music offers a very limited catalog of songs—from 1 million at its start growing to approximately 2 million today.<sup>127</sup> Also, unlike Unlimited and Apple Music, Prime Music does not offer HD or ultra-HD playback.
- (68) Prime Music is not available as a standalone service but only as part of the broader Amazon Prime membership program, a \$12.99 per month (or \$119 annually) service that also includes free two-day shipping on Amazon purchases, free streaming video, free games, savings at Whole Foods stores, and a number of other free and reduced-price services.<sup>128</sup>
- (69) Prime Music is designed to appeal to consumers with a low WTP for an interactive streaming service. According to Amazon’s Global Head of Music Publishing and Director of Content Acquisition,

Amazon has designed Prime Music to introduce streaming music to customers who want access to music but may have a low willingness to pay (“WTP”). Amazon targets Prime Music at users whose listening habits are casual enough that they may not want to spend the money required to access a full catalog. [REDACTED]

129

<sup>125</sup> Stuart Dredge, “Amazon Prime Music Streaming Service Launches in the US with 1m Songs,” *Guardian*, June 12, 2014, <https://www.theguardian.com/technology/2014/jun/12/amazon-prime-music-streaming-spotify>. Written Direct Testimony Of James Duffett-Smith, October 13, 2021 [hereinafter “Duffett-Smith WDT”], ¶ 11 (“Amazon Music Prime (“Prime Music”) marked Amazon’s first entry into the streaming music business. Launched in June 2014, Prime Music is a limited-catalog, advertisement-free, on-demand streaming music service.”).

<sup>126</sup> Duffett-Smith WDT, ¶ 11 (“Prime Music launched with a catalog of approximately 1 million songs and hundreds of playlists. Prime Music also allows limited downloads for offline playback.”).

<sup>127</sup> Duffett-Smith WDT, ¶ 14 (“Although the Prime Music catalog has doubled from the original to roughly 2 million songs, it is still far less than the roughly 75 million songs offered by Amazon Music Unlimited or other full-catalog services.”).

<sup>128</sup> Duffett-Smith WDT, ¶ 13, citing “About Amazon Prime Insider & Prime Membership Benefits,” Amazon, accessed October 2, 2021, <https://www.amazon.com/primeinsider/about> for the current list of services, (“Amazon has never offered Prime Music as a standalone service. Nor does Prime Music have any standalone price. Instead, it is available solely as part of a broader Amazon Prime membership, which also gives members access to free two-day shipping, video content, arcade games, savings at Whole Foods supermarkets, and a host of other benefits. Amazon Prime members pay \$12.99 per month, or \$119 per year, for access to all of these services, including Prime Music.”).

<sup>129</sup> Duffett-Smith WDT, ¶¶ 1, 12.

- (70) In addition to attracting low WTP listeners, Prime Music serves as a “funnel” to convert these low WTP listeners into Unlimited subscribers.<sup>130</sup> [REDACTED]

[REDACTED].<sup>131</sup>

## IV.C. Amazon Music Free

- (71) Amazon launched its ad-supported free streaming service, Free, in April 2019.<sup>132</sup> While initially available only through Alexa-enabled devices, Amazon expanded the service later in the year to allow access through other platforms.<sup>133</sup>
- (72) Free allows users to listen to music through playlists and thousands of stations, but without the ability to request specific songs.<sup>134</sup> Users only have the option to skip, dislike, or like the songs played within the playlists and stations they select.<sup>135</sup> Free has a limited library and no HD content. Unlike Unlimited and Prime Music users, Free users do not have access to personalized streaming stations or offline playback.<sup>136</sup>
- (73) Free serves customers with a low WTP for music streaming while also introducing customers to the Amazon Music interface and offerings, with the goal of inducing listeners to upgrade to the paid subscription service.<sup>137</sup> The Klein Survey found that nearly 40% of the surveyed Free subscribers list the fact that “[p]aid streaming services are too expensive” as among their “primary reasons for not paying for a music streaming service.”<sup>138</sup> The Klein Survey also found that over 50% of the surveyed Free subscribers “would probably not or definitely not upgrade to Amazon Music Unlimited,”

<sup>130</sup> Duffett-Smith WDT, ¶¶ 15–16 (“Due to Prime Music’s limited catalog, some of the songs that are visible on playlists are not available for streaming unless the customer upgrades to Amazon Music Unlimited...Amazon operates Prime Music as a ‘funnel’ to Amazon Music Unlimited, which is Amazon’s premium, full-catalog streaming service.”).

<sup>131</sup> [REDACTED]

<sup>132</sup> Duffett-Smith WDT, ¶ 21 (“Amazon launched Amazon Music Free (“Free”) in April 2019.”).

<sup>133</sup> Jem Aswad, “Amazon Music Launches Free Streaming Tier, Through Alexa Only (for Now),” *Variety*, April 18, 2019, <https://variety.com/2019/music/news/amazon-launches-free-streaming-tier-alexa-only-for-now-1203192744/>.

<sup>134</sup> Amazon, “Amazon Music offers free streaming,” news release, May 6, 2020, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-offers-free-streaming>.

<sup>135</sup> [REDACTED]

<sup>136</sup> Hurwitz WDT, ¶ 23 (“Compared to Amazon Music’s other services, the functionality of Free is limited. For example, off-line playback and on-demand functionality are not available.”). *See also* Figure 12.

<sup>137</sup> Duffett-Smith WDT, ¶¶ 21,23 (“Free also fills the void for individuals who both have low WTP and who lack access to Prime Music. Free users, who listen to advertisements rather than paying for access to the service, tend to have the lowest WTP among Amazon Music customers.”) (“Amazon designed Free as a funnel to upsell customers to Unlimited, in a similar way to the Prime Music funnel.”).

<sup>138</sup> Klein WDT, Table 39.



whereas [REDACTED] of respondents “indicated that they would probably or definitely upgrade to Amazon Music Unlimited.”<sup>139</sup>

#### IV.D. Amazon’s music sales

- (74) After books, music was the first category that Amazon added to its online offerings, launching its music store in 1998.<sup>140</sup> Amazon began offering PDDs through an online music store in 2007.<sup>141</sup> In addition, their online music store offers vinyl and CDs. Amazon also offers a service, AutoRip, which gives customers an MP3 version of eligible physical albums when purchased from Amazon, at no additional charge.<sup>142</sup>

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<sup>139</sup> Klein WDT, Table 40 and ¶ 108.

<sup>140</sup> Hurwitz WDT, ¶8.

<sup>141</sup> Yinka Adegoke, “Amazon Launches Early Version of Web Music Service,” Reuters, September 25, 2007, <https://www.reuters.com/article/us-amazon-music/amazon-launches-early-version-of-web-music-service-idUSWNAS474420070925>.

<sup>142</sup> “What Is AutoRip?” Amazon, accessed July 8, 2021, <https://www.amazon.com/gp/help/customer/display.html?nodeId=G6N9QAN4WDBKAKPF>.

## V. Music copyrights

- (75) A single musical product encompasses two basic rights: the right to the musical work—the collection of notes and lyrics either written or recorded—and the right to the sound recording—the fixation of the sound of these notes and lyrics in a recording medium or digital file.<sup>143</sup> Under copyright law, the musical work and sound recording are separately protected and can be separately owned.<sup>144</sup>
- (76) Within these two types of ownership, there are three categories of rights: public performance rights, reproduction and distribution (“mechanical”) rights, and synchronization rights.<sup>145</sup> Although distribution channels usually pay royalties for both musical work and sound recording rights, it is common for a particular type of distribution service to only have to pay for public performance, mechanical, or synchronization rights, depending on the service.<sup>146</sup> For instance, non-interactive streaming services pay only performance royalties, whereas distributors of PDDs pay only mechanical royalties. Interactive streaming services, in contrast, pay both public performance and mechanical royalties.<sup>147</sup>
- (77) In this section, I review some details of each of these types of rights that are relevant to my analysis.

### V.A. Musical work rights

#### V.A.1. Public performance rights

- (78) Public performance rights must be obtained for music transmitted to the public via a public performance or through a transmission by a radio, television, or streaming service.<sup>148</sup> The large

<sup>143</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, pp. 16–18.

<sup>144</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 18.

<sup>145</sup> So-called “ephemeral rights” for sound recordings—the rights to make server reproductions of sound recordings to facilitate digital transmissions—were created by Congress in 1998. In practice, the Board in its determination of sound recording royalty rates for non-interactive services bundles ephemeral rights with public performance rights and defines the ephemeral right portion of the bundled rate as 5% of the total. *See* Web V Determination, at 4, 290–292.

Synchronization rights refer to the right to “use music in ‘timed relation’ to visual content.” Synchronization rights are negotiated in the free market for both musical works and sound recording. US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, pp. 55–56, Appendix D.

<sup>146</sup> One exception to this is terrestrial radio, which does not pay royalties for sound recordings. US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 87.

<sup>147</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, Appendix D.

<sup>148</sup> “What Is a Public Performance of Music and What Is the ‘Performing Right’?” BMI.com, FAQs, accessed September 28, 2021, [https://www.bmi.com/faq/entry/what\\_is\\_a\\_public\\_performance\\_of\\_music\\_and\\_what\\_is\\_the\\_performing\\_right1](https://www.bmi.com/faq/entry/what_is_a_public_performance_of_music_and_what_is_the_performing_right1).

number of public music performances makes it difficult for individual composers to negotiate and collect royalties from each party seeking to use their music. Performing rights organizations (PROs) aggregate the interests of the composers whom they represent and negotiate and collect rates on their behalf from businesses including terrestrial and satellite radio, interactive and non-interactive streaming services, television networks and cable systems, and other businesses.<sup>149</sup> PROs acquire rights from owners of musical works and in turn grant “blanket licenses” that allow music users to play any of the musical works in the PRO’s repertoire.<sup>150</sup> The license rates charged by ASCAP and Broadcast Music, Inc. (BMI), the two largest PROs, are overseen by a court established by a 1941 consent decree with the Department of Justice designed to “contain the market power each organization acquired through the aggregation of public performance rights held by their member songwriters and music publishers.”<sup>151</sup>

### V.A.2. Mechanical rights

- (79) Mechanical rights allow parties to make and distribute copies of a musical work. They apply only to certain distribution channels.<sup>152</sup> The Board sets statutory mechanical royalty rates for musical works, which vary by distribution channel and by business model within the channel.<sup>153</sup> Rates are set for five-year periods.<sup>154</sup>

### V.A.3. Synchronization rights

- (80) Synchronization rights allow music to be used in timed-relation with an audiovisual work such as a film, video, television show, or commercial.<sup>155</sup> Royalties are set through negotiation with the musical

<sup>149</sup> See, e.g., “Who Does ASCAP Collect From?” ASCAP, accessed October 2, 2021, <https://www.ascap.com/help/royalties-and-payment/payment/whocollect>.

<sup>150</sup> Such blanket licenses “reduce the costs of licensing copyrighted musical compositions. They eliminate costly, multiple negotiations of the various rights and provide an efficient means of monitoring the use of musical compositions. They also allow users of copyrighted music to avoid exposure to liability for copyright infringement,” *Buffalo Broadcasting v. American Soc. of Composers*, 744 F.2d 917 (Court of Appeals, 2d Cir. 1984), at 15.

<sup>151</sup> “Antitrust Division Review of ASCAP and BMI Consent Decrees 2014,” US Department of Justice, updated December 16, 2015, <https://www.justice.gov/atr/ascap-bmi-decree-review> (“The Consent Decrees, originally entered in 1941, are the products of lawsuits brought by the United States against ASCAP and BMI under Section 1 of the Sherman Act, 15 U.S.C. § 1, to address competitive concerns arising from the market power each organization acquired through the aggregation of public performance rights held by their member songwriters and music publishers.”). The 2018 Music Modernization Act made some changes to the operation of the rate court, partially removing a prohibition on the rate court considering sound recording license fees in its rate setting proceedings, and assigning judges from the Southern District of New York on a rotating basis rather than having a single judge for all rate disputes. See “Frequently Asked Questions,” US Copyright Office, accessed October 12, 2021, <https://www.copyright.gov/music-modernization/faq.html>.

<sup>152</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, pp. 26-32.

<sup>153</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 29.

<sup>154</sup> 17 U.S.C. § 114(f)(2)(B).

<sup>155</sup> See *Steele v. Turner Broad. Sys., Inc.*, 646 F. Supp. 2d 185, 193 (D. Mass. 2009), at 11. See also *Boosey & Hawkes*

work rights owner (and, separately, with the sound recording right owner), without any regulatory oversight.<sup>156</sup>

## V.B. Sound recording rights

- (81) Music distribution services including satellite radio, non-interactive streaming, interactive streaming, and sellers of PDDs and CDs are required to pay royalties to holders of sound recording rights.<sup>157</sup> Terrestrial radio, however, is not required to pay sound recording royalties.<sup>158</sup>
- (82) Sound recording royalty rates paid by interactive streaming services are established through direct negotiations with the copyright holder without any regulatory oversight.<sup>159</sup> As is true of musical works rights, interactive streaming services must acquire both mechanical and performance rights from sound recording rightsholders, although as a practical matter those rights are not separately negotiated.<sup>160</sup> Synchronization rights for sound recordings are also privately negotiated. In contrast, sound recording royalties for public performance rights paid by non-interactive streaming services, satellite radio, and “preexisting subscription services,” such as Music Choice, are set by the Board for five-year terms.<sup>161</sup>

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*Music Publishing LTD. v. the Walt Disney Co.*, 145 F.3d 481 (2d Cir. 1998) at 451 (“limited to the use of the composition in synchronism or timed-relation with the motion picture.”).

<sup>156</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, at 56 (“The licensing of music for audiovisual works, unlike that for other uses, occurs in the free market for both musical works and sound recordings.”).

<sup>157</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, Appendix D.

<sup>158</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, pp. 43-44, 87.

<sup>159</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 43.

<sup>160</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, Appendix D.

<sup>161</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, pp. 46, 50.

## VI. Publishers, record labels, and PROs

- (83) Musical works copyrights are generally administered by music publishers, while sound recording copyrights are usually administered by record labels.<sup>162</sup> In addition, PROs such as ASCAP and BMI serve as intermediaries that help publishers and artists collect public performance musical works royalties.<sup>163</sup> The publishing and record label space in the United States is dominated by three firms—Universal Music Group, Sony Music Holdings, and Warner Music Group—each of which controls a major music publisher and a major record label. In this section I describe the role of publishers, record labels, and PROs in music distribution.

### VI.A. Publishers

- (84) Music publishers generally make deals with songwriters to administer and promote their songs in return for a share of the copyright.<sup>164</sup> Agreements between songwriters and publishers traditionally have assigned 50% of the copyright to the publisher during the deal term, though terms vary, and sometimes include advances paid by publishers to songwriters recouped by future royalty collections.<sup>165</sup> Some publishers also offer other services, including input into the creative process, but this varies across publishing companies and artists.<sup>166</sup>
- (85) Publisher revenue comes mainly from four sources: selling print music, mechanical royalties, performance royalties, and synchronization royalties.<sup>167</sup> Because a publisher generally receives a fraction of the song’s copyright, the publisher generally keeps a portion of licensing revenue in each of these four areas.<sup>168</sup> The exact portion depends on the specific contract between a publisher and

<sup>162</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, pp. 18–23.

<sup>163</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 20.

<sup>164</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 19. Todd Brabec, “Music Publishers and What They Do,” *ASCAP Corner*, accessed July 19, 2021, <https://www.ascap.com/help/career-development/corner1>.

<sup>165</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 19. “What Does a Music Publisher Do?” *Career Explorer* (blog), accessed July 7, 2021, <https://www.careerexplorer.com/careers/music-publisher/>.

<sup>166</sup> Heather McDonald, “What a Music Publishing Company Does,” *The Balance Careers*, October 28, 2019, <https://www.thebalancecareers.com/what-does-a-music-publishing-company-do-2460915>. Dana A. Scherer, “Money for Something: Music Licensing in the 21<sup>st</sup> Century,” Library of Congress, February 23, 2021, *available at* <https://crsreports.congress.gov/product/pdf/R/R43984>, p. 7.

<sup>167</sup> Not in order of importance necessarily. Mark Tavern, “4 Music Publishing Revenue Streams, Explained,” *DJ Booth* (blog), June 9, 2021, <https://djbooth.net/features/2021-04-27-four-music-publishing-revenue-streams-amuse>.

<sup>168</sup> Chris Robley, “Publishing Rights: How Do They Get Split?” *DIY Musician* (blog), July 10, 2018, <https://diymusician.cdbaby.com/music-rights/how-do-publishing-rights-get-split/> (“If so, the writer will be asked to sign an agreement, usually called a songwriter-publisher agreement. What is unusual in this kind of agreement is that the

songwriter.<sup>169</sup> The increasing sales of publishing catalogs to third parties such as Hipgnosis Songs Fund mean that the entity collecting musical works royalties may be neither the original composer nor original publisher of the song.<sup>170</sup>

- (86) After a drop in the 2000s attributable to increased piracy and decreased sales of physical media, music publishing industry revenue has revived in recent years, as shown in Figure 14, coinciding with the rise of interactive streaming.

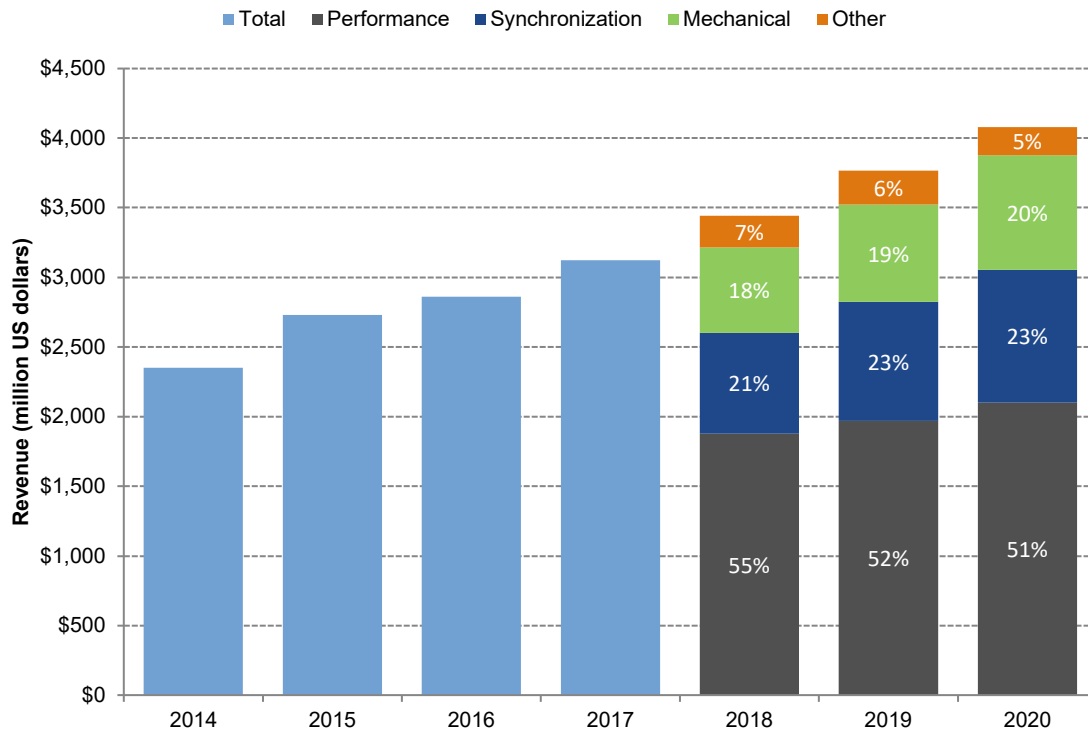
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writer will be asked to transfer his ownership of the copyright to the publisher. That has the effect of leaving the writer with no future ownership interest in his creation. What the writer gets in return is a royalty sharing arrangement, spelled out in the contract, which states what percentage of the money the publisher receives for things such as record sales, derivative work uses, soundtrack licensing, etc. will be split with the writer. Many times this is 50%, but some publishers are willing to give the writer more.”); *See also* Gary Roth, “© C in a Circle—Signing Away Your Copyright: Joining Forces with a Publisher Songwriter 101,” *BMI.com*, July 5, 2004, [https://www.bmi.com/news/entry/C\\_in\\_a\\_Circle\\_\\_Signing\\_Away\\_Your\\_Copyright\\_Joining\\_Forces\\_With\\_A\\_Publisher](https://www.bmi.com/news/entry/C_in_a_Circle__Signing_Away_Your_Copyright_Joining_Forces_With_A_Publisher).

<sup>169</sup> Henry Schoonmaker, “Songwriting Royalties Explained: Writers vs Publishers Share,” *Songtrust* (blog), updated April 22, 2021, <https://blog.songtrust.com/songwriting-royalties-explained-writers-vs-publishers-share>.

<sup>170</sup> See Section II.B.2 for a discussion of music catalog acquisitions.

**Figure 14: Estimated US music publishing revenue by source, 2014–2020, in constant 2020 dollars**



Sources: Tim Ingham, “US Publishers Pulled in \$3.7bn During 2019—Just Over Half What Record Labels Made,” *Music Business Worldwide*, June 11, 2020, <https://www.musicbusinessworldwide.com/us-publishers-pulled-in-3-7bn-during-2019-just-over-half-what-record-labels-made/>; Ed Christman, “Music Publishing Revenue Topped \$4B in 2020, Says NMPA,” *Billboard*, June 9, 2021, <https://www.billboard.com/articles/business/publishing/9585238/music-publishing-revenue-2020-nmpa/>.  
Note: Revenue shown in 2020 dollars adjusted using the Consumer Price Index.

- (87) The three largest music publishers in the United States are Sony Music Publishing, Warner Chappell Music, and Universal Music Publishing Group.<sup>171</sup> Each of these is also affiliated with a major record label.

## VI.B. Record labels

- (88) Record labels are companies that finance, promote, and distribute sound recordings.<sup>172</sup> Each of the three largest record labels has common corporate ownership with one of the three largest

<sup>171</sup> “Sony Music Publishing,” accessed October 3, 2021, <https://www.musicbusinessworldwide.com/companies/sony/sony-music-group/sony-music-publishing/>; “Warner Chappell Music,” accessed October 3, 2021, <https://www.musicbusinessworldwide.com/companies/access-industries/warner-music-group/warner-chappell-music/>; Tim Ingham, “The Three Major Publishers Generated More than \$3.2 Billion in 2019—That’s \$369,000 per Hour,” March 2, 2020, <https://www.rollingstone.com/pro/features/the-three-major-publishers-generated-more-than-3-2-billion-in-2019-thats-369000-per-hour-959699/>.

<sup>172</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 22.

publishers.<sup>173</sup> The three largest record labels in the United States are Universal Music Group, owner of Universal Music Publishing Group; Sony Music Entertainment, a subsidiary of Sony Music Group, which also owns Sony Music Publishing; and Warner Music Group, which owns the publishing company Warner Chappell Music.<sup>174</sup> There are hundreds of independent labels not affiliated with the big three, collectively making up roughly one-third of the market.<sup>175</sup>

- (89) Record labels often own all or part of the sound recording copyrights for associated artists. They earn revenue from digital streaming and download services, physical recorded music sales, touring and concert promotion, and audio-visual licensing to TV and film.<sup>176</sup> Revenues of record labels have increased substantially since 2015, driven mainly by streaming revenue.<sup>177</sup>
- (90) The operating income of the “Big 3” music companies has increased substantially in recent years alongside the rise of music streaming, before a drop in 2020 likely attributable to the pandemic.<sup>178</sup>

<sup>173</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 23.

<sup>174</sup> “Our Labels & Brands,” Universal Music Group, accessed October 3, 2021, <https://www.universalmusic.com/labels/>.  
Jem Aswad and Patrick Frater, “Universal Music Approaches \$53 Billion Valuation Following IPO,” *Variety*, September 21, 2021, <https://variety.com/2021/music/news/universal-music-ipo-shares-1235069336/> (“As the world’s largest label group, not to mention the second largest music publisher (according to Music & Copyright), UMG’s assets are more than impressive.”).  
“Labels,” Sony Music, accessed October 3, 2021, <https://www.sonymusic.com/labels/>.  
Amy Wang, “Sony’s Music Recording and Music Publishing Companies Are Now One,” *Rolling Stone*, July 17, 2019, <https://www.rollingstone.com/pro/news/sonys-music-recording-and-music-publishing-companies-are-now-one-860134/>.  
“Publishing,” Warner, accessed October 3, 2021, <https://www.wmg.com/services>.  
“Warner Music Group and Twitch Announce First-of-Its-Kind Partnership,” *PR Newswire*, September 27, 2021, <https://www.prnewswire.com/news-releases/warner-music-group-and-twitch-announce-first-of-its-kind-partnership-301385629.html> (“WMG’s music publishing arm, Warner Chappell Music, has a catalog of over 1 million copyrights.”).  
Tim Ingham, “Welcome to the New Record Business: Warner Music Group Is Now Generating Over \$270m from TikTok, Peloton, Facebook and Other ‘Alternative’ Platforms Annually,” *Music Business Worldwide*, September 23, 2021, <https://www.musicbusinessworldwide.com/welcome-to-the-new-record-business-warner-music-group-is-now-generating-over-270m-from-tiktok-peloton-facebook-and-other-alternative-platforms-annually2/>.

<sup>175</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 23. *See also* Figure 31 *infra*.

<sup>176</sup> Warner Music Group Corp., Quarterly Report (Form 10-Q) (June 30, 2021), 12.

<sup>177</sup> Worldwide revenue from music streaming was 23% of total recording revenue in 2015 for Universal, climbing to 59% in 2019. This was calculated by dividing “Subscriptions and streaming” revenue by total “Recorded music” revenue. *See* Vivendi Financial Report and Audited Consolidated Financial Statements (February 13, 2020), p. 12; Vivendi Financial Report and Audited Consolidated Financial Statements (February 19, 2016), p. 14).  
In the case of Sony, this percentage was 44% in 2018 and 59% in 2020. This was calculated by dividing “Recorded Music – Streaming” revenue by the sum of “Recorded Music – Others” revenue and “Recorded Music – Streaming” revenue. Sony Corporation, Annual Report (Form 20-F) (March 31, 2020), 208.  
For the global recording industry, the contribution of streaming, calculated by dividing global recording streaming revenue by total global recording revenue, was 19% in 2015 and 56% in 2019 according to IFPI. *See* Warner Music group, Annual Report (Form 10-K) (September 30, 2020), p.6.

<sup>178</sup> Sony and Warner saw declines in 2020 operating income likely due to the impact of the pandemic. Sony Corporation, Annual Report (Form 20-F) (March 31, 2020), p. 7 (“In the Music segment, CDs and other packaged media sales are decreasing due to restrictions on going outside, and ticket, merchandising and video revenues are decreasing as concerts and other events are being postponed and cancelled in Japan and other areas.”); Warner Music Group, Annual Report (Form 10-K) (September 30, 2020), p. 23 (“It has ended live concert tours, adversely impacting our concert promotion



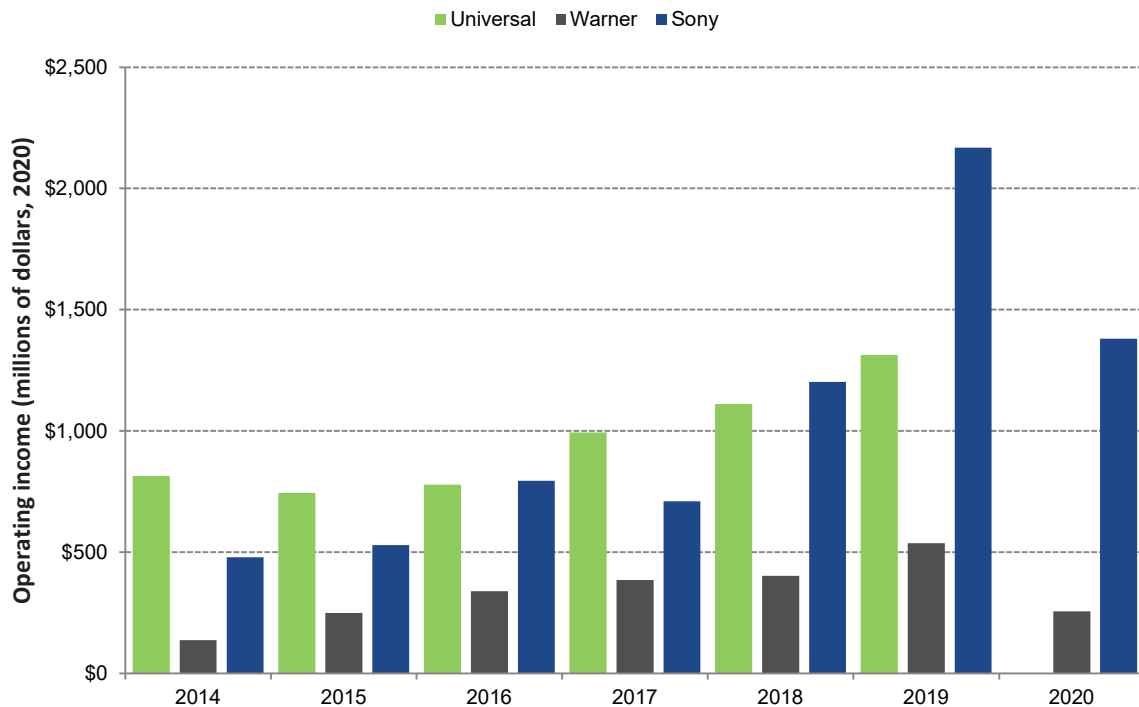
Figure 15 shows the evolution of worldwide operating income of the three major players in the industry from 2014 to 2020.<sup>179</sup>

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business and our sale of tour merchandise. It has made it more difficult for artists to engage in marketing efforts around the release of their new recordings which, in some cases, has led to our decisions to delay the release of those recordings. It has delayed the release of new recordings by impeding the types of collaboration among artists, songwriters, producers, musicians, engineers and studios which are necessary for the delivery of those recordings. The cessation or significant delay in the production of motion pictures and television programs has negatively affected licensing revenue in our Recorded Music business and synchronization revenue in our Music Publishing business.”). See Figure 4 and Figure 5 *supra* for data on the rise of music streaming.

<sup>179</sup> Operating income includes music publishing and sound recording business. Operating income is revenue minus production and administrative cost as well as depreciation and amortization. Sony Kabushiki Kaisha, SEC Form 20-F, 2015-2019. Vivendi Financial Report and Audited Consolidated Financial Statements, 2014-2019. Warner Music Group Corp., SEC Form 10K, 2016-2020.

**Figure 15: Music industry worldwide operating income of the three majors, 2014–2020, in constant 2020 dollars<sup>180</sup>**



Sources: Sony Corporation, Annual Report (Form 20-F) (March 31, 2016), F-88; Sony Corporation, Annual Report (Form 20-F) (March 31, 2017), F-79; Sony Corporation, Annual Report (Form 20-F) (March 31, 2018), 35; Sony Corporation, Annual Report (Form 20-F) (March 31, 2020), 35; Vivendi Financial Report and Audited Consolidated Financial Statements (February 27, 2015), 24; Vivendi Financial Report and Audited Consolidated Financial Statements (February 19, 2016), 14; Vivendi Financial Report and Audited Consolidated Financial Statements (February 15, 2018), 15; Vivendi Financial Report and Audited Consolidated Financial Statements (February 13, 2020), 11; Warner Music Group, Annual Report (Form 10-K) (September 30, 2016), 49; Warner Music Group, Annual Report (Form 10-K) (September 30, 2017), 43; Warner Music Group, Annual Report (Form 10-K) (September 30, 2020), 57.

Notes:

1. Operating income includes music publishing and sound recording business.
2. Operating income shown in 2020 dollars adjusted using the Consumer Price Index.
3. Operating income is revenue minus production and administrative cost as well as depreciation and amortization.
4. The fiscal year ends in March 31 for Sony, September 30 for Warner and December 31 for Universal.
5. Universal data for 2020 were not available.

## VI.C. Performing rights organizations

- (91) Performing rights organizations (PROs) often collect and distribute musical works public performance royalties. They typically issue blanket licenses for their entire catalog of songs to users

<sup>180</sup> Sony acquired EMI in November of 2018 which contributed to a sharp increase in operating income in 2019. Sony Corporation, Annual Report (Form 20-F) (March 31, 2019), p. 33 (“This significant increase was primarily due to the above-mentioned recording of a 116.9 billion yen remeasurement gain resulting from the consolidation of EMI, partially offset by the above-mentioned recording of an 11.6 billion yen deterioration of equity in net income (loss) in connection with Sony’s acquisition of the remaining approximately 60% interest in EMI.”).

of public performance rights such as streaming services, radio and television stations, and venues that play music such as bars and restaurants.<sup>181</sup> [REDACTED]

[REDACTED].<sup>182</sup>

- (92) There are four major PROs in the United States: ASCAP, BMI, the Society of European Stage Authors and Composers (SESAC), and Global Music Rights (GMR). Although uncertainty exists over PRO market shares, ASCAP and BMI are generally assumed to represent over [REDACTED] of songs available for licensing in the United States.<sup>183</sup> They both operate under Department of Justice (DOJ) consent decrees that established that ASCAP and BMI are required to grant a license to any user that applies, and must accept any music composer who wishes to be represented by the PRO.<sup>184</sup> These consent decrees were designed to contain “the market power each organization acquired through the aggregation of public performance rights held by their member songwriters and music publishers.”<sup>185</sup> ASCAP and BMI operate as non-profits, while SESAC and GMR are for-profit organizations that do not accept all composers, just those they invite to join.<sup>186</sup> SESAC and GMR do not operate under a consent decree.

<sup>181</sup> US Department of Justice, “Statement of the Department of Justice on the Closing of the Antitrust Division’s Review of the ASCAP and BMI Consent Decrees,” news release, January 15, 2021, <https://www.justice.gov/atr/page/file/1355391/download>, p. 1.

<sup>182</sup> Written Direct Testimony of Amy Watson Braun, October 13, 2021 [hereinafter “Braun WDT”], ¶ 18 [REDACTED]

<sup>183</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 20. *See also* Braun WDT, ¶¶ 14, 32, 64.

US Department of Justice, “Statement of the Department of Justice on the Closing of the Antitrust Division’s Review of the ASCAP and BMI Consent Decrees,” news release, January 15, 2021, <https://www.justice.gov/atr/page/file/1355391/download>, p. 1.

May Woodcock, “ASCAP vs BMI vs SESAC—How To Get Your Royalties,” *Music Gateway* (blog), August 1, 2020, <https://www.musicgateway.com/blog/how-to/ascap-vs-bmi-vs-sesac>.

Paul Resnikoff, “A Comprehensive Comparison of Performing Rights Organizations (PROs) in the US,” *Digital Music News*, February 20, 2018, <https://www.digitalmusicnews.com/2018/02/20/performance-rights-pro-ascap-bmi-sesac-soundexchange/>.

<sup>184</sup> US Department of Justice, “Statement of the Department of Justice on the Closing of the Antitrust Division’s Review of the ASCAP and BMI Consent Decrees,” news release, January 15, 2021, <https://www.justice.gov/atr/page/file/1355391/download>, p. 2.

<sup>185</sup> US Department of Justice, “Antitrust Consent Decree Review—ASCAP and BMI 2014,” updated December 16, 2015, <https://www.justice.gov/atr/ascap-bmi-decree-review> (“The Consent Decrees, originally entered in 1941, are the products of lawsuits brought by the United States against ASCAP and BMI under Section 1 of the Sherman Act, 15 U.S.C. § 1, to address competitive concerns arising from the market power each organization acquired through the aggregation of public performance rights held by their member songwriters and music publishers.”).

<sup>186</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 20.

## VII. Music royalty payments by interactive streaming services

- (93) In 2013, as part of the Phonorecords II (“Phono II”) proceeding, the Board adopted a settlement between copyright owners and services that carried forward previously existing rates and terms and added new rates and terms for newly regulated “subpart C” service offerings such as mixed bundles and locker services.<sup>187</sup> These rates were to govern for the period 2013 through 2017. They were used on an interim basis after 2017 until the resolution of the Phonorecords III (“Phono III”) proceeding. New rates under Phono III became effective February 5, 2019, applying retroactively to January 1, 2018.<sup>188</sup> Phono III rates were then vacated by the US Court of Appeals for the DC Circuit effective October 26, 2020, [REDACTED]  
[REDACTED]<sup>189</sup> These interim rates are subject to a retroactive true-up once the Phono III remand proceedings are concluded.
- (94) In this section I describe the methodologies for determining mechanical royalty payments under the Phono II and Phono III statutory formulas that apply to Amazon’s services, calculate Amazon’s royalty rate under those structures for each of their services, and also calculate the overall musical works and sound recording royalty rates for each of their services.

### VII.A. Phono II statutory formula for determining musical works royalties

- (95) Under Phono II, mechanical royalties for interactive streaming services were calculated based on different formulas, depending on the type of interactive streaming service offered. For example, a paid standalone portable subscription service had a different formula than a free, ad-supported service. The formulas generally take an “all-in” approach to calculating musical works royalties that defines a total musical works royalty pool (inclusive of both mechanical and performance royalties) and then deducts performance royalties to determine the mechanical license royalty pool. The exception is a mechanical-specific per-subscriber royalty floor that in some cases exceeds the mechanical royalties resulting from the “all-in” royalty pool and can thus result in total musical works royalties that are greater than the “all-in” musical works headline rate.

<sup>187</sup> Phono III Final Determination, at 1919.

<sup>188</sup> Phono III Final Determination, at 1918.

<sup>189</sup> *George Johnson v. Copyright Royalty Board* (D.C. Cir. August 7, 2020) [hereinafter, “Phono III Appellate Decision”]. The Court issued its mandate on October 26, 2020; see *George Johnson v. Copyright Royalty Board and Librarian of Congress*, No.19-1028 (Cir., October 26, 2020). [REDACTED]  
[REDACTED]  
[REDACTED]

- (96) The Phono II structure contains separate formulas for eight types of interactive streaming.<sup>190</sup> Below I describe in more detail the formulas that have applied to Amazon services.

### **VII.A.1. Phono II royalty calculation for Amazon Music Unlimited**

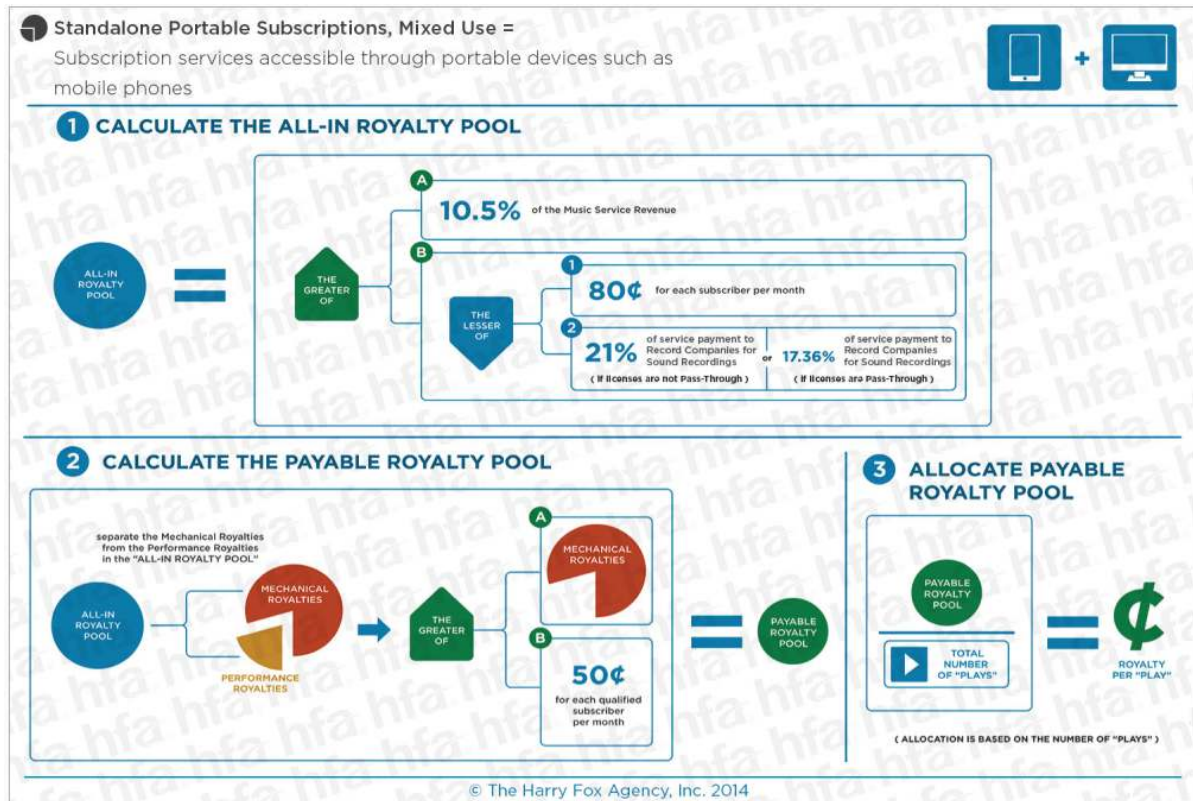
- (97) Amazon’s Unlimited service contains several different pricing tiers and falls under multiple Phono II categorizations. The primary Unlimited plan falls under the “Standalone Portable Subscriptions, Mixed Use” category in Phono II. The single-device plan falls under the “Standalone Non-portable Subscriptions, Streaming Only” category. Although both services have the same headline rate of 10.5% of revenue, other aspects of the formula differ.<sup>191</sup> In this section, I focus on Amazon’s Unlimited plan that falls under the “Standalone Portable Subscriptions, Mixed Use” categorization. The flowchart in Figure 16 describes the formula as it applies to this service type.

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<sup>190</sup> “Archived Rate Charts,” Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

<sup>191</sup> The “Standalone Non-portable Subscriptions, Streaming Only” formula follows the same methodology as the “Standalone Portable Subscriptions, Mixed Use” formula. The differences are as follows: (1) in Step 1B, the per-subscriber per-month cap is 50 cents (in contrast to 80 cents for standalone portable subscriptions) and the percentage of sound recording payments is 22% (in contrast to 21% for standalone portable subscriptions); (2) in Step 2, the per-subscriber minimum is 15 cents (in contrast to 50 cents for standalone portable subscriptions). “Archived Rate Charts,” Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

**Figure 16: Mechanical royalty formula for “Standalone Portable Subscriptions, Mixed Use” under Phono II**



Source: "Archived Rate Charts," The Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

- (98) Under this formula, there are four possible determinants of mechanical royalty rates: the 10.5% headline rate (Step 1A), the lesser of 21% of sound recording payments rate and the 80 cent per-subscriber per-month cap (Step 1B), or the 50 cent per-subscriber minimum rate (Step 2). In all cases except the 50 cent per-subscriber mechanical floor, performance royalty payments are deducted from the total royalty pool to determine mechanical royalty payments.
- (99) To illustrate the calculation in the case of Unlimited, I apply inputs from June 2017 to the Phono II formula. In that month, Amazon's mechanical royalty rate under Phono II [REDACTED]. Figure 17 contains the inputs for the calculation.

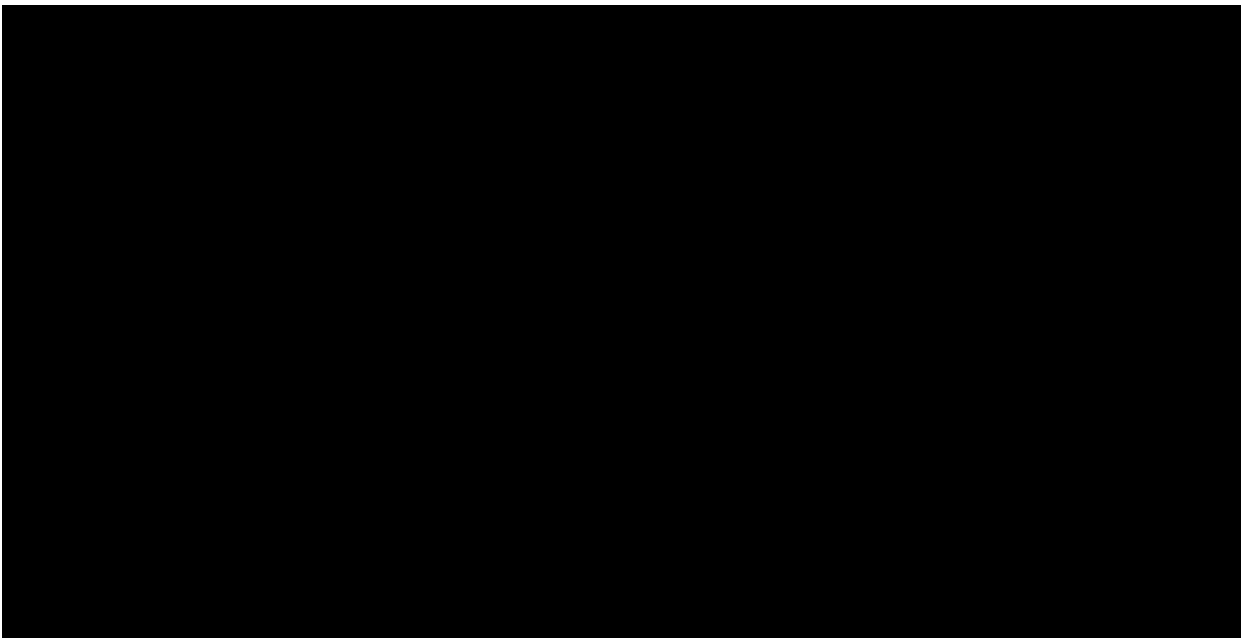
**Figure 17: Inputs to Unlimited mechanical royalty rate under “Standalone Portable Subscriptions, Mixed Use” categorization (June 2017)**

Month	Service revenue	Subscribers	Performance royalty payments	Sound recording payments
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: Amazon royalty rate data.

(100) [REDACTED] I illustrate the step-by step calculations to determine mechanical royalties under Phono II in Figure 18. As shown in Figure 18, [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

**Figure 18: Amazon Music Unlimited’s mechanical royalty rate calculations under Phono II, “Standalone Portable Subscriptions, Mixed Use” categorization (June 2017)**



(101) [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

Figure 19: Amazon musical works royalty rates under Phono II—Amazon Music Unlimited, “Standalone Portable Subscriptions, Mixed Use” categorization (June 2017)

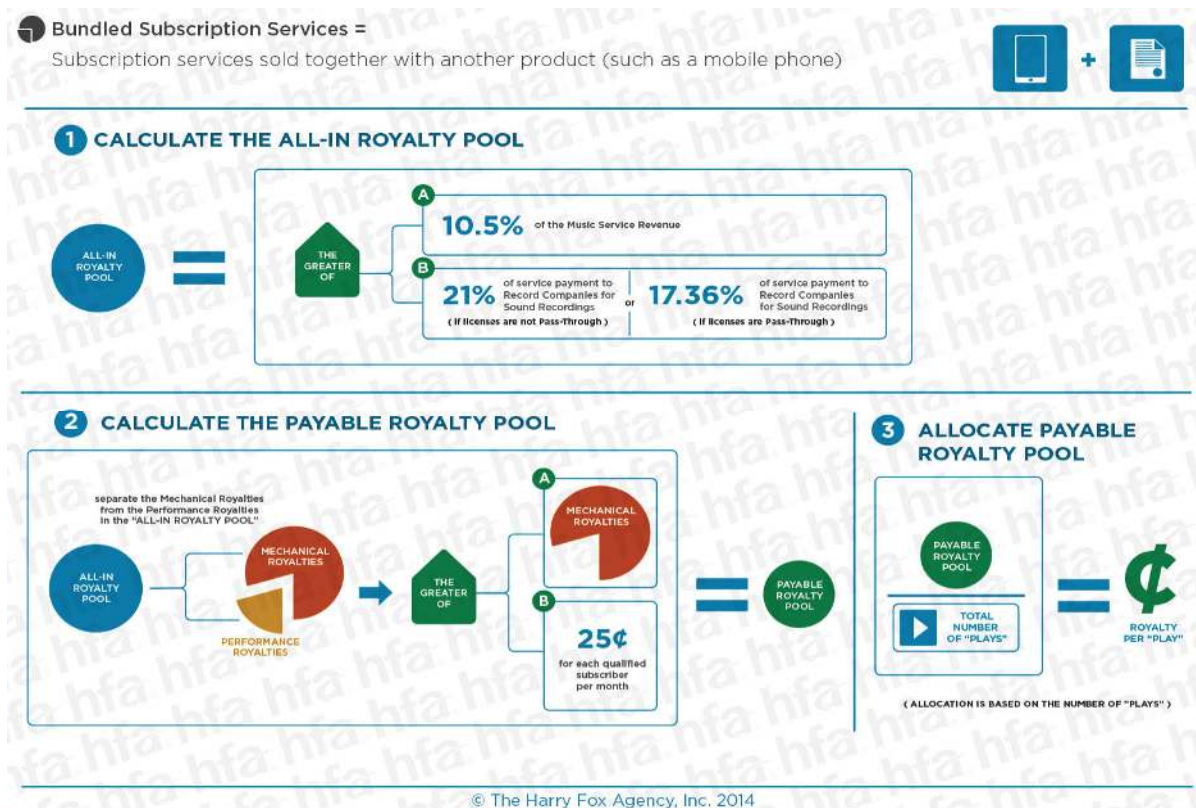
Performance royalty (% revenue)	Mechanical royalty under Phono II (% revenue)	Total music works royalty (% revenue)

Source: Amazon royalty rate data.

## VII.A.2. Phono II royalty calculation for Amazon Music Prime

(102) Prime Music falls under the “Bundled Subscription Services” categorization under Phono II. Figure 20 shows the flowchart for calculating mechanical royalties for this category.

Figure 20: Mechanical royalty formula for “Bundled Subscription Services” under Phono II



Source: “Archived Rate Charts,” The Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

(103) [REDACTED]

<sup>192</sup> Library of Congress, CFR § 385.11 (Copyright Royalty Board, July 1, 2016) (“Where the licensed activity is provided to



193

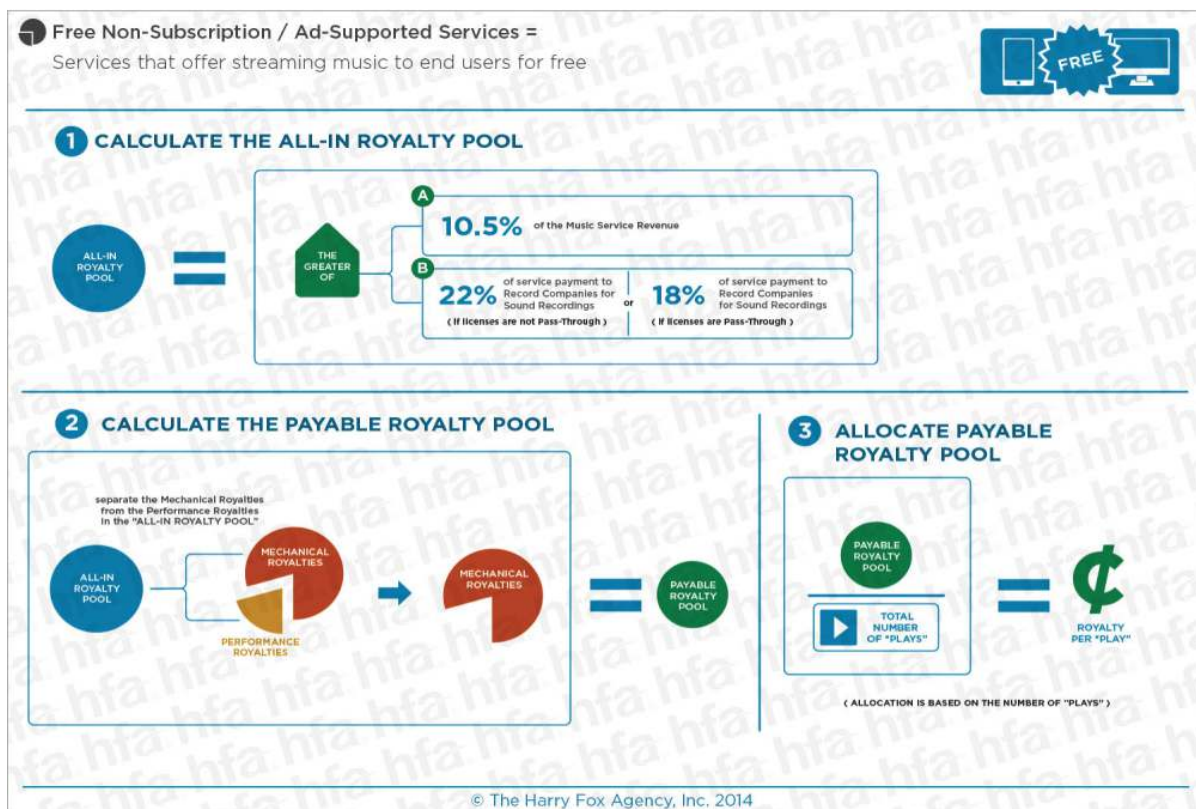
195

### VII.A.3. Phono II royalty calculation for Amazon Music Free

(105) Free falls under the Phono II categorization of “Free Non-Subscription/Ad-Supported Services” because there is no charge to the end user and the service is funded using advertising revenue. The flowchart in Figure 21 shows the Phono II formula for free, ad-supported services.

195 Duffett-Smith WDT, ¶ 8, 222 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]”).

**Figure 21: Mechanical royalty formula for “Free Non-Subscription/Ad-Supported Services” under Phono II**



Source: "Archived Rate Charts," Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

- (106) The formula for Free is similar to that used for Unlimited and Prime Music, with the major difference being that the number of subscribers does not factor into the calculation. Thus, there is no per-subscriber maximum or minimum and there are just two possible determinants of mechanical royalty rates: the 10.5% headline rate (Step 1A), or the 22% of sound recording payments rate (Step 1B). In both of these cases, payments for performance royalties are deducted from the total royalty pool to determine mechanical royalty payments.
- (107) Free was first released in 2019, when Amazon was paying under Phono III rates. [REDACTED]

196

<sup>196</sup> Amazon calculation of royalty rates, Ad-Supported Tier Stations (AMZN\_Phono IV\_00003114).

#### VII.A.4. Summary of Amazon’s musical works royalty rates under Phono II

- (108) Figure 22 summarizes Amazon’s musical works royalty accruals in the first two quarters of 2021. [REDACTED]

**Figure 22: Amazon’s musical works royalty rates under Phono II by service, 2021Q1–Q2**<sup>197</sup>

Service	Mechanical royalty rate (Phono II)			Performance royalty rate			Total musical works royalty rate
Amazon Music Unlimited							
Amazon Music Prime							
Amazon Music Free							

Source: Amazon royalty rate data.

#### VII.B. Phono III statutory formula for determining musical works royalties

- (109) The Board released its final determination in the Phono III proceeding on November 5, 2018, with Judge Strickler issuing a dissenting opinion from the Majority opinion.<sup>198</sup> On February 5, 2019, the Phono III rates became effective retroactive to January 1, 2018.<sup>199</sup> The services and copyright owners both appealed the Board’s Final Determination to the US Court of Appeals for the DC Circuit. The Appellate Court decided the case on August 7, 2020.<sup>200</sup> The Court vacated the Phono III determination and remanded “the Board’s adopted rate structure and percentages for further proceedings consistent with [its] opinion.”<sup>201</sup> As of the time of this report, the Board is still evaluating the Phono III decision per the instruction of the Court.
- (110) The Phono III rate structure hews generally to the structure of Phono II. Figure 23 shows the changes in Phono III relative to Phono II for what became the “Standalone Portable Subscriptions” category.<sup>202</sup> The changes for other categorizations are similar in spirit. The Phono III determination

<sup>197</sup> [REDACTED]

<sup>198</sup> Phono III Final Determination, at 1963.

<sup>199</sup> Phono III Final Determination, at 1918.

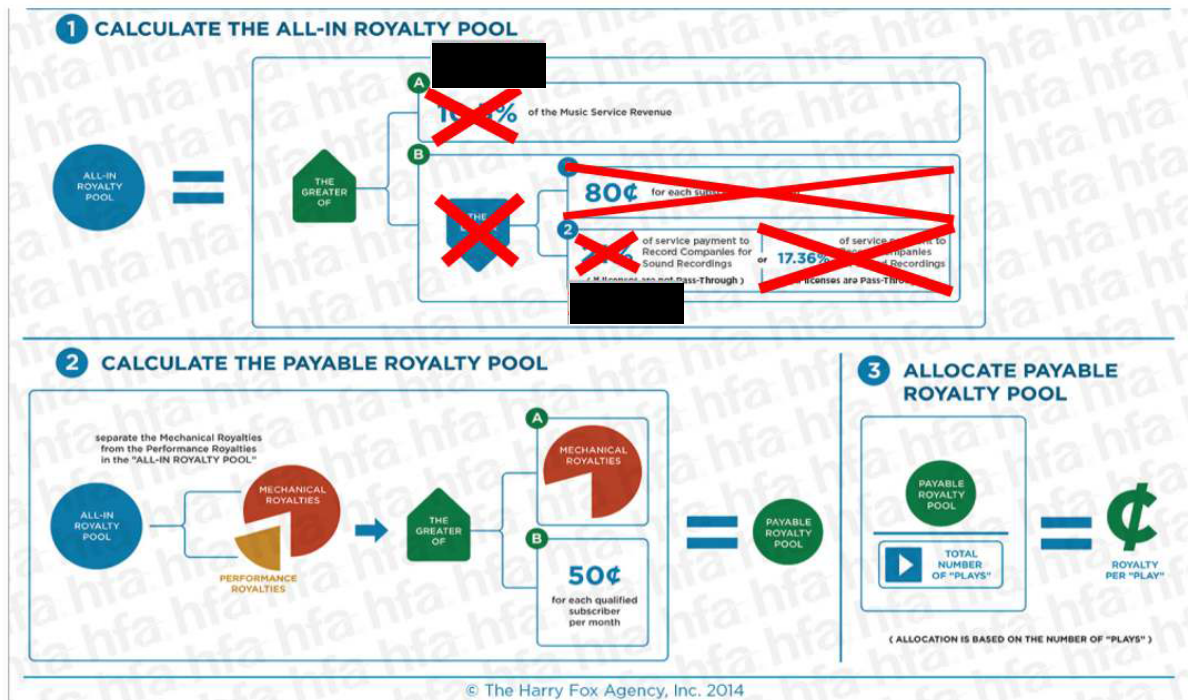
<sup>200</sup> Phono III Appellate Decision.

<sup>201</sup> Phono III Appellate Decision, at 33.

<sup>202</sup> This was one subcategory from among the service categorizations defined in Phono II. The Majority’s decision in Phono III contained the same rate structure for all service categorizations apart from physical phonorecord deliveries, permanent digital downloads, ringtones, and music bundles, except that the “mechanical-only” floor is present for some and not others and is set at a different level, depending on the service type. *See* Mechanical and Digital Phonorecord Delivery Rate Determination Proceeding, Case No. 2006-3 CRB DPRA (Copyright Royalty Board, January 26, 2009); Adjustment of Determination of Compulsory License Rates for Mechanical and Digital Phonorecords, Case No. 2011-3

removed the 80 cent per-subscriber cap on the TCC rate prong and the pass-through version of that rate, and it significantly increased both the headline percent-of-revenue rate and the TCC rate prong, with the increase in rate levels phased in over five years.<sup>203</sup>

**Figure 23: Phono III adjustments to Phono II mechanical royalty formula for “Standalone Portable Subscriptions, Mixed Use”**



Source: "Archived Rate Charts," The Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf). "Standalone Portable Subscriptions," The Harry Fox Agency, updated 2019, [http://harryfox.com/content/2019\\_s\\_p\\_s\\_mu.pdf](http://harryfox.com/content/2019_s_p_s_mu.pdf). Note: Figures reflects rates as of 2022.

- (111) The Phono III decision eliminated the “cap” on the TCC prong of 80 cent per subscriber and adjusted upward the percent-of-revenue rate and the percentage-of-TCC rate, although not in the same proportion. In addition to these adjustments to the rates, the Judges modified how “service revenue” would be defined for bundled services.<sup>204</sup> The Majority also made a number of other changes to the regulatory terms.<sup>205</sup>

CRB Phonorecords II (Copyright Royalty Board, November 13, 2013); Phono III Final Determination.

<sup>203</sup> TCC is defined as “the amount paid by a service to a record company for the section 114 right to perform digitally a sound recording.” Phono III Final Determination, at p. 1923, fn. 38. The TCC rate prong defines the all-in musical works royalty as a percentage of the TCC.

<sup>204</sup> Phono III Final Determination at 2031-2035.

<sup>205</sup> For example, the Majority removed royalty payments for “fraudulent streams” and, for purposes of dividing mechanical revenue among Copyright Owners, defined a play as a greater than a 30-second stream. Phono III Final Determination, at 1961.

### VII.B.1. Phono III royalty calculation for Amazon Music Unlimited

- (112) I illustrate the calculation of mechanical royalties for Unlimited using the Unlimited plan in June 2018 that falls under the “Standalone Portable Subscriptions” categorization. The inputs for the rate calculation are shown in Figure 24.

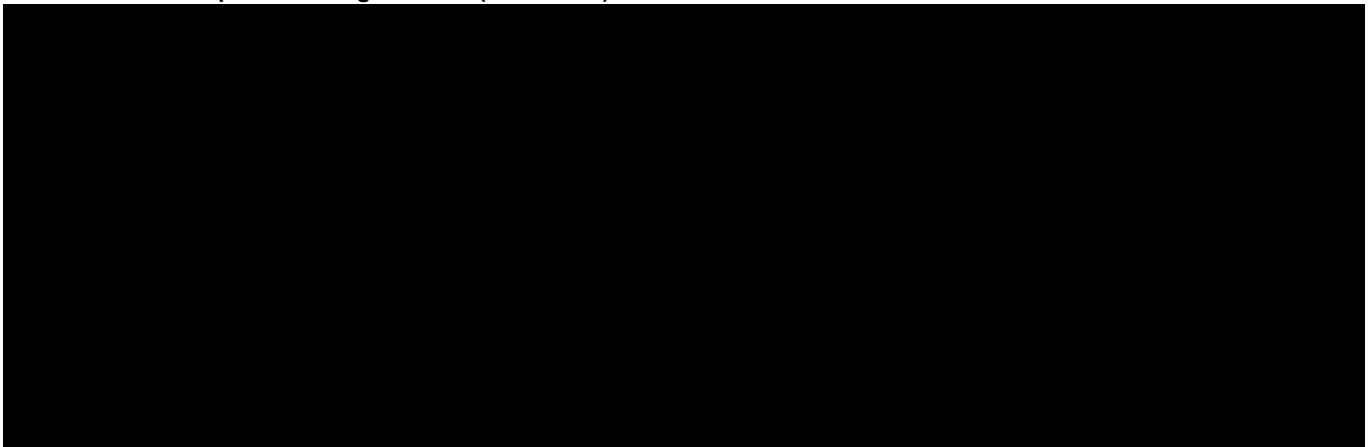
**Figure 24: Inputs to Amazon Music Unlimited mechanical royalty rate under “Standalone Portable Subscriptions” categorization (June 2018)**

Month	Service revenue	Subscribers	Performance royalty payments	Sound recording payments
██████	██████████	██████████	██████████	██████████

Source: Amazon royalty rate data.

- (113) [REDACTED], I illustrate the step-by step calculation of the mechanical royalties under Phono III in Figure 25.

**Figure 25: Amazon Music Unlimited’s mechanical royalty rate calculations under Phono III, “Standalone Portable Subscriptions” categorization (June 2018)**



- (114) [REDACTED] Figure 25, [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

**Figure 26: Amazon musical works royalty rates under Phono III—Amazon Music Unlimited, “Standalone Portable Subscriptions” categorization (June 2018)**

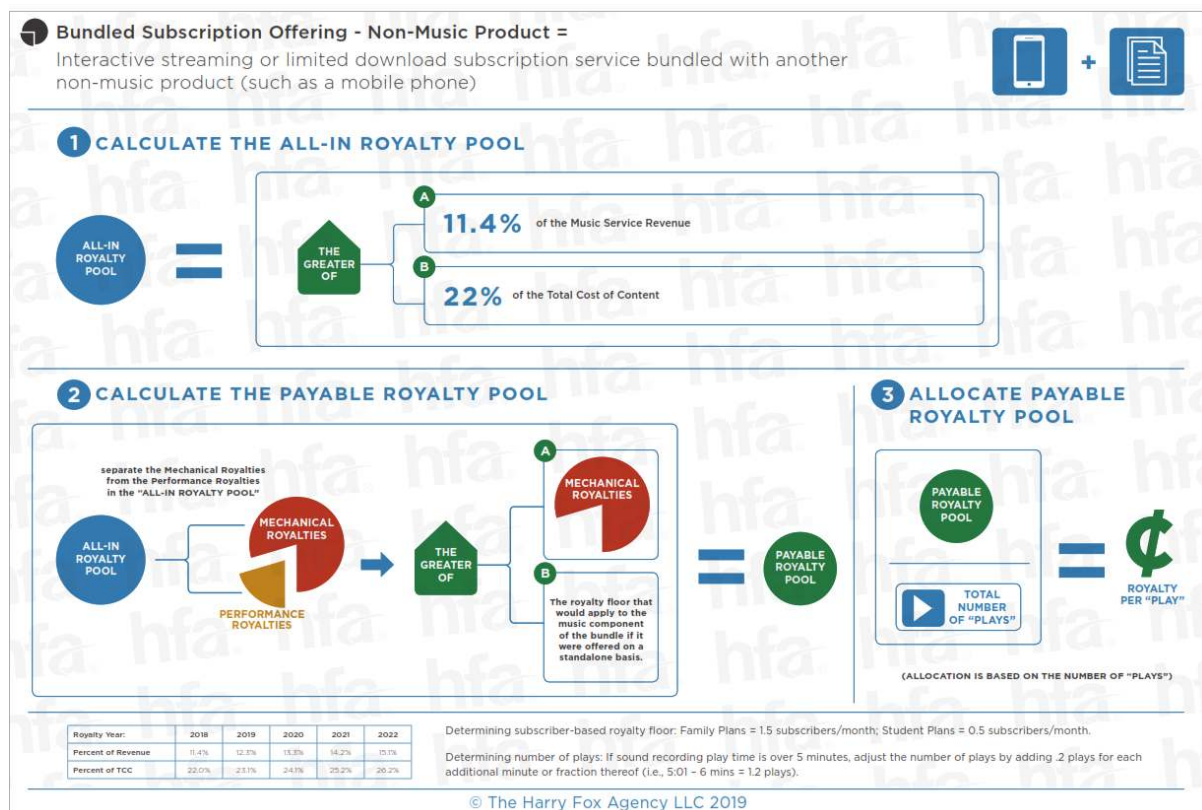
Performance royalty (% revenue)	Mechanical royalty under Phono III (% revenue)	Total music works royalty (% revenue)

Source: Amazon royalty rate data.

## VII.B.2. Phono III royalty calculation for Amazon Music Prime

- (115) The Prime Music service falls under the “Bundled Subscription Offering-Non-Music Product” categorization under Phono III. Figure 27 shows the flowchart for this category.

**Figure 27: Mechanical royalty formula for “Bundled Subscription Offering—Non-Music Product” under Phono III**



Source: “Bundled Subscription Offering – Non-Music Product,” The Harry Fox Agency, updated 2019, [https://www.harryfox.com/content/2019\\_f\\_ns\\_ad\\_s.pdf](https://www.harryfox.com/content/2019_f_ns_ad_s.pdf).

- (116) This formula requires a determination of the standalone price of the music component of the Prime Music bundle.<sup>206</sup> [REDACTED]

[REDACTED]<sup>209</sup>

- (117) [REDACTED]<sup>211</sup>

### VII.B.3. Phono III royalty calculation for Amazon Music Free

- (118) The flowchart in Figure 28 shows the Phono III formula for ad-supported services, such as Free. Similar to the “Standalone Portable Subscriptions, Mixed Use” category, the headline rate increased from 10.5% in Phono II to up to 15.1% in 2022 in Phono III.

<sup>206</sup> Phono III Final Determination, at 1981-1982,

<sup>207</sup> Duffett-Smith WDT, ¶ 199 [REDACTED]

<sup>208</sup> Duffett-Smith WDT, ¶ 68.

<sup>209</sup> Duffett-Smith WDT, ¶ 200 [REDACTED]

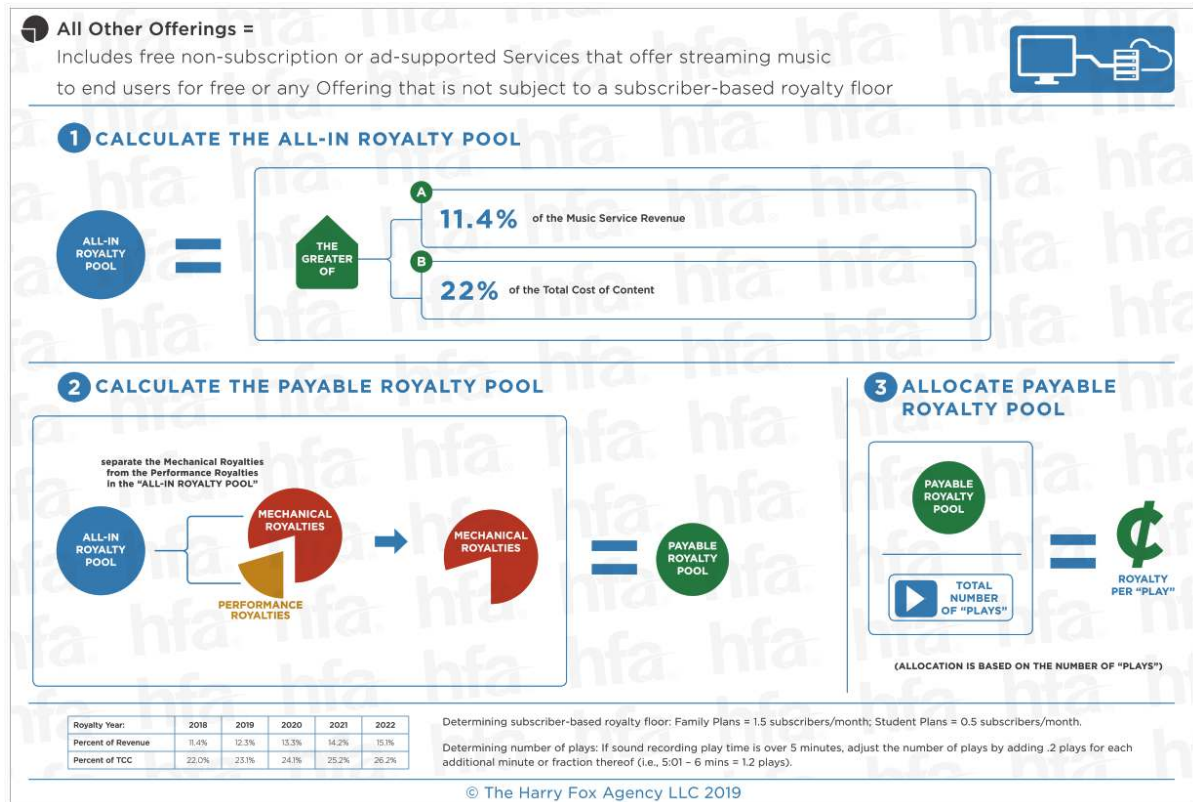
<sup>210</sup> Duffett-Smith WDT, ¶ 70 [REDACTED]

*See also* Section XI.B.3 *infra*.

<sup>211</sup> Duffett-Smith WDT, ¶ 68 [REDACTED]



**Figure 28: Mechanical royalty formula for “All Other Offerings,” including ad-supported services, under Phono III**



Source: “All other offerings,” The Harry Fox Agency, updated 2019, [https://www.harryfox.com/content/2019\\_f\\_ns\\_ad\\_s.pdf](https://www.harryfox.com/content/2019_f_ns_ad_s.pdf).

- (119) As with Phono II, there are just two possible determinants of mechanical royalty rates: the headline rate that varies between 11.4% and 15.1% (Step 1A) or the TCC prong, which varies between 22% and 26.2% (Step 1B). In both of these cases, payments to PROs are deducted from the total royalty pool to determine mechanical royalty payments.

#### VII.B.4. Summary of Amazon musical works royalty rates under Phono III

- (120) Figure 29 summarizes Amazon’s musical works royalty payments in 2019. [REDACTED]
- [REDACTED]
- [REDACTED]



**Figure 29: Amazon’s musical works royalty rate under Phono III by service, 2019<sup>212</sup>**

Service	Mechanical royalty rate (Phono III)	Performance royalty rate	Total musical works royalty rate
Amazon Music Unlimited			
Amazon Music Prime			
Amazon Music Free			

Source: Amazon royalty rate data.

## VII.C. Sound recording payments

- (121) Sound recording royalty rates for operating an interactive streaming service are determined through negotiations with the copyright holder (generally a record label) without regulatory oversight.<sup>213</sup> For Amazon, sound recording rates vary based on the individual contracts reached with each label. Figure 30 below shows Amazon’s effective sound recording royalty rates for each of its services from June 2020 through May 2021.<sup>214</sup>

**Figure 30: Amazon’s effective sound recording royalty rate by service, June 2020–May 2021**

Service	Effective sound recording rate
Amazon Music Unlimited	
Amazon Music Prime	
Amazon Music Free	

Source: Amazon royalty rate data.

<sup>212</sup>

<sup>213</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 52.

<sup>214</sup> In my WDT from October 13, 2021, my benchmark analysis relied on Amazon, Google, Spotify, and Pandora MLC rate calculation files for January 2020–December 2020. I now updated my benchmark analyses to rely on the most recent 12 months of data from Dr. Eisenach’s processed dataset that contains MLC rate calculations for all interactive streaming services through May 2021. More detail on these data is available in Section XI.E.

## VIII. Statutory standard for determining mechanical royalty rates

- (122) Prior to the passage of the MMA, “reasonable rates and terms” for the compulsory mechanical royalty license for interactive streaming services were set to conform to four statutory objectives known as the “801(b) factors,” after Section 801(b)(1) of the Copyright Act.<sup>215</sup> In 2018, the MMA changed the criteria for determining reasonable rates and terms for mechanical royalties to what is known as the “willing buyer/willing seller” standard, affecting rate determination proceedings that commence on or after October 11, 2018.<sup>216</sup> This section discusses the application of the WBWS standard in this matter.

### VIII.A. WBWS standard

- (123) The MMA explains that reasonable rates and terms for the compulsory mechanical license should represent the rates and terms that “would have been negotiated in the marketplace between a willing buyer and a willing seller.”<sup>217</sup>
- (124) In the past, the Board has consistently found that the “marketplace” within which a willing buyer and a willing seller negotiate under the WBWS standard should be not be marred by undue market power.<sup>218</sup> Thus, application of the WBWS standard necessitates evaluating the competitiveness of a reference market. Consistent with its earlier decisions, in its Web V determination, the Board determined that applying the WBWS standard requires adjusting actual market rates to reflect rates that would be established in a hypothetical “effectively competitive” market.<sup>219</sup> In that decision, the

<sup>215</sup> The four 801(b) factors are: (1) to maximize the availability of creative works to the public; (2) to afford the copyright owner a fair return for his or her creative work and the copyright user a fair income under existing economic conditions; (3) to reflect the relative roles of the copyright owner and the copyright user in the product made available to the public with respect to relative creative contribution, technological contribution, capital investment, cost, risk, and contribution to the opening of new markets for creative expression and media for their communication; and (4) to minimize any disruptive impact on the structure of the industries involved and on generally prevailing industry practices. Phono III Final Determination.

<sup>216</sup> “Frequently Asked Questions,” U.S. Copyright Office, accessed October 11, 2021, <https://www.copyright.gov/music-modernization/faq.html> (“The new legislation does not change the rates for the compulsory license under section 115. However, the legislation does establish a new rate setting standard to be applied by the Copyright Royalty Judges. The new market-based willing buyer / willing seller rate setting replaces the policy-oriented 801(b)(1) rate-setting standard. The Copyright Royalty Judges will apply the new standard to rate determination proceedings that commence on or after October 11, 2018.”).

<sup>217</sup> “This determination is to be made based on “economic, competitive, and programming information presented by the parties, including—(i) whether use of the compulsory licensee’s service may substitute for or may promote the sales of phonorecords or otherwise may interfere with or may enhance the musical work copyright holder’s other streams of revenue from its musical works; and (ii) the relative roles of the copyright owner and the compulsory licensee in the copyrighted work and the service made available to the public with respect to the relative creative contribution, technological contribution, capital investment, cost, and risk.” Orrin G. Hatch-Bob Goodlatte Music Modernization Act, Pub. L. No. 115-264, 132 Stat. 3680 (2018).

<sup>218</sup> Web IV Determination, at 26347 (“The need to adjust for undue market power dates back to Web I.”).

<sup>219</sup> Web V Determination, at 7 (“Consistent with the D.C. Circuit’s decision affirming Web IV, the Judges in this Web V proceeding again apply the standard that royalty rates for noninteractive services should be set at levels that reflect those

Board found that the complementary oligopoly power of the major record labels prevents effective competition in the market for sound recording rights sold to interactive streaming companies, and therefore rates derived from that benchmark should be adjusted to reflect what they would be in a hypothetical effectively competitive market.<sup>220</sup> The Board has also found that similar complementary oligopoly power is exercised over non-interactive services and in the markets for musical works rights.<sup>221</sup>

## VIII.B. The concept of effective competition

- (125) The term “effective competition” has been equated to the concept of “workable competition,” which was introduced by the economist J.M. Clark in 1940 as a close “working approximation” to the ideal of perfect competition, but which, unlike perfect competition, can occur under real-world market conditions.<sup>222</sup> There is no single definition of workable competition, but it generally refers to a market in which no firm has substantial market power and in which firms directly compete for customers by improving their offerings, for example by offering a better price.<sup>223</sup> Although an effectively or workably competitive market is not affected by substantial market power, it does not achieve the “metaphysical perfection and competitiveness” of a *perfectly* competitive market.<sup>224</sup>
- (126) Antitrust enforcers implicitly incorporate an effective or workable competition standard in evaluating potentially anticompetitive actions.<sup>225</sup> For example, mergers are not condemned for causing a market

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that would be set in an effectively competitive market.”).

<sup>220</sup> Web V Determination, at 72 (“In sum, the Judges find it appropriate—for the reasons discussed above—to apply a 12% steering adjustment (prior to the offsets discussed below) in order to generate a competitive rate.”).

<sup>221</sup> Web V Determination, at 7 (“In Web IV, the Judges applied the concept of ‘effective competition’ as a counterweight to the ‘complementary oligopoly’ power of the Majors. Web IV, 81 Fed. Reg. at 26368 (identifying the ‘complementary oligopoly that exists among the Majors,’ allowing them to ‘utilize their combined market power to prevent price competition among them ....’). Simply put, the Judges found that each Major is a ‘Must Have’ licensor for noninteractive services (in the hypothetical unregulated market), meaning that each noninteractive service ‘must have’ a license for the entire repertoires of Sony, Universal and Warner, in order to remain in business.”); Web V Determination, at 10 (“And, in the next rate-setting case, Phonorecords III, the Judges (in the majority and in the dissent) found that the licensors—owners of the copyrights for musical works—possessed complementary oligopoly power.”).

<sup>222</sup> J. M. Clark, “Toward a Concept of Workable Competition.” *American Economic Review* 30 (June 1940): 241–56, <https://search.ebscohost.com/login.aspx?direct=true&db=eoh&AN=1185426&site=ehost-live>.

<sup>223</sup> J.S. Bain, “Workable Competition in Oligopoly: Theoretical Considerations and Some Empirical Evidence.” *American Economic Review* 40 (May 1950): 35–47, <https://search.ebscohost.com/login.aspx?direct=true&db=eoh&AN=1194470&site=ehost-live>.

<sup>224</sup> Web IV Determination, at 26332-26333 (“First, the D.C. Circuit, the Librarian, the Judges, and the CARP have all acknowledged that the Judges can and should determine whether the proffered rates reflect a sufficiently competitive market, *i.e.*, an “effectively competitive market. The Judges made this point clearly in their decision in the Web III remand, which included a summary of the past decisional language regarding the §114 standard: The DC Circuit has held that this statutory section does not oblige the Judges to set rates by assuming a market that achieves “metaphysical perfection and competitiveness.” *Intercollegiate Broad. Sys., Inc. v. Copyright Royalty Board*, 574 F.3d 748, 757 (D.C. Cir. 2009). Rather, as the Librarian of Congress held in Web I, the WBWS standard calls for rates that would have been set in a “competitive marketplace.” 67 FR at 45244-45 (emphasis added).”).

<sup>225</sup> R.S. Khemani, “Glossary of Industrial Organisation Economics and Competition Law,” Organisation for Economic Co-

to depart from perfect competition, but rather for causing a “substantial lessening of competition,” in the words of the Clayton Act.<sup>226</sup> The Department of Justice and the Federal Trade Commission, in their merger guidelines, interpret a “substantial lessening of competition” as an enhancement of market power.<sup>227</sup>

- (127) Economists define “market power” as the ability to price above a competitive level.<sup>228</sup> “Monopoly power” has been equated to substantial market power or the ability to price substantially above a competitive level.<sup>229</sup> While a market with only one producer—a literal “monopoly”—is rare, in most industries, most firms have some market power.<sup>230</sup> On the other end of the spectrum from monopoly, a market with sustained “perfect” competition, with prices consistently at marginal cost, likely does not exist outside of textbooks.
- (128) In addition to pricing above cost, in assessing market power, economists also pay attention to low price elasticity of demand for the product—which allows the product to be priced high with relatively little loss in sales—a durable market position,<sup>231</sup> and barriers to entry.<sup>232</sup> Market shares are sometimes used as a proxy for some of these indicia of market power.<sup>233</sup>

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Operation and Development, July 16, 1993, available at <https://www.oecd.org/competition/publicationsdocuments/glossary/>, at 86 (“No consensus has arisen over what might constitute workable competition but all bodies which administer competition policy in effect employ some version of it.”).

<sup>226</sup> “15 U.S. Code § 18 – Acquisition by One Corporation of Stock of Another,” Legal Information Institute, Cornell Law School, accessed October 2, 2021, <https://www.law.cornell.edu/uscode/text/15/18>.

Clayton Act, 15 U.S.C. § 7, <https://www.law.cornell.edu/uscode/text/15/18> (“[Section 7 of the Clayton Act prohibits mergers if] in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.”).

<sup>227</sup> US Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, August 19, 2010, <https://www.justice.gov/atr/horizontal-merger-guidelines-08192010>, p. 2 (“The unifying theme of these Guidelines is that mergers should not be permitted to create, enhance, or entrench market power or to facilitate its exercise. For simplicity of exposition, these Guidelines generally refer to all of these effects as enhancing market power. A merger enhances market power if it is likely to encourage one or more firms to raise price, reduce output, diminish innovation, or otherwise harm customers as a result of diminished competitive constraints or incentives.”).

<sup>228</sup> Massimo Motta, *Competition Policy: Theory and Practice* (Cambridge: Cambridge University Press, 2004), p. 115.

<sup>229</sup> Avishalom Tor, “Unilateral, Anticompetitive Acquisitions of Dominance or Monopoly Power,” *Antitrust L.J.* 76, no. 847 (2010): 1, [https://scholarship.law.nd.edu/law\\_faculty\\_scholarship/40](https://scholarship.law.nd.edu/law_faculty_scholarship/40) (“The prohibition of certain types of anticompetitive unilateral conduct by firms possessing a substantial degree of market power—variously called “monopolists” or “dominant firms”—is a cornerstone of competition law regimes worldwide.”).

<sup>230</sup> Massimo Motta, *Competition Policy: Theory and Practice* (Cambridge: Cambridge University Press, 2004), pp. 115-116.

<sup>231</sup> “Monopolization Defined,” Federal Trade Commission, accessed October 8, 2021, <https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/single-firm-conduct/monopolization-defined>.

<sup>232</sup> US Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, August 19, 2010, <https://www.justice.gov/atr/horizontal-merger-guidelines-08192010>, section 9.

<sup>233</sup> US Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, August 19, 2010, <https://www.justice.gov/atr/horizontal-merger-guidelines-08192010>, sections 2.1.3, 4, 5.

- (129) In the case of music copyrights, streaming services negotiate with entities that control large agglomerations of music rights. Three companies—Sony, Universal, and Warner—own particularly large portfolios of sound recording and musical works copyrights.<sup>234</sup>
- (130) Importantly, the portfolios of the record labels and publishing companies are complements rather than substitutes for streaming services. They do not directly compete with one another on price to displace other labels and publishers on that interactive streaming service.<sup>235</sup> This ownership of complementary must-have portfolios creates the “complementary oligopoly” or “Cournot complements” problem that the Board has identified in previous proceedings.<sup>236</sup> Under complementary oligopoly, the so-called “double marginalization” problem can lead to even higher prices than under monopoly.<sup>237</sup>
- (131) In the next sections, I discuss evidence of the substantial market power of record labels and music publishers with respect to licensing their works to interactive streaming services.

<sup>234</sup> See Section X.

<sup>235</sup> Web V Determination, at 7,8 (“[T]he ‘Must Have’ status of the three Majors rendered each a ‘complementary oligopolist.’”) (“The Majors possess ‘complementary oligopoly power’ in the actual (unregulated) interactive market and in the hypothetical (unregulated) noninteractive market that ‘thwart[s] price competition and [is] inconsistent with an ‘effectively competitive market’....”); Phono III Final Determination, at 1941 (“[I]n the interactive streaming market, services must build a catalog of sound recordings and their included musical works, so that many works can be streamed to listeners.... That is, in the interactive streaming market, the sound recordings are ‘must have’ complements, not in competition with each other.”); Duffett-Smith WDT, ¶¶ 29,30 (“[REDACTED]”).

<sup>236</sup> Originally coined by Cournot as a *composite commodity*. Cournot, Antoine Augustin. *Researches into the Mathematical Principles of the Theory of Wealth*. Macmillan, 1897 (original 1838), chapter IX, p. 99, ¶55 (“we will imagine two commodities, (a) and (b), which have no other use beyond that of being jointly consumed in the production of the composite commodity (ab).”).

Giuseppe Dari-Mattiacci and Francesco Parisi, “Substituting Complements,” *Journal of Competition Law and Economics* 2, no. 3 (2006): 333 (“The presence of multiple sellers in the provision of nonsubstitutable complementary goods [...]. This problem is known in the economics literature as complementary oligopoly.”).

<sup>237</sup> Giuseppe Dari-Mattiacci and Francesco Parisi, “Substituting Complements,” *Journal of Competition Law and Economics* 2, no. 3 (2006): 333 (“The presence of multiple sellers in the provision of nonsubstitutable complementary goods leads to outcomes that are worse than those generated by a monopoly with a vertically integrated production of complements. This problem is known in the economics literature as complementary oligopoly.”).

Cournot, Antoine Augustin. *Researches into the Mathematical Principles of the Theory of Wealth*. Macmillan, 1897 (original 1838), chapter IX, p. 103, ¶57 (“But there is this essential and very remarkable difference, that the root of equation (c) is always greater than that of equation (c’), so that the composite commodity will always be made more expensive, by reason of separation of interests than by reason of the fusion of monopolies. An association of monopolists, working for their own interest, in this instance will also work for the interest of consumers, which is exactly the opposite of what happens with competing producers.”).

## VIII.C. Market power of labels and publishers

### VIII.C.1. Market power of labels

- (132) The three largest music labels—Universal Music Group, Sony Music Entertainment, and Warner Music Group—collectively earn approximately 65% of all US label revenue. The dominance of the industry by three major labels has resulted from ongoing consolidation since the birth of the industry in the 1940s and 1950s. By 1988, there were six major labels.<sup>238</sup> Those “Big 6” became the “Big 3” after the 1998 merger of Universal and Polygram, the 2003 merger of Sony and BMG, and the 2012 merger of Universal and EMI.<sup>239</sup> The estimated market shares of the three major labels in the United States and worldwide are shown in Figure 31 below.

**Figure 31: Market shares of Record Labels, US and worldwide, by revenue, 2019**

Record label	US	Worldwide
Universal Music Group		32%
Sony Music Entertainment		20%
Warner Music Group		16%
Other		32%

Sources: US: “Market Share of Record Companies in the United States from 2011 to 2019, by Label Ownership,” *Statista*, January 8, 2021, accessed October 2, 2021, <https://www.statista.com/statistics/317632/market-share-record-companies-label-ownership-usa/>. Worldwide: “UMG Increases Recorded-Music Market Share Lead, Indies Enhance Publishing Dominance,” *Music & Copyright* (blog), May 20, 2020, <https://musicandcopyright.wordpress.com/2020/05/20/umg-increases-recorded-music-market-share-lead-indies-enhance-publishing-dominance/>.

- (133) [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED].<sup>240</sup> The Federal Trade Commission concluded in its evaluation of the 2012 Universal-EMI

<sup>238</sup> Sebastian Watzinger, “Music Labels: What Are They and a Review of the Top Record Labels,” *Music Gateway* (blog), May 20, 2020, <https://www.musicgateway.com/blog/how-to/music-labels-top-record-labels>.

<sup>239</sup> Mark Cooper and Jodie C. Griffin, “The Role of Antitrust in Protecting Competition, Innovation and Consumers as the Digital Revolution Matures: The Case Against the Universal-EMI merger and E-Book Price Fixing” (SSRN paper, June 2012), <http://dx.doi.org/10.2139/ssrn.2460992>.

<sup>240</sup> See Amended Written Direct Testimony of Kajal Gayadien March 8, 2022 [hereinafter “Gayadien AWDT”], ¶ 9

(“[REDACTED]”).  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] See also Dmitry Pastukhov, “How Music Streaming Works and the Popular Music Streaming Trends of Today,” *Soundcharts* (blog), updated June 13, 2019, <https://soundcharts.com/blog/how-music-streaming-works-trends/> (“The core product of the streaming market is unlimited, seamless access to all music in the world. Sure, none of the streaming catalogues are actually complete—but the point is that 99% of the users won’t ever have to look for music outside of their streaming service of choice.”). See also Duffett-Smith WDT, ¶ 28 (“[REDACTED]”).

merger that each leading interactive streaming service “must carry the music of each Major to be competitive,” and thus that the major labels’ catalogs were complements rather than substitutes from the perspective of interactive streaming services.

Commission staff found considerable evidence that each leading interactive streaming service must carry the music of each Major to be competitive. Because each Major currently controls recorded music necessary for these streaming services, the music is more complementary than substitutable in this context, leading to limited direct competition between Universal and EMI.<sup>241</sup>

- (134) Evidence from the Klein Survey shows that the [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]
- [REDACTED] 245

### VIII.C.2. Market power of publishers

- (135) As discussed in Section VI above, the “Big 3” labels are also each affiliated with a publishing company. The publishing arms of the major labels each control large portfolios of songs. Figure 32 shows estimated shares of the top three publishers in the United States and worldwide, the former estimated as shares of plays of the 100 most played radio songs, the latter by revenue.

241 Statement of Bureau of Competition Director Richard A. Feinstein In the Matter of Vivendi, S.A. and EMI Recorded Music, September 21, 2012.

242 Klein WDT, ¶ 14 and Table 36.

<sup>243</sup> Klein WDT, Table 28.

<sup>244</sup> Klein WDT, Table 31.

<sup>245</sup> Klein WDT, Table 29.

**Figure 32: Estimated shares of Major Publishers, US and worldwide**

Publisher	US Q2-2021 top 100 play share	Worldwide 2019 revenue share
Sony Music Publishing	33%	
Universal Music Publishing Group	18%	
Warner/Chappell Music	17%	
Other	32%	

Sources: For the US, shares are based on shares of plays of the 100 most-played radio songs in the second quarter of 2021, Ed Christman, “Publishers Quarterly: Sony ‘Levitating’ Atop Rankings, Silk Sonic Makes Smooth Entry,” *Billboard*, August 11, 2021, Factiva, <https://assets.billboard.com/articles/business/publishing/9613100/publishers-quarterly-sony-silk-sonic-q2-2021>. For Worldwide numbers, shares are based on revenue from physical and digital sales, “Revenue Market Share of the Largest Music Publishers Worldwide from 2007 to 2019,” *Statista*, accessed July 13, 2021, <https://www.statista.com/statistics/272520/market-share-of-the-largest-music-publishers-worldwide/>.

- (136) Importantly from the perspective of market power, ownership of musical works is often diffuse—several different entities may own fractional shares of musical works rights for a given song. This creates a potential “holdout” problem whereby an owner of a fractional share of a song could potentially appropriate a disproportionate share of the returns.<sup>246</sup> This problem is compounded by the fact that musical works ownership information is difficult to obtain and constantly changing, making

<sup>246</sup> Calabresi and Melamed defined the holdout problem in terms of the ability of individual land holders to prevent an efficient transfer of a tract of land by holding out for more than the value of their individual parcel. *See* Guido Calabresi and A. Douglas Melamed, “Property Rules, Liability Rules, and Inalienability: One View of the Cathedral,” *Harvard Law Review* 85, no.6 (April 1972): 1106-07. Holdout (or “hold-up”) problems have manifested in the IT sector, where new innovations often touch on a number of patents, each of which can exert a potential veto over the innovation and thus extract more than the incremental value of the patent to the final good. *See* Mark A. Lemley, “Ten Things to Do About Patent Hold Up of Standards (and One Not To),” *Boston College Law Review* 48(2007): 150-151 (“...the one central fact about the information technology (“IT”) sector—including the Internet, semiconductors, telecommunications, computer hardware, and computer software—is the multiplicity of patents that developers must deal with...This creates a problem because various features of the patent system facilitate holdup. Patent owners in these component technology industries like IT can capture not just the value of the incentive contribution that they have made—something they ought to be entitled to—but also some greater amount of money than their invention is worth.”).



it difficult for a service to know precisely which songs a particular publisher owns.<sup>247</sup> [REDACTED]

[REDACTED]<sup>248</sup>

(137)

[REDACTED]<sup>249</sup>

<sup>247</sup> Duffett-Smith WDT, ¶¶ 38, 39 (“Additional features of musical-works rights magnify publishers’ [REDACTED]. Musical-works ownership structures are often complicated, as demonstrated by the “Rain on Me” example above. Amazon typically lacks ex ante (and often even ex post) visibility into those structures. For many newly released songs, Amazon receives songwriting ownership data only after the fact – often many months after the song is released and placed onto Amazon’s services. When “Rain on Me” was released, for example, even the record label was unaware of the entire songwriting ownership structure: [REDACTED]

[REDACTED] And for many older songs, we never gain visibility into the entire ownership chain. We rely on Music Reports Incorporated (“MRI”) to match individual tracks to publishers, but the rights holders often do not provide MRI with the information necessary to perform that task in a timely manner. Due to this lack of visibility, [REDACTED]

Ownership changes also amplify the problem. Even if Amazon manages to verify a song’s entire ownership structure at a given point in time, the ownership shares can change without notice. And we often will not know about those changes until well after the fact – if ever. For example, Bruno Mars and Mark Ronson’s “Uptown Funk” had six songwriters at the time of release, but months later five songwriters were added apparently as a result of a litigation settlement. The prospect of such fluctuating ownership shares further complicates Amazon’s ability to verify which publishers own which songs. [REDACTED]

See also Braun WDT, ¶ 63 (“[REDACTED]”).

<sup>248</sup> Duffett-Smith WDT, ¶ 40 (“[REDACTED]”). Economists have long identified information asymmetries as a potential source of market inefficiencies. See, e.g., George A. Akerlof, “The Market for ‘Lemons’: Quality Uncertainty and the Market Mechanism,” *Quarterly Journal of Economics* 84, no. 3 (1970): 488–500, <https://doi.org/10.2307/1879431>; Michael Rothschild and Joseph Stiglitz, “Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information,” *Quarterly Journal of Economics* 90, no. 4 (1971): 629, <https://doi.org/10.2307/1885326>.

<sup>249</sup> See, e.g., Braun WDT, ¶ 59 [REDACTED]

<sup>250</sup> Duffett-Smith WDT, ¶¶ 33–37.

<sup>251</sup> Duffett-Smith WDT, ¶¶ 33–35.

██████████<sup>252</sup> This indicates that even publishers with small market shares could wield a large degree of market power against interactive streaming services in an unregulated setting.

#### VIII.D. Implications of market power for rate-setting

- (138) Substantial market power and a lack of effective price competition in the record label and music publishing markets indicate that the markets for the sale of sound recording and musical works rights to interactive streaming services are not effectively competitive. Thus, unregulated rates derived from these markets are not good benchmarks under the WBWS standard without adjustment to account for the lack of effective competition in the market. I discuss this issue in more detail in my discussion of market power adjustments to benchmarks in Section XI.C below.

252 Duffett-Smith WDT, ¶ 35 (“[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]”).

## **IX. Maintaining a particular level of mechanical royalties is not critical to making songwriting a viable profession**

- (139) While acknowledging that it “was largely anecdotal and unsupported by sophisticated survey, studies, or economic theories,” the Board in its Phono III final determination found that “the evidence points strongly to the need to increase royalty rates to ensure the continued viability of songwriting as a profession.”<sup>253</sup> They also found that it was important to maintain mechanical royalties specifically, through a mechanical floor in the rate structure, to ensure continuation of “an important source of liquidity for songwriters.”<sup>254</sup>
- (140) The share of mechanical royalties within all musical works royalties is a function of changes in technology and distribution platforms. As distribution of recorded music moves from CDs and PDDs to interactive streaming, the share of mechanical royalties relative to performance royalties within musical works royalties decreases. When evaluating payments to musical works rightsholders, however, the particular split is less important than trends in musical works royalties as a whole. As shown in Figure 4, streaming services have driven increases in recorded music revenue in recent years. Given that musical works royalties have been tied to that revenue, songwriters and publishers have seen increasing royalty payments from the streaming services.
- (141) If, despite this, there is an underpayment of musical works rightsholders leading to a market undersupply of musical works, then, as discussed in this section, that deficiency is more naturally and effectively remedied by direct transfers between sound recording and musical works rightsholders—especially given the supra-competitive profits of record labels and the co-ownership of major labels and publishers—rather than by further increasing total interactive streaming royalties.

### **IX.A. Trends in relative size of mechanical and performance royalties are driven by changes in technology**

- (142) Compensation to musical works copyright holders is ultimately determined by total musical works royalties: that is, the sum of performance and mechanical royalties. The particular division of royalties between performance and mechanical royalties is a function of the regulatory environment—which determines which distribution channels pay which musical works royalties—and of changes in technology, which move revenue between distribution channels. For instance, the replacement of physical and digital sales of CDs and PDDs—which pay only mechanical and not performance royalties—by interactive streaming—which pays both mechanical and performance

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<sup>253</sup> Phono III Final Determination, at 1958.

<sup>254</sup> Phono III Final Determination, at 1934.

royalties—will tend to make mechanical royalties a smaller share of total musical works royalties, even if total musical works royalties increase.

- (143) The replacement of CD/PDD revenue by interactive streaming revenue has had two beneficial effects for songwriters: first, musical works rightsholders earn more as a share of revenues from interactive streaming subscription sales than they do from sales of PDDs.<sup>255</sup> Second, because all musical works revenues from PDDs are in the form of mechanical royalties while those from interactive streaming are split between mechanical and performance royalties, in the short run, songwriters benefit because they generally retain a larger share of performance royalties than they do of mechanical royalties.<sup>256</sup> In the longer run, the perfect complementarity of mechanical and performance royalties means that musical works rights holder payments should not depend on the particular split.
- (144) More importantly, as I discussed in Section VI.A, publishing revenue, which captures *all* sources of musical works revenue including both performance and mechanical royalties, has been increasing steadily since 2014.

## IX.B. The structure of copyright payments does not mandate particular final payment streams

- (145) A musical work (a “song”) is an input into a sound recording. At a high level, it is unusual that streaming services have to pay for use of not just a final product—an album or song released by a recording artist—but also, separately, an input into that final product, namely the musical work underlying it. Typically, final goods producers pay for their own inputs and do not charge the final consumer separately for the input costs.
- (146) In the case of streaming services, the legal structure surrounding copyrights leads to this outcome, but it does not necessarily mandate it. For example, to sell a music PDD, Amazon pays a share of the PDD’s retail price to the record label, which owns the sound recording right and itself pays a publisher for the musical works rights.<sup>257</sup> That structure is more straightforward than the one that

<sup>255</sup> See Figure 35, which shows that Amazon pays an estimated 7.97% of PDD revenue as musical works royalties, compared to Figure 29, which shows that Amazon paid 15.2% of revenue as musical works royalties in 2019.

<sup>256</sup> See Written Direct Testimony of Wayne C. Coleman, CPA, October 13, 2021, ¶ 18 (“Mechanical royalties that flow through the major music publishers are slow to be paid, hard to match to songwriters, and disproportionately used to pay publishers themselves. They are far less efficient in providing revenue to songwriters than, for example, public-performance royalties.”); See also Donald S. Passman, *All You Need to Know About the Music Business*, 10<sup>th</sup> ed. (New York: Simon & Schuster, 2019), 227 (“It isn’t just publishers who affiliate with these societies. The writers also sign on, and even more important, *the writers are paid 50% of the money (the writer’s share) directly by the society*. In other words, the writers’ performance earnings are not paid to the publisher; they’re sent to the writer. This is designed to protect the writer (which it does nicely) from flaky publishers who might steal their money.”) [emphasis in original].

<sup>257</sup>

currently prevails for interactive streaming, in which the streaming services (rather than the labels) pay for the upstream composition input into any sound recording to which they purchase access.

- (147) More generally, if there were a law in a particular industry that said that a final consumer had to pay for an upstream input at a set rate, and if that set rate were “too low” from the perspective of economic efficiency, leading to an underproduction of the final good, the final good producer would have an incentive to make side payments to the input producer to remedy that problem. In the case of musical works, if there were an undersupply of musical works by songwriters, recording artists and record labels would have the incentive and ability, via their supracompetitive profits, to remedy this deficiency.

### **IX.C. Record labels are best positioned to correct any undersupply of songwriting**

- (148) If there were a substantial undersupply of musical works affecting the production of sound recordings, then it would be in the interest of record labels and recording artists to increase payments to songwriters to remedy the problem. Music distributors would also have this general interest, but a record label is likely better placed to efficiently remedy an undersupply of musical works than a distributor for at least two reasons. First, record labels are directly involved in the creation of sound recordings and thus have more information on the supply of musical works than distributors have. Second, each of the major record labels has its own publishing affiliate, so that identifying appropriate recipients and transferring funds to support musical works creation would likely have lower transaction costs for them relative to distributors.
- (149) In addition, the generally unregulated complementary oligopoly power of the record labels supports the conclusion that they are overcompensated for their sound recording rights relative to what an effectively competitive market would deliver.<sup>258</sup> In contrast, as I discussed in Section III.D above, interactive streaming services struggle with profitability.
- (150) If songwriters were undercompensated such that there was underprovision of musical works, then, a market solution would be for record labels to incentivize musical works production on their own.

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*See also* Dana A. Scherer, “Money for Something: Music Licensing in the 21st Century,” Library of Congress, February 23, 2021, available at <https://crsreports.congress.gov/product/pdf/R/R43984>, p. 6 (“Rights owners of sound recordings (e.g., record labels) pay music publishers for the right to record and distribute the publishers’ musical works in a physical format.”).

<sup>258</sup> Phono III Final Determination, at 1964 (“However, it is undisputed that the record companies, by statutory design, have the unfettered legal ability to set their sound recording royalty rates, allowing them to exercise their economic power to demand rates that embody their ‘complementary oligopoly’ status, as previously described by the Judges.”).

## **X. Appropriate mechanical royalty structure**

- (151) Both the level of royalties and their structure—that is, whether they are determined as a percentage of service revenue, on a per-subscriber or per-play basis, or by reference to other royalty rates—potentially impact the development of interactive streaming services and the industry more broadly. The Phono II and the initial Phono III royalty rate structures, as well as those of some private contracts, feature a headline all-in percent-of-revenue rate, with alternative rate calculations based on a per-subscriber royalty rate or on a percentage of sound recording royalties.
- (152) In this section, I provide a discussion of economic foundations and tradeoffs related to rate structures.

### **X.A. Overview of economic tradeoffs related to rate structures**

- (153) There are sound economic reasons for a percent-of-revenue rate structure. To understand this, let us focus on royalties that are applied to a subscription service, where subscribers pay a fixed monthly fee and then can play as many songs as they like at no incremental cost. To begin, the subscription model itself promotes economic efficiency because it aligns the incremental cost to the listener of playing an additional song with the approximately zero marginal cost to the service of streaming an additional song to the listener, where here I am talking about costs other than royalties.
- (154) Now consider different royalty structures that could be applied to a subscription streaming service.
- (155) A percent-of-revenue rate structure aligns interactive streaming services' incentives to maximize revenue with copyright owners' interest in profiting from their musical works because, under such a rate structure, both the services and the copyright owners benefit from any increase in revenue. In addition, all revenue is weighted the same, in the sense that revenue from one subscriber is given equal weight with revenue from another subscriber. The percent-of-revenue rate structure does not introduce inefficient distortions into a service's preferences over which songs it streams or to which subscribers it streams those songs.
- (156) For contrast, it is useful to consider the alternatives of per-subscriber and per-play fees. Under a per-subscriber fee, a change in a service's monthly subscription fee affects the profits of the service but not the revenue received by the copyright owners, implying that the incentives of services and copyright owners are not aligned. For example, at least in the short run, copyright owners would benefit from having very low (or even zero) monthly subscription fees that attract more subscribers and so generate more per-subscriber fees. Further, under per-subscriber fees, a service may not have the incentive to incur acquisition costs for listeners who are unlikely to continue to subscribe to its service for an extended period of time because per-subscriber fees would have to be paid during the acquisition period in which the service's revenue is relatively low or zero, even if those listeners

would be surplus-enhancing. In contrast, under a percentage of revenue structure, the services' and the copyright owners' interests in acquiring subscribers who will generate a future revenue stream are aligned. In particular, a percent-of-revenue rate structure provides services with appropriate incentives to attract even low WTP consumers, including working to acquire new subscribers through special offers and discounts.<sup>259</sup>

- (157) Under a per-play fee, a different set of economic inefficiencies arise. Services would have incentives to engage in wasteful efforts to more actively monitor whether subscribers are actively listening to avoid paying per-play fees on streams that are not generating a threshold level of value for the listener. Services would also have incentives to skew listening toward longer songs within the class of songs that require the same per-play fee (and potentially even to allow for additional dead time to slow the rate at which songs play if that can be done without disrupting the listener experience) so as to minimize the number of plays subject to retaining a subscriber. Once again, the economic incentives of the services and the copyright owners are not aligned.
- (158) In addition to per-subscriber and per-play fees, past royalty structures have also involved prongs based on a percentage of sound recording royalties. This can be inefficient for multiple reasons. First, record labels have substantial market power, so basing musical works royalties on sound recording royalties can import the distortions associated with market power into the musical works royalties. Second, the record labels involved in negotiating sound recording royalties are not independent entities from the publishers that receive musical works royalties. Thus, record labels may have an incentive to distort their negotiations over sound recording royalties in recognition of the effects on their associated publishers' revenue. Third, the dependence of musical works royalties on negotiated outcomes outside the control of the Board introduces an additional level of uncertainty into the determination of musical works royalties.
- (159) Despite the disadvantages of musical works royalties based on per-play fees, per-subscriber fees, and a percentage of sound recording royalties, they appear in a number of statutorily set and privately negotiated rates. Such rate structures can be useful when difficulties arise with the application of a percent of revenue royalty structure, such as if there are difficulties in defining the appropriate revenue. For example, it may be difficult to determine the revenue attributable to an interactive streaming service when the service is sold in conjunction with a bundle of unrelated services, or more

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<sup>259</sup> Phono III Final Determination, at 1956-57 (“Professor Marx marshals these microeconomic principles to explain why the 2012 Settlement rate structure tends to incentivize and support the maximization of musical works available to the public under Factor A. Marx WDT ¶¶ 119–122, 123–133. As she testified at the hearing: “[H]aving different means of price discrimination is going to allow greater efficiency to be achieved [i]f we have a way for low willingness to pay consumers to access music, for example, student discounts, family discounts or ad-supported streaming, where low-willingness-to-pay consumers can still access music in a way that still allows some monetization of that provision of that service’....With regard to the downstream market, the Judges find that Professor Marx’s analysis of how a price discriminatory model maximizes availability is correct. Price discrimination not only serves low WTP listeners, but it also indirectly serves copyright owners, by incentivizing interactive streaming services to increase the total revenue that price discrimination enables.”) [emphasis original].

generally when revenue is difficult to attribute to a music service.<sup>260</sup> In that case, implementation constraints may cause a rate structure other than percentage of revenue to be the best option for that service. The inefficiencies associated with non-percent-of-revenue rate structures can be ameliorated by targeting them to a particular service or service type.

## **X.B. Economic efficiency and flexibility favor a percent-of-revenue structure for most interactive streaming services**

- (160) Economic theory indicates that a royalty rate structure based on a percentage of revenue helps maximize the efficiency of music distribution. This is because a percent-of-revenue structure aligns the marginal price to streaming services for music usage with the marginal cost to copyright owners of providing that usage, while transferring to copyright owners a lump sum scaled to the willingness to pay of consumers for the service. This encourages a variety of business models geared toward different consumers with different WTP.
- (161) Economic efficiency normally requires that the price be equal to the marginal cost.<sup>261</sup> However, for products with essentially zero marginal cost, such as digital music, setting the efficient marginal price does not allow a producer to generate revenue sufficient to cover its fixed costs. One way proper production incentives can be maintained, while retaining economic efficiency on the margin, is by charging a “two-part tariff”—a fixed amount, such as a subscription fee, for the right to purchase multiple units of a product, while pricing individual units at or close to marginal cost.<sup>262</sup>
- (162) A percent-of-revenue structure applies this two-part tariff structure upstream: services pay a lump sum based on revenue collected while paying a zero usage fee aligned with the zero true marginal cost of providing music. This upstream structure supports a similar downstream structure that is universal among popular paid subscription streaming services: a single monthly subscription fee that allows for unlimited streaming.<sup>263</sup>
- (163) A royalty structure that incentivizes efficient downstream usage, and thereby increases the available surplus, aligns with what willing buyers and willing sellers would negotiate in a market in the absence

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<sup>260</sup> Such royalties may also be used as a way of allocating risk for new, unproven business models.

<sup>261</sup> Schramm, Gunter. “Marginal cost pricing revisited.” *Energy Economics* 13, no. 4 (1991), p. 245, <https://www.sciencedirect.com/science/article/pii/0140988391900031> (“Marginal cost pricing is the appropriate approach for achieving economic efficiency.”).

<sup>262</sup> Examples of services that use this type of “two-part tariff” with a fixed, low, or zero marginal fee include video streaming services such as Netflix, health clubs, mobile telephone services that provide unlimited talk and text for a fixed fee, and, to a lesser extent, warehouse clubs (in the last, price is not literally marginal cost but is generally lower than that available outside the club).

<sup>263</sup> Charging a subscription price above zero induces some static inefficiency as it excludes users whose total value from the product is less than the subscription fee but greater than the true marginal cost, but users who purchase the subscription have an incentive to access the economically efficient amount of the product that maximizes their value for the service.



of regulation. Both parties in a free negotiation have the same incentive to set terms that maximize the total surplus available from reaching agreement. They have opposing incentives regarding how that surplus should be divided between them. But to the extent that transfers of surplus between parties can be implemented without reducing total surplus, a solution that maximizes surplus is in both parties' interests.

- (164) Calculating royalties as a percentage of revenue is common in the interactive streaming industry, both in statutory rates set by the Board for mechanical royalties and in private rates negotiated between interactive streaming services and record labels for sound recording royalties.
- (165) The Phono II settlement featured a percent-of-revenue rate structure, with a headline rate of 10.5% for the most popular services.<sup>264</sup> In addition to the headline rate, the Phono II rate structure for interactive streaming contained alternative prongs, depending on the particular service, based on a percentage of sound recording royalties paid (the “TCC” prong), or various per-subscriber minima.<sup>265</sup> The Phono III final determination retained the headline percent-of-revenue rate structure of Phono II, increasing the level somewhat, while simplifying the structure in other respects.<sup>266</sup>

- (166) [REDACTED]  
[REDACTED]  
[REDACTED]<sup>268</sup>

### **X.C. “Backstops” for percentage of revenue can be appropriate in certain circumstances**

- (167) Both the Phono II and Phono III rate structures and many private contracts contain alternatives to percent-of-revenue rates that can supersede percent-of-revenue rates if those rates fall below a certain level. These “backstops” can be seen as ways to allocate risk, as protection against difficulties in

<sup>264</sup> Specifically, the headline rate of 10.5% applied to “Bundled Subscription Services,” “Free Non-Subscription / Ad-Supported Services,” “Limited Offering,” “Standalone Non-portable Subscriptions” (both “Mixed Use” and “Streaming Only”), and “Standalone Portable Subscriptions, Mixed Use” services.

“Music Bundles” and “Mixed Service Bundle,” had a headline rate of 13.35. “Purchased Content Locker” and “Paid Locker Service” had a headline rate of 12% under Phono II. See “Archived Rate Charts,” Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

<sup>265</sup> See Section VII.A for further description of the Phonorecords II rate structure.

<sup>266</sup> See Section VII.B for further description of the Phonorecords III rate structure.

<sup>267</sup> Phono III Final Determination, at 1925.

<sup>268</sup> Gayadien AWDI, ¶ 11 (“Amazon’s deals with record labels for Unlimited [REDACTED]”).

measuring revenue attributable to music, or as a way to maintain royalties in the face of pricing strategies that defer or displace revenue from music streaming.<sup>269</sup>

- (168) One way this “backstop” was implemented in the Phono II settlement is through a “capped TCC” prong. Under the capped TCC calculation, using the “standalone portable subscription services, mixed use” rates to illustrate, if the royalty amount calculated by the headline percentage of revenue fell below 21% of sound recording royalties paid (the TCC percentage), then rates were set according to the TCC prong.<sup>270</sup> If, however, the TCC calculation implied an amount that was above an 80 cent per-subscriber “cap,” the cap would be triggered, and royalties would be set at 80 cents per subscriber. [REDACTED].
- (169) The Phono II structure also included a “mechanical only” floor that activated if mechanical royalty rates, as opposed to all musical works royalty rates, fell below a certain minimum amount. As I discussed in Section IX, defining and protecting a certain level of mechanical royalties, independently of musical works royalties as a whole, is economically unjustified.
- (170) The Phono III determination reduced the number of service definitions and rate prongs but retained the TCC prong and a mechanical-only per-subscriber floor for certain services.<sup>271</sup> It removed the cap on the TCC prong, however, which resulted in a large, immediate 55% jump in musical works royalties for Amazon’s standalone portable services from December 2017 to January 2018, as shown

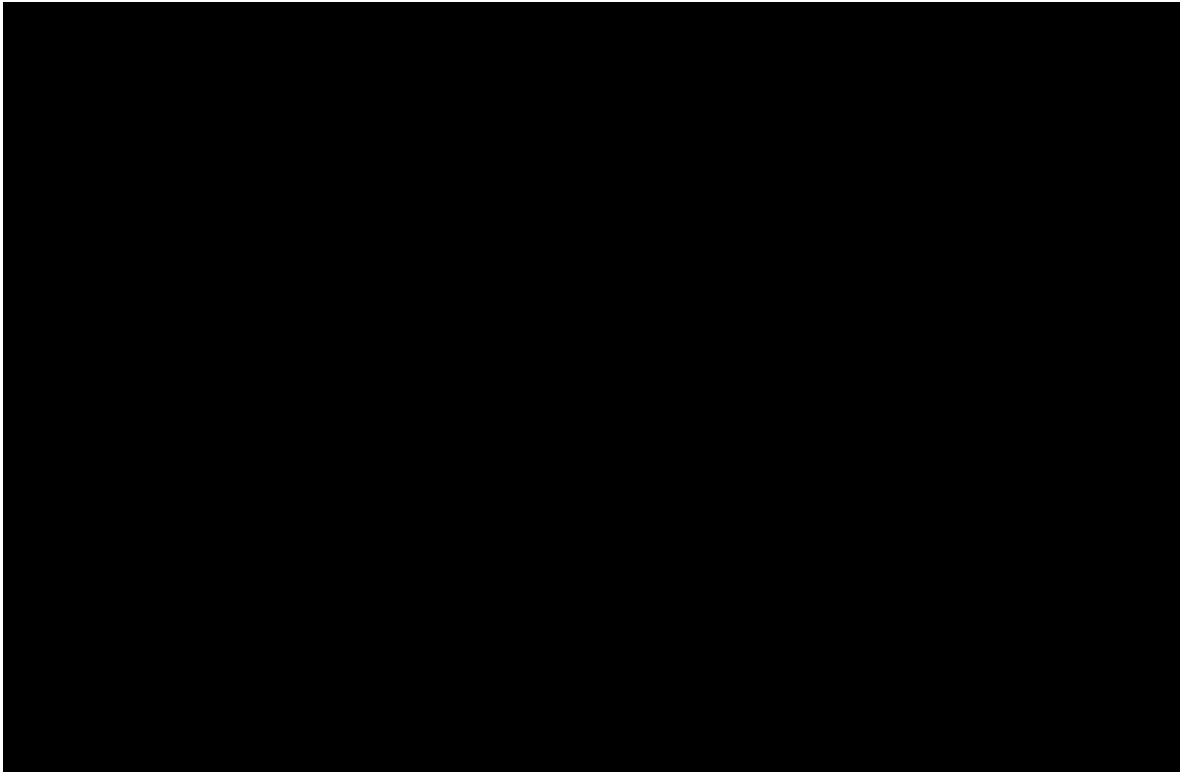
<sup>269</sup> Amazon’s Global Head of Record Label Licensing for its digital music business has testified [REDACTED]. See Gayadien AWDT ¶ 11 (“Amazon’s deals with record labels for Unlimited [REDACTED].”). See also Phono III Final Determination, at 1928 (“When the Services pay royalties as a percent of their current revenue, the input suppliers, i.e., Copyright Owners, are likewise deferring some revenue to a later time period and assuming some risk as to the ultimate existence of that future revenue. One way the Copyright Owners could avoid this impact would be to refuse to accept a percent-of-revenue form of payment and move to a fixed per-unit price. Another way would be to establish a pricing structure that provides minima and floors, below which the revenue could not fall. The bargain struck between Copyright Owners and Services in 2012 is an example of the latter structure.”).

<sup>270</sup> The 21% TCC prong applies to non-pass-through rates. “Archived Rate Charts,” The Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

<sup>271</sup> The following service offerings pay a mechanical-only per-subscriber floor under Phono III: Standalone Portable Subscriptions (50 cents); Standalone Non-portable Subscriptions, Streaming Only (15 cents); Standalone Non-portable Subscriptions, Mixed Use (30 cents). Bundles services pay the “royalty floor that would apply to the music component of the bundle if it were offered on a standalone basis.” Phono III Final Determination, at 2036.

in Figure 33 below. The period during which Amazon was paying under Phono III is shaded in blue in the figure.

**Figure 33: Musical works as a percent of revenue before and after Phono III (Unlimited)**



Source: Amazon royalty rate data.

## **X.D. Per-subscriber and per-play rates can induce inefficiencies**

- (171) Although flat per-play and per-subscriber rates may be useful in certain situations in which revenue attributable to a streaming service is difficult to calculate, they have the downside of promoting inefficiencies in interactive streaming relative to percent-of-revenue rates. This is especially true of industry-wide per-play or per-subscriber rates, such as those proposed by the Copyright Owners in the Phono III proceeding.<sup>272</sup>
- (172) Per-play rates raise the marginal cost to the service of a play above its true marginal cost. This can discourage efficient, surplus maximizing behaviors that encourage listening. High per-play and per-

<sup>272</sup> Phono III Final Determination, at 1924 (“The Copyright Owners structured the proposal as the greater-of a usage charge and a per-user charge. Specifically, under the Copyright Owners’ proposal, each month the licensee would pay the greater of (a) a per-play fee (\$0.0015) multiplied by the number of interactive streams or limited downloads during the month and (b) a per-end user fee (\$1.06) multiplied by the number of end users during the month.”).

subscriber rates also discourage efficient discounting, which can hinder interactive streaming services’ marketing toward consumer groups, such as students, with a low WTP for streaming.<sup>273</sup>

- (173) With high per-subscriber rates, services would have a disincentive to promote services through trial periods that have traditionally served as an important on-ramp for paid subscriptions.<sup>274</sup> The Klein Survey found that, among respondents who took advantage of a free trial for Unlimited, over [REDACTED] found the trial “very important” or “somewhat important” in their decision to subscribe.<sup>275</sup> High per-subscriber fees may make some offerings, such as ad-supported services, unprofitable, even though, in the absence of the fees, such services would have offered a way to monetize low WTP listeners not willing to pay for a subscription service. High per-play rates can distort decision making toward recommending longer songs and generally reducing incentives to increase listening by individual subscribers. This can encourage strategies such as aggressively checking to ensure that someone is actively listening at all times or induce reducing or discontinuing practices such as automatically playing related songs after a requested song is finished.<sup>276</sup>
- (174) In situations in which the correct level of revenue attributable to the interactive streaming service is difficult to calculate, a *targeted* alternative rate structure may serve a useful purpose. If such an alternative rate structure is tailored to the specifics of a particular service or service type, the potential inefficiencies of non-percent-of-revenue rates can be reduced.

## **X.E. An appropriate statutory rate structure for interactive streaming services**

- (175) The efficiency of percent-of-revenue rates, their use in the Phono II settlement, and their ubiquity in private contracts argue for a headline percent-of-revenue rate in this proceeding.

<sup>273</sup> Gayadien AWDT, ¶ 14 [REDACTED]

<sup>274</sup> *Id.*

<sup>275</sup> Klein WDT, Table 24.

<sup>276</sup> See Hurwitz WDT, ¶ 77 [REDACTED]

- (176) The Phono II settlement and the Phono III proceeding each added a “TCC” prong alongside the headline percent-of-revenue rate in part to protect against “revenue deferral.”<sup>277</sup> Such an alternative rate can protect against problems of revenue displacement or attribution in certain circumstances.<sup>278</sup>
- (177) The Phono II settlement capped this TCC rate with a per-subscriber rate. If set at an appropriate level, such a cap can prevent mechanical royalty rates from swinging dramatically with the vagaries of record labels’ market power. Uncapping the TCC exposes the services to potentially large increases in mechanical royalties tied not to relative contributions of publishers and streaming services, but rather to market developments on the sound recording side of the market. As the US Court of Appeals for the DC Circuit noted in its review of the Phono III determination, uncapping the TCC across the board was a “dramatic step.”<sup>279</sup> The Court found that

[u]ncapping the total content cost prong across all categories leaves the Streaming Services exposed to potentially large hikes in the mechanical license royalties they must pay... By eliminating any cap on the total content cost prongs, the Final Determination yokes the mechanical license royalties to the sound recording rightsholders’ unchecked market power.<sup>280</sup>

- (178) Indeed, as I discussed earlier, removal of the TCC cap [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]<sup>281</sup>

- (179) If the Board determines that an alternative prong is necessary in this proceeding to protect against revenue deferral or revenue misattribution, then a more straightforward protection for paid subscription services that avoids the problems of the uncapped TCC is a simple per-subscriber musical works backstop akin to the per-subscriber cap implemented in the TCC prong in Phono II. In

<sup>277</sup> Phono III Final Determination, p. 1934. Note that a TCC prong only protects against revenue displacement and deferral if there are alternatives to percent-of-revenue prongs such as per-subscriber minima in the services’ contracts with record labels.

<sup>278</sup> Phono III Final Determination, pp. 1934–1935 (“...an uncapped TCC prong effectively imports into the rate structure the protections that record companies have negotiated with services to avoid the undue diminution of revenue through the practice of revenue deferral.”).

<sup>279</sup> Phono III Appellate Decision, at 33.

<sup>280</sup> Phono III Appellate Decision, at 36.

<sup>281</sup> Phono III Final Determination, pp. 1959–1960 (“While the reasonable rate determined by the Judges does not present the same risk of disruption as the rates sought by the Copyright Owners, it does represent a not insubstantial increase of approximately 44% over the current headline rate. In order to mitigate the risk of short-term market disruption, and to afford the services sufficient opportunity ‘to adequately adapt to the changed circumstance produced by the rate change,’ the Judges will phase in the new rate in equal annual increments over the rate period.”). Between those two months, Amazon paid [REDACTED] of revenue, respectively, to musical works royalties for Unlimited’s standalone portable subscription service. See Figure 33.

Section XI.E.1 below I describe the appropriate level of such a per-subscriber backstop in this proceeding.

- (180) A targeted per-subscriber fee can provide a useful backstop for paid subscription services that offer similar catalog size and features. Due to their different features and thus different revenue bases, the appropriate per-subscriber minimum depends on the service category. I calculate appropriate per-subscriber minima for standalone portable and non-portable subscriptions in Section XI.E below. For a bundled service, the appropriate per-subscriber minimum is that one that would apply if it were sold as a standalone service.
- (181) For free services for which the notion of a subscriber is less well defined, a single per-subscriber fee is not a good fit.<sup>282</sup> Historically, the statutory rate structure has recognized this fact, and from the Phono II settlement through the Phono III final determination, has not included per-subscriber minima for free, ad-supported services.<sup>283</sup> Instead, they have used an uncapped TCC percentage as a backstop for those services. Although an uncapped TCC structure does create risk of the importation of market power from the label side of the market to the publisher side of the market, free ad-supported services are generally smaller in revenue terms and less central to the business of the major interactive streaming services than their premium paid services. The industry also has many years of experience with an uncapped TCC for ad-supported services, dating back to the Phono II settlement. Importantly, as noted above, there is no attractive alternative backstop available for ad-supported services. Thus, if the Board views a backstop as necessary for free, ad-supported services, a TCC prong is a reasonable backstop for that service category.
- (182) In Section XI.E below I calculate the appropriate backstop level for both paid subscription and free ad-supported services.

282

[REDACTED]  
[REDACTED]  
[REDACTED]. See Duffett-Smith WDT, ¶ 190 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED].”).

283 “Archived Rate Charts,” Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf); “All other offerings,” The Harry Fox Agency, updated 2019, [https://www.harryfox.com/content/2019\\_f\\_ns\\_ad\\_s.pdf](https://www.harryfox.com/content/2019_f_ns_ad_s.pdf).

## X.F. An appropriate statutory rate structure for Amazon Music Prime

- (183) While a percent-of-revenue rate alongside an appropriate backstop has many advantages and is flexible enough to accommodate most interactive streaming business models, the Prime Music service presents particular problems in calculating service revenue and subscribers.<sup>284</sup>
- (184) Prime Music is offered for free as part of a large bundle of unrelated services, and thus it is difficult to attribute revenue to it. [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]
- (185) A per-subscriber fee is problematic for Prime Music because the notion of “subscriber” is very different for a free service that is used to widely varying degrees by a large set of people who have access to the service than the notion of a “subscriber” of a paid interactive streaming service. The value that Amazon Prime subscribers place on Prime Music seems to vary widely. For example, the Klein Survey shows that [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]
- (186) This means that an appropriate rate structure for Prime Music will not be the same as the appropriate rate structure that I described above for other services considered in this proceeding. Instead, I view a per-play for Prime Music as the most reasonable rate structure for this service. Such a structure solves problems that were created for Prime Music by the rate structures of Phono II and III and is in line [REDACTED]  
[REDACTED]

<sup>284</sup> See Section X.

<sup>285</sup> Duffett-Smith WDT, ¶ 199 (“[REDACTED]”);  
Phono III Final Determination, at 2034 (“...if there is no standalone published price for a component of the bundle, then the Service shall use the average standalone published price for End Users for the most closely comparable product or service in the U.S., or, if more than one comparable exists, the average of standalone prices for comparables.”).

<sup>286</sup> Klein WDT, Table 16.

<sup>287</sup> Klein WDT, Table 16 and ¶ 87.

<sup>288</sup> Klein WDT, Table 16.

<sup>289</sup> Klein WDT, Table 16.

<sup>290</sup> Gayadien AWD, ¶ 16 (“Since 2019, all of Amazon’s deals with record labels have used [REDACTED] for Prime





- (189) The Phono III final determination retained the basic structure for this type of service, though it increased the percentage of revenue and TCC percentage for all services to 15.1% and 26.2%, respectively, with those increases phased in over five years, and removed the per-subscriber cap on the TCC.<sup>296</sup> Importantly, however, the Phono III determination also changed the definition of service revenue for bundled services to be the sum of the standalone prices for the components of the bundle that involve music licenses, not to exceed the bundled price.<sup>297</sup> If there is no standalone published price for a component of the bundle, “then the Service shall use the average standalone published price for End Users for the most closely comparable product or service in the U.S. or, if more than one comparable exists, the average of the standalone prices for comparables.”<sup>298</sup>
- (190) The Phono II and Phono III definitions of bundled service revenue appear to represent two extreme methods of determining music service revenue when it is part of a bundle. An approach that lies between these two extremes would be more balanced. To understand why the Phono II and Phono III methodologies are extreme, it is useful to consider an example.
- (191) Define the *discounted bundle price* as the price that a bundle sells for and the *undiscounted bundle price* as the sum of the prices of the component parts of the bundle when sold separately. The difference between the discounted bundle price and the undiscounted bundle price is the *bundle discount*. The Phono II methodology effectively attributes *all* of the bundle discount to the music service component of the bundle. So, for example, if a bundle combined a music service with a standalone price of \$10/month, a video streaming subscription with a standalone price of \$10/month, and a newspaper subscription with a standalone price of \$10/month, then if the bundle was sold at the discounted price of \$20/month, the Phono II methodology would calculate the music service price as \$0 (\$20 for the bundle minus \$10 for each of the two standalone components). Thus, all of the \$10 bundle discount is effectively applied to the music service price.
- (192) The Phono III methodology appears to take the opposite approach, seemingly applying *none* of the bundled discount to the music part of the bundle. That approach would simply take the standalone music service price of \$10/month to be the music service revenue, even though it was sold as part of a bundle with a substantial bundle discount. A more balanced way of calculating music service revenue when part of a bundle would be to distribute the bundle discount over all components of the bundle. In this example, that would mean assigning to each service one-third of the \$10 bundle discount, yielding an effective music service price of \$6.66/month. More generally, for a bundle with  $n$  components with standalone prices of  $p_1, p_2, \dots, p_n$  and a bundle discount of \$ $x$ , a more balanced way of

<sup>296</sup> The Majority also adopted the Services’ proposal to count family plans as having 1.5 subscribers and student plans as having 0.5 subscribers for purposes of calculating the mechanical floor rate. Phono III Final Determination, at 2036.

<sup>297</sup> Phono III Final Determination, at 2034.

<sup>298</sup> Phono III Final Determination, at 2034.

assigning a price to the first component of the bundle would be to use  $p_1 - x \cdot p_1 / (p_1 + \dots + p_n)$  rather than the extremes of either  $p_1$  as in Phono III or  $p_1 - x$  as in Phono II.

- (193) Whichever of these algorithms one uses, however, this bundled revenue methodology requires the ability to find a standalone price of the music service. That is difficult to implement in practice when, as in the case of Prime Music, [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

## X.F.2. Amazon Music Prime private contractual rate structures

- (194) [REDACTED]. For example, since 2019, all direct label contracts for Prime Music [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]<sup>303</sup>.

<sup>299</sup> Duffett-Smith WDT, ¶¶ 199.

<sup>300</sup> Duffett-Smith WDT, ¶¶ 200–201 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]”).

<sup>301</sup> Duffett-Smith WDT, ¶¶ 161, 162, 204 [REDACTED]  
[REDACTED]  
[REDACTED] (“On August 27, 2019, the NMPA sent Amazon a letter asserting that a “number of [the NMPA’s] music publisher members have expressed concern regarding the manner in which Amazon appears to be calculating royalties under the Section 115 statutory mechanical license for its Prime Music offering.”).

<sup>302</sup> Gayadien AWD, ¶¶ 16, 20 (“Since 2019, all of Amazon’s deals with record labels have used a per-play rate for Prime Music.”) (“[REDACTED]”)

<sup>303</sup> Duffett-Smith WDT, ¶¶ 68, 69 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

### **X.F.3. Appropriate rate structure for Amazon Music Prime**

(195)

[REDACTED]  
[REDACTED]  
[REDACTED]. Because per-play rates are not subject to revenue misallocation issues, no alternative rate structure (such as a TCC percentage) is required as a backstop. Despite the inefficiencies of per-play royalties in general, in this context they provide a workable alternative to percent-of-revenue or per-subscriber rates that are challenging to define for Prime Music. I describe in Section XI.F below how to calculate reasonable per-play royalty rates for Prime Music.

## **XI. Appropriate musical works royalty rates for interactive streaming**

- (196) As discussed in Section VIII above, this proceeding is governed by the WBWS standard rather than the 801(b) standard used in past Section 115 proceedings. Historically, a variety of approaches have been used to determine appropriate rates under a WBWS standard. They generally fall into two categories: benchmarking to rates paid in other markets, or application of an economic model meant to mimic a market setting.<sup>304</sup> The benchmarking approach involves looking to actual market outcomes in comparable markets, adjusted as necessary to achieve comparability, to infer a reasonable rate in the target market. It generally does not start from economic theory, but rather uses economic principles to examine the comparability of the markets and make proper adjustments. In contrast, a theory-based approach uses theoretical economic model to derive market outcomes, typically using real-world inputs to the extent possible. In either case, the objective is the same: to determine the rates that would be set by willing buyers and willing sellers in an effectively competitive market. The benchmark approach has the advantage of basing rates on actual market outcomes. The modeling approach has the advantage of potentially yielding insights into the factors determining rates. The appropriate approach depends on the setting, goals of the analysis, and the available data.
- (197) In this setting, where we are focused on WBWS rates, given the difficulties modeling a market outcome with many players, imperfect information, and institutional rigidities such as overlapping long-term contracts, the clearest path forward is to determine interactive streaming musical works rates by benchmarking to rates observed in a comparable market that, when properly adjusted, represent WBWS rates. In this section I describe my benchmarking approach and the WBWS-based royalty rates that result.

### **XI.A. The benchmarking approach**

- (198) Benchmarks are more useful the more analogous they are to the target market. Past determinations by the Board have articulated a number of desirable properties for benchmarks. These include whether the benchmark market includes the same buyers and sellers as the target market, whether they cover the same rights, and, in the case of a rate determined under the WBWS standard, whether they represent rates that would have been negotiated between willing buyers and willing sellers.<sup>305</sup>
- (199) Benchmarks are not expected to be perfect and likely depart in some ways from the target market. For instance, in the recent Web V proceeding, the Board looked to ratios of *interactive* rates and prices to

<sup>304</sup> See, e.g., Web V Determination, at 94, 203 (“Mr. Orszag engages in a benchmark analysis to estimate an appropriate statutory royalty to be paid to record companies by noninteractive services for subscription services.”) (“Professor Shapiro proffers two game theoretic bargaining theories to support proposed benchmark rates.”).

<sup>305</sup> See, e.g., Web IV Determination, at 26383.

determine royalty rates in the *non-interactive* market. In some cases, benchmarks can be adjusted to make them more comparable to the target market. For instance, in the Web V proceeding, the Board applied a market power adjustment to the interactive streaming market to remove the complementary oligopoly power of record labels when using that market as a benchmark.<sup>306</sup>

- (200) My benchmark approach utilizes ratios of sound recording to musical works royalty rates, with market power adjustments as appropriate, to derive WBWS all-in musical works rates for interactive streaming services. I describe my basic methodology here.

**Figure 34: Basic benchmark ratio approach**

	Sound recording rate	Musical works rate
Benchmark market	$A$	$C$
Interactive streaming	$B$	$D?$

- (201) Figure 34 above helps to illustrate the basic approach. I calculate WBWS musical works rates for interactive streaming by equating the ratio of sound recording to musical works rates in the benchmark market with that in the interactive streaming market. Given the ratio  $\frac{A}{C}$  in an appropriate benchmark market, and appropriately adjusted interactive streaming sound recording rates  $B$ , the WBWS musical works royalty rate can be calculated by equating the ratios and solving for  $D$ . That is:

$$\frac{A}{C} = \frac{B}{D}$$

$$\text{Musical works royalty rate for interactive streaming } (D) = \frac{B \times C}{A}$$

- (202) The use of this approach requires that the benchmark market values the sound recording and musical works rights in similar proportions as in interactive streaming, under effectively competitive conditions on both sides of the market. In addition, the use of the approach requires adjustments for market power in some cases. The  $\frac{A}{C}$  ratio must reflect WBWS rates on both sides of the benchmark market to provide a good benchmark for WBWS rates in the interactive streaming market. And, given the complementary oligopoly power of the record labels, the effective sound recording royalty rate for interactive streaming services  $B$  must be adjusted to remove excess market power before applying the appropriate ratio to derive the WBWS musical works rate for interactive streaming.
- (203) I discuss my approach to these issues below.

<sup>306</sup> Web V Determination, at 66–72.

## XI.B. Benchmark ratios

- (204) In this section, I discuss three benchmark ratios that I find useful for determining the appropriate WBWS interactive streaming musical works rates.

### XI.B.1. Non-interactive streaming

- (205) Non-interactive streaming and interactive streaming exist along a continuum of possible ways of delivering streamed music. Despite the statutory division into non-interactive and interactive categories for the purposes of royalty frameworks, from a user’s perspective, there is substantial overlap.<sup>307</sup> Non-interactive services allow the user to enter a “seed” or select a predefined “channel” and allow limited use of “skips” and “likes,” giving the user a degree of control over the songs streamed. Interactive services offer “seeded” and predefined “channels” and recommend playlists to users, allowing them to have a non-interactive listening experience. Indeed, Free, which is classified as a Section 115 interactive service, is barely distinguishable from a Section 114 non-interactive service.<sup>308</sup>
- (206) The level of royalties paid by non-interactive streaming is typically lower than the level paid by interactive streaming. This can be understood as related to a number of factors. There is a *promotional effect* provided by non-interactive streaming, which makes plays on a non-interactive streaming service more valuable to both the sound recording rights holder and the musical works rights holder—a play on a non-interactive streaming service may induce a listener to pursue other ways of listening to the song, such as purchasing the PDD or streaming the song on an interactive service, with benefits to both the sound recording and musical works rightsholders. In contrast, a play on an interactive streaming service is more likely to provide a substitute for the purchase of a PDD, so there can be a *cannibalization effect* associated with interactive streaming. In addition, interactive and non-interactive services may differ in their need for particular songs, with the absence of a particular song being more noticeable on an interactive than a non-interactive service. This *full catalog effect* is consistent with higher royalties for an interactive service. Despite the differences in the levels of royalties, the promotional, cannibalization, and full catalog effects likely apply similarly to the sound recording and musical work. As a result, the ratio of musical works to sound recording royalties for non-interactive streaming can inform the ratio for interactive streaming. By focusing on the ratio, one can control for effects that apply both to sound recordings and musical works.
- (207) Indeed, in its Phono III determination, the Board explicitly endorsed the idea that the sound recording to musical works ratio for non-interactive services can provide a good benchmark for the sound recording to musical works ratio for interactive streaming services. Speaking of the “Opt-Out”

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<sup>307</sup> See Section II.A.4.

<sup>308</sup> See Section IV.C.

agreements between major publishers and Pandora for Pandora’s non-interactive streaming service, the Board wrote:<sup>309</sup>

The Judges agree with Dr. Eisenach that the Pandora “Opt-Out” agreements are useful benchmarks. These agreements have the level of comparability necessary for a benchmark to be useful. However, the Judges do not agree with Dr. Eisenach’s attempt to extrapolate from the actual rates in those Opt-Out Agreements. Rather, the judges find that the 4.65:1 ratio Dr. Eisenach identified for the year 2018 in existing agreements is the most useful derived from the “Opt-Out” data.<sup>310</sup>

- (208) As I noted earlier, a difference between interactive and non-interactive streaming services is that musical works royalties for interactive streaming are broken out into two components, performance and mechanical, whereas musical works royalties for non-interactive streaming are all categorized as performance.<sup>311</sup> This is a distinction that is functionally without a difference. All musical works royalties are paid to the musical works rightsholders, although publishers and songwriters are, of course, free to agree to divisions of the royalties that make reference to the categories. In the case of interactive streaming, musical works royalties are, with one caveat,<sup>312</sup> defined as an all-in royalty, and then a component is separated and labeled as mechanical. Economic decisions by an actor depend on the actor’s total compensation, not the particular division of money received in one pocket versus money received in another pocket.<sup>313</sup> In light of this, it is appropriate to focus, as I do, on all-in musical works royalties and to view all-in musical works royalties for non-interactive streaming as

<sup>309</sup> Phono III Final Determination, at 2003 (“Pandora had negotiated these direct agreements with major publishers for musical works rights after certain publishers had decided to “opt-out,” i.e., to withdraw their digital music performance rights from PROs, and asserted the right to negotiate directly with a digital streaming service. As Dr. Eisenach acknowledges, the music publishers’ legal right to withdraw these rights remained uncertain during an extended period. Pandora thus negotiated several such “Opt-Out” Agreements with an understanding that the rates contained in those direct agreements might not be subject to rate court review. Given this unique circumstance, and given that the markets and parties involved in the Pandora Opt-Out agreements are somewhat comparable to the markets and parties at issue in this proceeding, Dr. Eisenach concluded that these agreements provided “significant insight into the relative value of the sound recording and musical works rights in this proceeding.”).

<sup>310</sup> Phono III Final Determination, at 1942. The Judges also note (footnote 101) that “Pandora’s status as a purely noninteractive service prior to 2018 does not decrease the relevancy of this benchmark.” This, despite the fact that non-interactive services do not pay mechanical royalties, because “(1) noninteractive and interactive services both pay performance royalties; (2) noninteractive services historically have not paid mechanical royalties; and (3) the performance license and the mechanical license are perfect complements.”

<sup>311</sup> See Section X above.

<sup>312</sup> For some service categories, the Phono II formulas included a mechanical only per-subscriber minimum. “Archived Rate Charts,” The Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

<sup>313</sup> See Braun WDT, ¶13 (“Amazon views the mechanical and performance royalties that it pays for its interactive music streaming services as payments for functionally the same musical-works right. For interactive streaming, neither has any standalone value to Amazon. Both payments are to the same ultimate rights holder (a songwriter, or if the songwriter has assigned the right, a publisher or administrator) for the right to use the same intellectual property (a musical work). Amazon will not pay anything for the mechanical license to stream a song online unless accompanied by the performance license, and vice versa. These licenses are complementary, and while Amazon often pays for the licenses separately, Amazon values them collectively – not individually.”).

Braun WDT, ¶ 74 (“Amazon is agnostic about the split between mechanical and performance royalties and does not assign any standalone economic value to either component of the musical-works right in isolation.”).

the counterpart to all-in musical works royalties for interactive streaming, despite the musical works royalties for non-interactive streaming being directed to one of the rightsholder’s pockets, while the musical works royalties for interactive streaming are directed into two of the rightsholder’s pockets.<sup>314</sup>

- (209) Both the sound recording and musical works rates for non-interactive streaming are set under the WBWS standard, the former under the supervision of the Board and the latter, with respect to royalties paid to ASCAP and BMI, under the supervision of the rate court that has historically enforced the Department of Justice consent decree under a WBWS standard.<sup>315</sup> Thus, the ratio of sound recording royalties to musical works royalties, at least as paid to ASCAP and BMI, represents a WBWS ratio of sound recording to musical works royalty rates. [REDACTED]

[REDACTED] <sup>316</sup>

## XI.B.2. PDD

- (210) I also consider the sound recording to musical works ratio for PDDs as a potential benchmark for interactive streaming services. Like interactive streaming services, licensees of PDD rights pay a musical works rate regulated under Section 115, while negotiating unregulated sound recording rates directly with record labels. Musical works royalty rates for PDDs for the 2023–2027 rate period were recently set via a settlement negotiated under the WBWS standard.<sup>317</sup> The ratio between the freely negotiated PDD sound recording rate and the PDD musical works rate settlement in the shadow of the WBWS standard can provide a benchmark for the comparable interactive streaming ratio.<sup>318</sup>

<sup>314</sup> Although non-interactive streaming services do not pay mechanical royalties, they pay “statutory license to make phonorecords to facilitate the transmission of sound recordings.” In Web V, the Board determined that “royalty for ephemeral recordings is part of the total royalty for webcasting and constitutes 5% of that amount.” Web V Determination, at 290.

<sup>315</sup> Web V Determination, at 2 (“The Act requires that the Judges ‘establish rates and terms that most clearly represent the rates and terms that would have been negotiated in the marketplace between a willing buyer and a willing seller.’”). *United States v. Am. Soc’y of Composers, Authors, & Publishers (In re Pandora Media, Inc.)*, 12 Civ. 8035 (DLC) (S.D.N.Y. Mar. 14, 2014), at 90 (“Helpfully, both ASCAP and Pandora have endorsed the same definition of ‘fair market value,’ drawn from a recent textbook: ‘A widely used description of fair market value is the cash equivalent value at which a willing and unrelated buyer would agree to buy and a willing and unrelated seller would agree to sell.’”).

<sup>316</sup> See [REDACTED]

<sup>317</sup> Determination of Rates and Terms for Making and Distributing Phonorecords (Phonorecords IV), No.21-CRB-0001-PR (Copyright Royalty Board, June 25, 2021), at 33601–33603.

<sup>318</sup> The Board in its Phonorecords III Final Determination similarly cited sound recording to musical works ratios based on Section 115 rates—both the statutory rates directly and those negotiated under the shadow of Section 115—as useful benchmarks for determining interactive streaming rates. See, e.g., Phono III Final Determination, at 1944 (“For the foregoing reasons, the Judges do not adopt Dr. Eisenach’s proposed benchmark rates as the mechanical rates for the upcoming rate period. However, the Judges do find several of the benchmark rates implied by his sound recording to



- (211) Related to the discussion in Section XI.B.1 about the division of musical works royalties into components labelled as performance and mechanical, the musical works royalties for PDDs are all labelled as mechanical. As discussed above, economic decisions regarding musical works royalties depend on the decisionmaker's total compensation, not the particular division of money received in one pocket versus another. In light of this, it is appropriate to focus, as I do, on all-in musical works royalties and to view all-in musical works royalties for PDDs as the counterpart to all-in musical works royalties for interactive streaming, despite the musical works royalties for PDDs being directed into the rightsholder's mechanical pocket, while the musical works royalties for interactive streaming are divided into rightsholder's mechanical and performance pockets.
- (212) To implement my PDD benchmark, I use the effective royalty rates from June 2020 to May 2021 that Amazon paid to labels for PDDs, which covers both sound recording and musical works rights, and the recent musical works settlement rate of either 9.1 cents per song or 1.75 cents per minute of playing time, whichever amount is larger.<sup>319</sup> [REDACTED], as shown in Figure 35 below.

**Figure 35: Calculation of PDD benchmark ratio**

Weighted average revenue per PDD	
Weighted average musical works royalty per PDD	
Weighted average cost per PDD	
PDD musical works royalty as % revenue (MW)	
Sound recording royalty (SR)	
Benchmark ratio (SR : MW)	

Source: Amazon data.

Note: Weighted average musical works royalty per PDD is estimated using the average song length from Unlimited streaming data from January 2020 through June 2021.

- (213) This benchmark ratio does not take into account the potential market power exercised by labels in negotiating royalty rates for PDDs. As I discuss in Section 0 below, applying market power adjustments will reduce this benchmark ratio.

### **XI.B.3. Amazon Music Prime's [REDACTED]**

- (214) [REDACTED]  
[REDACTED].<sup>320</sup> As an interactive streaming service, Prime Music should have a musical works ratios to be useful guideposts for identifying the headline percent-of-revenue rate to be incorporated into the rate structure in the forthcoming rate period.”).

<sup>319</sup> Determination of Rates and Terms for Making and Distributing Phonorecords (Phonorecords IV), No.21-CRB-0001-PR (Copyright Royalty Board, June 25, 2021), at 33602–03.

<sup>320</sup> [REDACTED]  
[REDACTED]

similar WBWS sound recording to musical works ratio as other interactive streaming services. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].<sup>321</sup>

- (215) In Phono II, Prime Music was defined as a “bundled subscription service” with zero revenue, implicating either the TCC prong or the 25 cent per subscriber mechanical floor defined for that category of service.<sup>322</sup> With the change in definition of bundled revenue under Phono III, Amazon was required to define its Prime Music revenue as the revenue that an equivalent standalone service would charge.<sup>323</sup> Although there is no comparable limited catalog standalone subscription service,

[REDACTED]

[REDACTED]

[REDACTED].<sup>324</sup>

- (216) [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

<sup>321</sup> See Section X.F for a further discussion of the features of Amazon Prime and its ill-fit with the Phonorecords II and III statutory formulas.

<sup>322</sup> “Archived Rate Charts,” The Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

<sup>323</sup> Phono III Final Determination, at 1981–1982.

<sup>324</sup> Duffett-Smith WDT, ¶¶202,203 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

<sup>325</sup> Duffett-Smith WDT, ¶ 99 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

See also Duffett-Smith WDT, ¶ 99 (“[REDACTED]”).

[REDACTED]

[REDACTED]

(217)

[REDACTED]

#### **XI.B.4. Synchronization rights are not an appropriate benchmark**

- (218) One economic expert in the Phono III proceeding proposed the sound recording to musical works synchronization rights ratio as a benchmark sound recording to musical works ratio for interactive streaming.<sup>329</sup> As I discussed in Section V.A.3, synchronization rights must be obtained to include music in timed-relation with images in an audiovisual project such as a film or commercial.<sup>330</sup> License fees for synchronization rights are not regulated and generally reflect a one-to-one ratio between fees for sound recording and musical works rights.<sup>331</sup>
- (219) This one-to-one ratio is far out of line with my benchmark sound recording to musical works ratios that I described in earlier. The economics of sync rights relative to music streaming explains why. Unlike streaming services, licensors of sync rights generally just need one or a small set of songs to capture the genre or mood to match with a particular image or scene. Rather than requiring a large catalog of audiovisual content, music supervisors need to choose a small set of musical works and can

<sup>326</sup> [REDACTED]

<sup>327</sup> Duffett-Smith WDT, ¶ 163.

<sup>328</sup> Duffett-Smith WDT, ¶ 208 (“[REDACTED]”).

<sup>329</sup> Phono III Final Determination, at 1937 (“Eisenach notes, from his review of other testimony and an industry treatise, that these freely negotiated market agreements grant the musical composition royalty payments equal to the corresponding royalty paid for the sound recording,” which is the equivalent of a 1:1 sound recording to musical works ratio.”).

<sup>330</sup> See *Steele v. Turner Broad. Sys., Inc.*, 646 F. Supp. 2d 185, 193 (D. Mass. 2009). Also *Boosey & Hawkes Music Publishing LTD. v. the Walt Disney Co.* 145 F.3d 481 (2d Cir. 1998): “limited to the use of the composition in synchronism or timed-relation with the motion picture,” p. 451.

<sup>331</sup> “Guide to Sync Royalties,” *Royalty Exchange* (blog), November 17, 2016, <https://www.royaltyexchange.com/blog/guide-to-sync-royalties> (“Sync royalties are one of the few music revenue streams that reward the songwriter and recording artist equally. Streaming services pay recording artists and labels six times or more what they pay songwriters and publishers. But the payouts for sync license is split 50/50 between the two camps.”).

thus shop around for good fits at reasonable cost.<sup>332</sup> This implies a different bargaining position with rightsholders generally. In addition, the relative leverage licensors have over musical works and sound recording rightsholders differs from interactive streaming. Synchronization rights licensors have particularly strong leverage over sound recording rightsholders, since they have the option of using cover versions of songs to bypass sound recording rights.<sup>333</sup> Even motion pictures *about* recording artists sometimes use cover versions of musical works, thereby avoiding sound recording royalties. For example, the movies *Rocketman* and *Walk the Line* depicting the lives of Elton John and Johnny Cash, respectively, used cover versions of the original songs that were performed by the actors.<sup>334</sup> Users of streaming services, on the other hand, generally do not consider cover versions of songs to be good substitutes for the “original” version, which gives streaming services less relative leverage over sound recording rightsholders than sync licensees.<sup>335</sup>

- (220) The implication of these factors is that the ratio of sound recording to musical works fees for synchronization rights is likely to be quite different from a WBWS ratio of sound recording to musical works fees for interactive streaming services. Indeed, the Board has consistently rejected the idea that sync rights provide a useful benchmark for interactive streaming, citing the lack of comparability between the two markets.<sup>336</sup>

<sup>332</sup> See Dmitry Pastukhov, “How Music Synchronization Licenses Work: Inside Movie, Advertisement, and Video Game Sync Licensing,” *Soundcharts* (blog), September 9, 2019, <https://soundcharts.com/blog/how-music-synclicensing-works/> (“[...] in most cases, the music supervisor will look for up-and-coming artists to save money while maintaining the overall emotional impact.”). See also “Pricing Your Songs, Negotiating Sync Fees,” *Creative and Productive* (blog), July 4, 2019, <https://www.creativeandproductive.com/pricing-negotiating-sync-fees/> (“If your track can fairly easily be replaced by another without making the project worse for wear, then your bargaining position isn’t super strong.”). See also Chris Robley, “Sync Placements and Licensing,” *DIY Musician* (blog), April 26, 2021, <https://diymusician.cdbaby.com/music-career/sync-licensing/> (“The size of your audience has nothing to do with how ‘right’ a song is for sync. It might mean you’re more likely to enter the ears of music supervisors, yes—but as we discussed above, your indie status also means you’re more likely to meet the budget and speed requirements for the placement. There’s your consolation for not being famous!”).

<sup>333</sup> See Dmitry Pastukhov, “How Music Synchronization Licenses Work: Inside Movie, Advertisement, and Video Game Sync Licensing,” *Soundcharts* (blog), updated September 9, 2019, <https://soundcharts.com/blog/how-music-sync-licensing-works/> (“The duplicity of music rights also opens up a way for music supervisors to alleviate some of the sync costs by using cover songs instead of the original sound recordings.”). See also “How to Get Permission to Use a Song,” Copyright Alliance, <https://copyrightalliance.org/faqs/how-to-get-permission-to-use-a-song/> (“[W]hile a sync license would allow you to, for example, record a cover-version of the song and use it in your audio-visual creation, it doesn’t give you the right to use the sound recording made popular by the recording artists. In order to use that recording, you’ll need a master use license. Together, a master use license and a sync license will allow you to add your favorite songs to the films and video games you create.”).

<sup>334</sup> “Walk the Line (2005) Soundtrack,” Internet Movie Database, <https://www.imdb.com/title/tt0358273/soundtrack>. “Rocketman (I) (2019) Soundtracks,” Internet Movie Database, <https://www.imdb.com/title/tt2066051/soundtrack>.

<sup>335</sup> See Lizzie Plaugic, “Sounds Like a Hit: The Numbers Game behind Spotify Cover Songs,” *The Verge* (blog), updated September 8, 2015, <https://www.theverge.com/2015/9/8/9260675/spotify-cover-songs-taylor-swift-adele>. (“It’s a cover song. If you look through Spotify’s community forums, you’ll see a lot of users complaining about these tracks.”). See also Ryan Nakashima, “When Did Cover Songs Become Annoying Marketing Ploys?” *Salon* (blog), May 30, 2013, [https://www.salon.com/2013/05/30/are\\_cover\\_songs\\_shameless\\_marketing\\_ploys\\_ap/](https://www.salon.com/2013/05/30/are_cover_songs_shameless_marketing_ploys_ap/) (“Bonde found a version of ‘Skyfall’ and mistakenly clicked on a ‘follow’ button to become a fan of GMPresents and Jocelyn Scofield, the name for a cover-song specialist with some 4,600 Spotify followers. [...] When I found out ... that I couldn’t find the original ‘Skyfall’ (and some other hits) I decided to quit Spotify,” Nissen says.”).

<sup>336</sup> Phono III Final Determination, at 1941 (“In a prior proceeding, the Judges rejected the synch license benchmark as

## **XI.C. Market power adjustments**

- (221) As I discussed in Section VIII, rates negotiated in an unregulated setting between interactive streaming services and large publishers and record labels do not reflect “effectively competitive” rates that conform to the WBWS standard because of the complementary oligopoly power of large record labels and publishers. This means that the application of my benchmark ratios requires market power adjustments to yield rates that conform to the WBWS standard. For example, even if one possessed the perfect sound recording to musical works ratio for interactive streaming services, simply applying that ratio to existing, supracompetitive sound recording rates would translate excessive market power from the sound recording market to the musical works market and yield supracompetitive musical works rates, which would not conform to the WBWS standard. In that example, supracompetitive sound recording rates would first need to be adjusted to remove the excessive market power, before applying the benchmark ratio. I need to make such market power adjustments to calculate WBWS musical works rates for interactive streaming.
- (222) In this section I describe the market power adjustments that I use to calculate WBWS musical works rates. In Section XI.D, I show how I apply these market power adjustments to specific benchmark ratios.

### **XI.C.1. Label market power adjustments**

#### **XI.C.1.a. Web V adjustment**

- (223) The Board has long recognized that the complementary oligopoly power of record labels and publishers yields unregulated royalty rates that are above the WBWS level.<sup>337</sup> Most recently, in its Web V final determination, the Board found that copyright owners have complementary oligopoly power in both the musical works and sound recording markets, against both interactive and non-

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useful “[b]ecause of the large degree of its incomparability.” See Phonorecords I, 74 Fed. Reg. at 4519. The Judges find that nothing in the present record supports a departure from that prior finding.”).

<sup>337</sup> See SDARS III Determination, 37 CFR Part 382, Fed. Reg., 83, no. 243 at 65230 (“The evidence in this proceeding strongly demonstrates the ‘must have’ status of each Major.... Indeed, Sirius XM implicitly acknowledged the ‘must have’ status of a Major, citing a steering adjustment as a method by which to mitigate the ‘must have’ status and complementary oligopoly power of a Major to allow for an effectively competitive market.”); See also Web V Determination, at 10 (“And, in the next rate-setting case, Phonorecords III, the Judges (in the majority and in the dissent) found that the licensors — owners of the copyrights for musical works — possessed complementary oligopoly power.”) Web IV Determination at 26333 (“The Judges agree that the legislative history supports the conclusion that section 114 directs the Judges to set rates that reflect the workings of a hypothetical effectively competitive market. The legislative history equates rates set under the willing buyer/willing seller standard with ‘reasonable rates.’ ...As discussed in detail *infra*, it is precisely this complementary oligopoly value that the Judges are declining to include in the statutory rate based upon their analyses of the parties’ benchmarks proffered in this proceeding.”). In both Web IV and Web V, the Board applied an adjustment to benchmark rates to remove the complementary oligopoly power of record labels. Web V Determination, at 66 (“[T]he Judges find that the 12% effective competition adjustment that they set in Web IV remains an appropriate measure for an effective competition adjustment.... Relying on all the steering evidence presented, the Web IV Judges determined that benchmark rates that were inflated by the complementary oligopoly effect needed to be adjusted downward by 12%, in order to establish an effectively competitive rate.”).

interactive streaming services.<sup>338</sup> In that determination, the Board applied a 12% “effective competition” downward adjustment to interactive streaming sound recording rates to achieve WBWS rates, based on a figure it had calculated in Web IV.<sup>339</sup> The 12% figure was derived from steering agreements between record labels and non-interactive streaming services that gave discounted royalty rates to non-interactive streaming services in return for increased plays of the label’s music.<sup>340</sup> The Judges found that these agreements represented a form of price competition that provided guidance as to what rates willing buyers and willing sellers would agree to in a hypothetical market.<sup>341</sup>

- (224) In the Web V final determination, the Judges found that “the 12% effective competition adjustment that they set in Web IV remains an appropriate measure for an effective competition adjustment (before any adjustment to reflect Spotify’s countervailing power).”<sup>342</sup> They advocated a smaller adjustment for Spotify to reflect what they saw to be their unique countervailing power reflecting their “independent pureplay status.”<sup>343</sup> Therefore, as one possible market power adjustment, I use the 12% discount in my benchmark calculations, adjusting Spotify’s rate as appropriate. I describe the Spotify adjustment in Section XI.C.1.c below.

#### **XI.C.1.b. Major-Indie market power adjustment**

- (225) The “must have” nature of large agglomerations of copyrights for interactive streaming services implies that below a certain level, an agglomeration of copyrights would have less of a “must have” nature and thus less complementary oligopoly power. Indeed, the Board has found a distinction in past proceedings between the market power of major labels and indie labels, noting in the Web V final determination its finding in Web IV that “based on the record the Judges observed that ‘in the marketplace, Services have agreed to pay higher rates to’ major record labels (Majors) than to so-called independent labels (Indies).”<sup>344</sup>
- (226) The prices charged by indie labels to interactive streaming services are unlikely to represent competitive prices, however, because [REDACTED]

<sup>338</sup> Web V Determination, at 66, 70 (“Relying on all the steering evidence presented, the Web IV Judges determined that benchmark rates that were inflated by the complementary oligopoly effect needed to be adjusted downward by 12%, in order to establish an effectively competitive rate. Web IV, 81 Fed. Reg. at 26404-05. [...] They [The Judges] emphasize that basic economic principles do not change with the mere passage of a few years. Although new probative factual evidence or advances in economic theory or modeling presented by an expert witness could show either that the principle is factually inapplicable or needs to be revisited, no such record has been presented in this proceeding. Accordingly, the Judges find that the economic experts cited above have properly relied on the evidence supporting the Web IV steering adjustment to establish the appropriate steering adjustment in this proceeding.”).

<sup>339</sup> Web V Determination, at 66 (“the Judges find that the 12% effective competition adjustment that they set in Web IV remains an appropriate measure for an effective competition adjustment.”).

<sup>340</sup> Web IV Determination, at 26404–26405.

<sup>341</sup> Web V Determination, at 69.

<sup>342</sup> Web V Determination, at 66.

<sup>343</sup> Web V Determination, at 72.

<sup>344</sup> Web V Determination, at 5.

<sup>345</sup> Also, true price competition—firms offering lower prices in return for a greater share of plays—generally does not occur between record labels in either the interactive or non-interactive streaming markets. One reason that the Judges in the Web V proceeding relied on older steering agreements for non-interactive services produced during the Web IV proceeding to make their market power calculation as a proxy for price competition, and not more recent agreements, was that they had not seen any more recent steering agreements, [REDACTED]

[REDACTED]<sup>346</sup> This has been attributed to “no-steering” clauses that prevent record labels from offering lower prices in return for a higher share of plays on non-interactive services.<sup>347</sup> [REDACTED] [REDACTED]

348

- (227) Therefore, prices charged by independent labels to full-catalog interactive streaming services are not competitive prices, and the difference between those prices and the major label prices does not fully correct for the market power of major labels. A better estimate of major label market power can be found by comparing the prices major labels are able to charge a *limited catalog* streaming service relative to what an independent label is able to charge the same service. In the case of a limited catalog service, a major label still has substantial market power by virtue of its control of many “hit”

345 Gayadien AWDT, ¶ 9 (“Customers that subscribe to a premium music service expect ‘on demand’ access to a comprehensive music library that includes popular, niche, and even obscure songs from the Major record labels and a wide range of Independent record labels. [REDACTED]”)

<sup>346</sup> Web V Determination, at 9 (“‘Steering’ in this context means the presence of contract provisions by which a licensee will increase the number of plays of the counterparty record company above its historic market share, in exchange for the record company’s agreement to accept a lower royalty rate than other record companies”); *See also* Web V Determination, at 67-68 (“SoundExchange could have called a witness from Merlin in Web V (as it did in Web IV) to present testimony that may have shed light on *why* [REDACTED] but elected not to. By contrast, Pandora presented testimony from Professor Shapiro explaining that Merlin (and the Majors) had refused to agree to continue steering.”).

<sup>347</sup> Web V Determination, at 67–68 (“SoundExchange argues that this evidence of steering is now ‘stale,’ because the experiments are outdated, as are the two cited agreements, SX PFFCL ¶¶ 490-91. But the dates of the experiment and those agreements are insufficient to wash away the importance of steering as a price competition mechanism applicable to the noninteractive market. The Judges note that SoundExchange could have called a witness from Merlin in Web V (as it did in Web IV) to present testimony that may have shed light on why [REDACTED] but elected not to. By contrast, Pandora presented testimony from Professor Shapiro explaining that Merlin (and the Majors) had refused to agree to continue steering. Specifically, Professor Shapiro testified: Following the *Web IV* Determination, as a condition for obtaining the additional rights necessary to offer its non-statutory services, [REDACTED] [REDACTED].”) [emphasis original].

348 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED].

\_\_\_\_\_ )

\_\_\_\_\_

songs.<sup>349</sup> In contrast, an independent label, in particular a smaller one, can more easily be excluded entirely from a limited catalog service than from a full-catalog service.

- (228) Two notable limited catalog services in the interactive streaming market are Prime Music and Free. Prime Music offers approximately 2 million songs while Free offers its users a limited catalog of pre-set playlists, as opposed to roughly 75 million for full-catalog services.<sup>350</sup>

[REDACTED]

[REDACTED]

[REDACTED].<sup>351</sup>

- (229) In light of the discussion above, for one measure of label market power, I calculate the difference in the effective sound recording rates that Amazon pays to major labels and indies for its Prime Music and Free services.<sup>352</sup> These calculations are shown in Figure 36 below.

<sup>349</sup> Web V Determination, at 71.

<sup>350</sup> See Figure 12.

<sup>351</sup> Gayadien AWDI, ¶¶ 18-19 (“Because Prime Music is a limited-catalog service with approximately two million songs, [REDACTED]”). See also Gayadien AWDI, ¶ 25 (“[REDACTED]”).

<sup>352</sup> [REDACTED]



**Figure 36: Sound recording rates comparison between major and indie labels, March 2020–February 2021**

Service	Sound recording rates (b)(3)					% Market power adjustment		
	Majors		Indies					
Amazon Music Prime								
Amazon Music Free								
Overall								

Source: Amazon data.

#### XI.C.1.c. Adjustments as applied to Spotify

- (230) The CRB found in its Web V final determination that Spotify played a unique role in the interactive streaming market as the only independent pureplay service, which gave it, in the Board's view, some countervailing power against the market power of the record labels.<sup>353</sup> In the Web V determination, the Judges therefore [REDACTED]

[REDACTED]  
 [REDACTED]  
 [REDACTED] 354 [REDACTED]  
 [REDACTED]  
 [REDACTED]. In Appendix C, I present rates [REDACTED]  
 [REDACTED]

### XI.C.2. Publisher market power adjustment

- (231) For some of my calculations, it is necessary to estimate the latent market power that publishers hold. Amazon's Head of Music Publishing in the Americas, Amy Braun, has testified [REDACTED]

355 [REDACTED]  
[REDACTED]. Ms. Braun opined that [REDACTED]  
[REDACTED]  
356 She then showed that [REDACTED]

<sup>353</sup> Web V Determination at 72, 138.

354 Web V Determination, at 72. The judges also noted that this lower adjustment may not apply to all of Spotify’s rates, and in certain cases a 12% adjustment should apply (“However, as explained *infra*, that [REDACTED] adjustment applies only to a headline rate that serves as a benchmark in this proceeding and that is consistent with [REDACTED] in *effective* per-play rate. To the extent the [REDACTED] adjustment does not apply to discounted subscriptions, such as student play subscriptions, or to ad-supported plans, then the [REDACTED] reduction is not applicable. Rather, in such instances, the full 12% competition adjustment applies.”). In Appendix C, I present my benchmark results based on unreduced label market power adjustments for Spotify. If the full 12% adjustment applies to Spotify’s services other than Premium (see *infra* n. 359), the resultant benchmark rates would be between those that I present in the body of the report and those contained in Appendix C.

355 Braun WDT.

<sup>356</sup> Braun WDT, ¶65.

██████████ I do not rely on Ms. Braun’s estimate.<sup>358</sup> But her general point is informative in helping to reinforce my opinion that musical works rates reflect publisher market power.

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## **XI.D. Calculation of WBWS percentage of revenue musical works rates**

(234) In this section, I combine the benchmark ratios described in Section XI.B with the market power adjustments described in Section XI.C to calculate a range of WBWS musical works percent-of-revenue rates for interactive streaming. This calculation proceeds in four steps:

1. Apply market power adjustments as necessary to ensure that the benchmark ratios reflect WBWS rates on both sides of the market.
2. Calculate the effective sound recording royalty rate for the major interactive streaming services.<sup>365</sup>
3. Apply a label market power adjustment to the effective sound recording royalty rates for the major interactive streaming services to arrive at WBWS sound recording rates.
4. Apply the benchmark ratios to the WBWS sound recording rates to arrive at WBWS musical works rates.

(235) I use data available to me across 59 different interactive streaming services, including those offered by Amazon, Apple, Google, Pandora, and Spotify to make these calculations. These 59 services span 6 different categories of interactive streaming service. To determine a headline percent-of-revenue rate, I calculate a weighted average headline rate across all service types using service revenue as the

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<sup>365</sup> To calculate the effective sound recording royalty rates for the major interactive streaming services, I relied on Dr. Eisenach's processing of MLC rate calculation files used to determine services' mechanical royalty rates under Phono II and Phono III. Dr. Eisenach produced this dataset as backup materials to his Written Direct Testimony. In creating this database, he made a number of adjustments, as outlined in Appendix C of his testimony. I accepted these adjustments at face value and relied on them for the purpose of my benchmark calculations in this report. However, in the event these adjustments are not appropriate, I also produce results that do not incorporate Dr. Eisenach's adjustments to the MLC rate files. See XII.Appendix D. The only modifications that I make to Dr. Eisenach's processed royalty rate dataset are outlined below. None of these modifications affect my overall conclusions.

1. I categorize SoundCloud GO as a "Limited Offering" in January 2021. Dr. Eisenach's dataset classifies this service as a Standalone Portable service in January 2021, and a Limited Offering in all other months.
2. I categorize the Audiomack Free service as a "Free Non-Subscription/Ad-Supported" service in 2018 through 2021 because the service was available for free to end users. Dr. Eisenach's dataset classifies this service as a "Limited Offering" from 2018 through 2020, and as a "Free Non-Subscription/Ad-Supported" service in 2021 only.
3. I do not exclude Primephonic from my analysis. Dr. Eisenach excludes Primephonic because it was acquired by Apple in August 2021 and taken offline the following month. Primephonic's acquisition by Apple does not overlap with my benchmark analysis.
4. Dr. Eisenach attempts to calculate the number of monthly end users, as opposed to subscribers, for Amazon, Apple, and Spotify. I do not rely on his end user calculations.

As described in Section VII, both service revenue and sound recording payments are used as an input to determine a service's mechanical royalty rate. Thus, for each service, I calculated the total revenue and total sound recording payments made from June 2020 to May 2021, the most recent 12-month period available to me across services. I then divided the sound recording payments by the revenue to determine the effective sound recording royalty rate. For Prime, instead of calculating the effective sound recording rate as a percent of revenue, I calculated it as a per-play rate.

weights.<sup>366</sup> This weighting method is reasonable because it grants greater significance to services that represent a greater share of revenue.<sup>367</sup>

- (236) Figure 37 shows the revenues used for weighting purposes. I use the revenue as reported for each service in the rate calculation files.

**Figure 37: Service revenue and weights for each service (June 2020–May 2021)**

Service type	Service	Service revenue	Service weight
Standalone Portable			
Free Non-Subscription/Ad-Supported			
Bundled Subscription			
Limited Offering			
Standalone Non-Portable Streaming			
Paid Locker Service			

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

- (237) My benchmark calculations, which I describe in detail in the following sections, yield percent-of-revenue rates from 6% to 11.6%, as shown in Figure 38.

<sup>366</sup> I present a single headline percent-of-revenue rate for all service categories. If the Board elects to assign different headline rates to different service categories, my analysis can also be used to inform those rates.

<sup>367</sup> Further, from a practical perspective, revenue-based weights can be consistently applied across subscription and ad-supported services, whereas weights based on subscriber counts are not appropriate for ad-supported services and weights based on plays may not be appropriate if a play on an ad-supported “lean-back” service is not comparable to a play that was directed by the user on a fully interactive service.

**Figure 38: Summary of musical works percent of revenue rates from the benchmark analyses**

Benchmark	Musical works percentage of revenue rates
Non-interactive streaming benchmark	10.1% – 11.0%
PDD benchmark	6.0% – 8.2%
Prime Music Benchmark	10.7% – 11.6%
<b>Overall</b>	<b>6.0% – 11.6%</b>

### XI.D.1. Non-interactive streaming benchmark

- (238) Sound recording rates for non-interactive services are set by the Board under the WBWS standard. Similarly, musical works rates for non-interactive services are negotiated with PROs, and in the case of ASCAP and BMI are overseen by the rate court under the WBWS standard.<sup>368</sup> Thus, no adjustment is necessary to the non-interactive 4.65:1 benchmark ratio. Figure 39 below applies this benchmark ratio and my two alternative market power adjustments to effective interactive streaming label rates to calculate a range of WBWS musical works rates for interactive streaming: 10.1% to 11.0%. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

<sup>368</sup> ASCAP and BMI are the only PROs that operate under consent decrees because of “competitive concerns arising from the market power each organization acquired through the aggregation of public performance rights held by their member songwriters and music publishers.” “Antitrust Consent Decree Review - ASCAP and BMI 2019,” Antitrust Division, The United States Department of Justice, accessed October 12, 2021, <https://www.justice.gov/atr/antitrust-consent-decree-review-ascap-and-bmi-2019>.

**Figure 39: WBWS musical works rates under the non-interactive streaming benchmark**

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (higher MP adjustment)	WBWS musical works rate (lower MP adjustment)
Standalone Portable				
Free Non-Subscription/Ad-Supported				
Bundled Subscription				
Limited Offering				
Standalone Non-Portable Streaming				
Paid Locker Service				
<b>Combined</b>	<b>Combined</b>	<b>12.2%</b>	<b>10.1%</b>	<b>11.0%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

## XI.D.2. PDD benchmark

- (239) The recent subpart B settlement that set musical works rates for PDDs occurred while Section 115 mechanical royalty rates are set under the WBWS standard. PDD sound recording rates, like those of interactive streaming, are set via unregulated negotiations with the record labels.
- (240) Unlike an interactive streaming service, a seller of PDDs does not necessarily need to offer a full catalog of songs or even all of the “hits” to run a PDD store.<sup>369</sup> It is therefore unlikely that labels would exhibit the same degree of market power over sellers of PDDs that they do over interactive streaming services. That said, a PDD store may have relatively more difficulty attracting shoppers if it

<sup>369</sup> Gayadien AWDT, fn 6 (“[REDACTED]”).

does not have a reputation for selling a broad range of music, so some market power adjustment may be necessary.

(241) The WBWS sound recording to musical works ratio for PDDs thus likely lies somewhere between the unadjusted ratio of [REDACTED] and the ratio that would obtain after applying the higher of the two market power adjustments (~[REDACTED] to PDD sound recording rates, or [REDACTED]<sup>370</sup>

(242) Figure 40 below applies these two benchmark ratios and my two alternative market power adjustments to effective interactive streaming label rates to calculate a range of WBWS musical works rates for interactive streaming: 6.0% to 8.2%. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] XII. Appendix B contains

additional calculations related to the PDD benchmarks.

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<sup>370</sup> See Figure 35 and Figure 36. See my working papers for the calculation of the PDD benchmark ratio after adjusting for label market power.

Figure 40: WBWS musical works rates under the PDD benchmark

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (higher MP adjustment)	WBWS musical works rate (lower MP adjustment)
Standalone Portable				
Free Non-Subscription/Ad-Supported				
Bundled Subscription				
Limited Offering				
Standalone Non-Portable Streaming				
Paid Locker Service				
Combined	Combined	7.3%	6.0%	8.2%

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

### XI.D.3. Prime Music benchmark

(243)

[REDACTED]

[REDACTED] Both sides of the ratio are subject to market power since neither market is effectively competitive because [REDACTED]<sup>371</sup> Although

<sup>371</sup> Duffett-Smith WDT, ¶ 27 (“[REDACTED]”).

Gayadien AWDT, ¶¶ 18-19 (“[REDACTED]”).



I view [REDACTED]

[REDACTED] Thus, market power adjustment on both sides of the ratio remains appropriate.

- (244) Figure 41 below applies two versions of this publisher market power adjustment: one assuming that publisher market power is equal to label market power and a second using the publisher market power adjustment described in XI.C.2 above. The resulting WBWS musical works rates for interactive streaming range from 10.7% to 11.6%. [REDACTED]

[REDACTED]

[REDACTED]

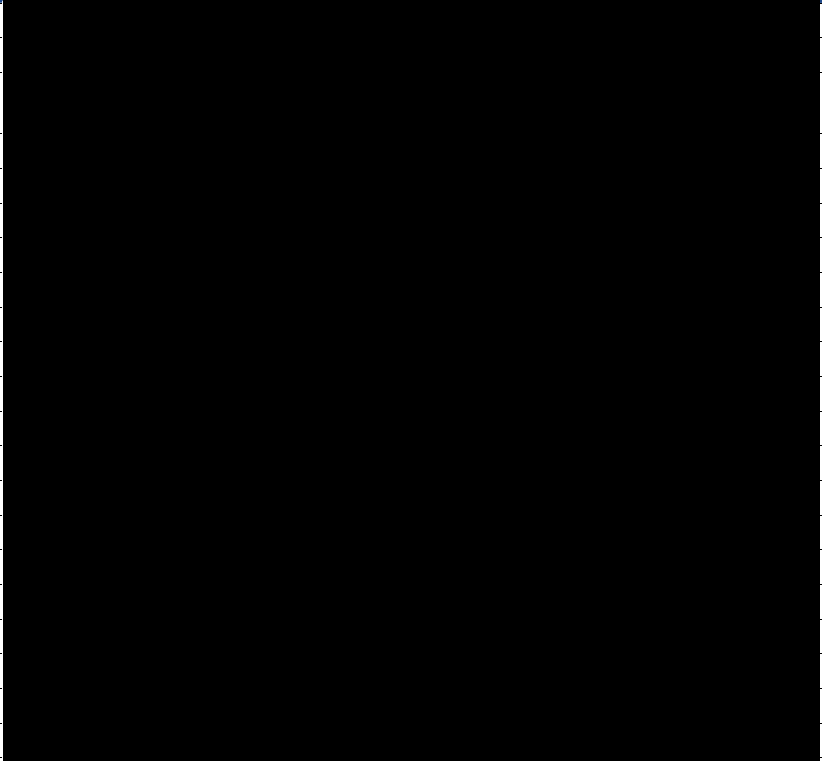
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Appendix B contains results for additional market power adjustments for this benchmark.

**Figure 41: WBWS musical works rates under the Prime Music benchmark**

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (higher MP adjustment)	WBWS musical works rate (lower MP adjustment)
Standalone Portable				
Free Non-Subscription/Ad-Supported				
Bundled Subscription				
Limited Offering				
Standalone Non-Portable Streaming				
Paid Locker Service				
<b>Combined</b>	<b>Combined</b>	<b>12.9%</b>	<b>10.7%</b>	<b>11.6%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

## XI.E. Calculation of backstops for headline percent-of-revenue rates

- (245) As discussed in Section X.C above, previous mechanical royalty rate structures for interactive streaming services, as well as many private contracts, contain backstops to percent-of-revenue rates, which can supersede percent-of-revenue rates if those rates fall below a certain level. These backstops can serve useful purposes, such as protecting against difficulties in measuring revenue.<sup>372</sup> To maintain the benefits of a percent-of-revenue rate, a backstop should not normally bind, but should only be activated for significant declines in the measured streaming revenue. In this section, I first discuss

<sup>372</sup> As discussed in Section X above, there is no economic justification for mechanical-only backstops. The backstops that I present in this section apply to all-in musical works royalties.

backstops for paid standalone portable services, then I turn to backstops for ad-supported services and other paid subscription services other than Prime.<sup>373</sup>

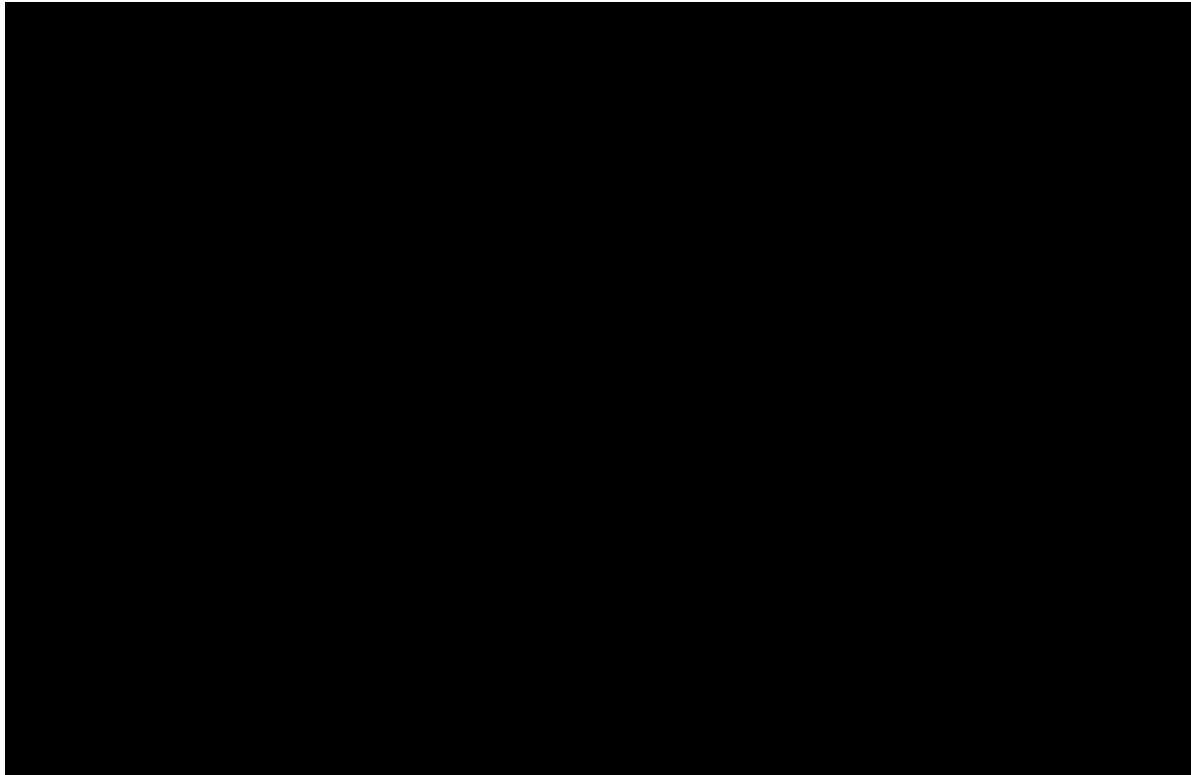
- (246) To the degree that the Board finds a need for backstops, a reasonable backstop for standalone portable subscriptions is at most 80 cents. A reasonable backstop for standalone non-portable subscriptions is at most 40 cents. A backstop of 19.0% TCC is reasonable for ad-supported services. I explain below the calculations that underlie these conclusions.

### **XI.E.1. Backstops for paid subscriptions**

- (247) In this section, I provide reasonable per-subscriber backstops for two service categories: (1) standalone portable and (2) standalone non-portable–streaming only. In addition, I provide a framework for determining a reasonable backstop for bundled subscription offerings
- (248) As I discussed in Section X, a rate structure based solely on a per-subscriber prong can promote economic inefficiency. In contrast, a percent-of-revenue rate structure benefits both services and the copyright owners by aligning the services’ incentives to maximize revenue with the copyright owners’ interest in profiting from their musical works. Therefore, an appropriate backstop would not bind at the benchmark percentage of revenue rates, given existing pricing, but would be close enough to mitigate the risk of significant decline in measured revenue. This allows the economic efficiency of rates based on a percentage of revenue so long as the revenue stream from subscriptions does not decline significantly.
- (249) I calculate per-subscriber equivalents for the percent-of-revenue rates for each of my three benchmarks and find that an 80-cent backstop is appropriate for standalone portable subscriptions, whereas a 40-cent backstop is appropriate for standalone non-portable–streaming only subscriptions. Because bundled offerings can span a variety of subscription categories, I find that the most reasonable approach is to choose the backstop that would apply to the music component of the bundle if it were offered on a standalone basis. These rates work to protect against substantial rate diminution from current levels but do not bind under most of my benchmarks.
- (250) Figure 42 shows per-subscriber equivalents for the percent-of-revenue rates for each of my three benchmarks for standalone portable subscriptions, compared to an 80-cent backstop. The solid bars correspond to the lower market power adjustments, whereas the striped bars correspond to the higher market power adjustments that are shown in Figure 39–Figure 41 above.

<sup>373</sup> See Section X.F for a discussion of benchmarks for Prime Music.

**Figure 42: WBWS musical works per-subscriber equivalents from benchmark analyses for standalone portable subscriptions**



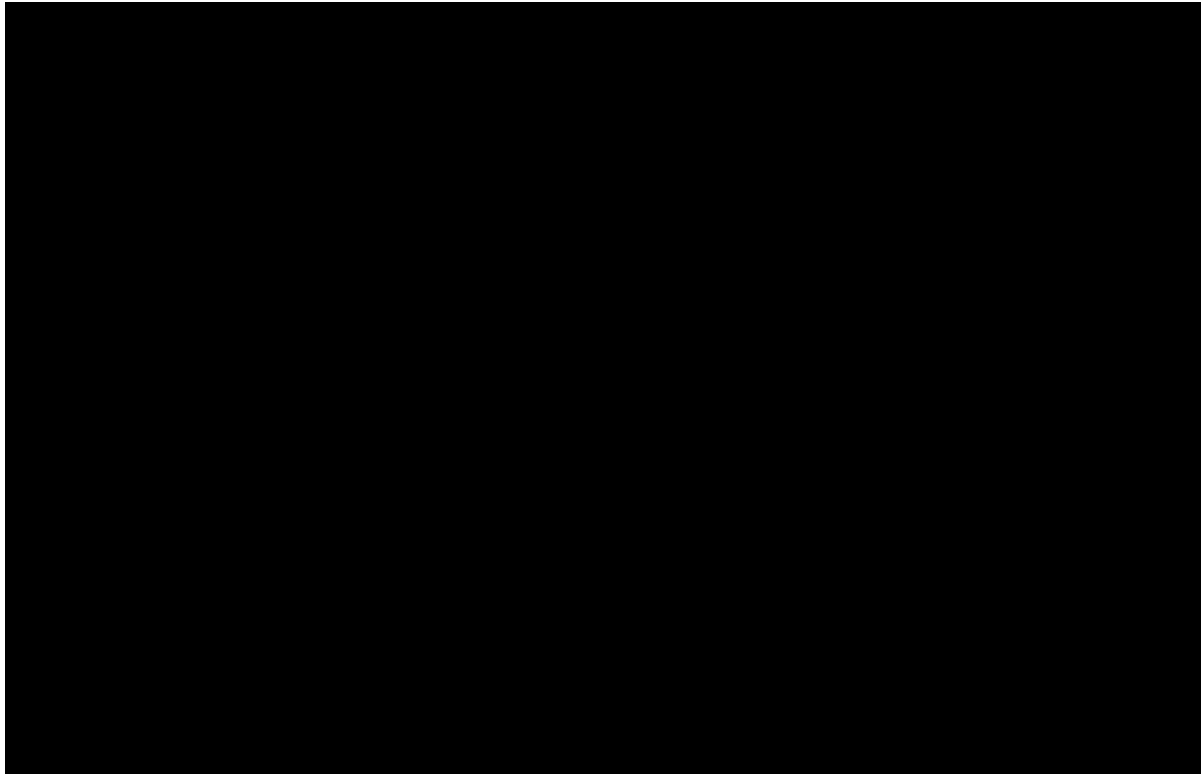
Note: Figures containing the complete set of services making up the “All other services” columns in this figure are available in my backup materials.

- (251) Figure 42 shows that for both the non-interactive streaming and the Prime Music benchmarks, an 80 cent per-subscriber prong would not currently bind for most services, but would be close enough to the per-subscriber benchmark rates for the standalone portable services to serve a backstop’s purpose of protecting upstream royalties from significant decline in measured streaming revenue.<sup>374</sup> It would therefore serve as a useful backstop to the range of headline rates produced by the non-interactive streaming and Prime Music benchmarks.
- (252) Figure 43 shows per-subscriber equivalents for the percent-of-revenue rates for each of my three benchmarks for standalone non-portable-streaming only subscriptions compared to a 40-cent backstop. As above, the solid bars correspond to the lower market power adjustments, whereas the

<sup>374</sup> An 80 cent per-subscriber prong would not be a good backstop for the percent-of-revenue rates implied by the PDD benchmark ratio. If that benchmark were to be used to set the headline rate, the per-subscriber backstop would need to be reduced to about 50 cents per subscriber. Because I conclude that the ultimate headline rate should be set closer to the ones implied by the non-interactive and Prime benchmarks, I conclude that an 80-cent backstop is appropriate.

striped bars correspond to the higher market power adjustments that are shown in Figure 39–Figure 41 above.

**Figure 43: WBWS musical works per-subscriber equivalents from benchmark analyses for standalone non-portable–streaming only**



- (253) Figure 43 shows that for both the non-interactive streaming and the Prime Music benchmarks, a 40 cent per-subscriber prong would not currently bind but would be close enough to the per-subscriber benchmark rates for each of the standalone non-portable–streaming only subscriptions to serve a backstop’s purpose of protecting upstream royalties from significant decline in measured streaming revenue.<sup>375</sup> It would therefore serve as a useful backstop to the range of headline rates produced by the non-interactive streaming and Prime Music benchmarks.

### **XI.E.2. Backstops for ad-supported services**

- (254) As discussed in Section X.E above, a per-subscriber backstop is not a good fit for an ad-supported service where subscribers may vary more dramatically in their usage of and valuation for the service

<sup>375</sup> A 40 cent per-subscriber prong would not be a good backstop for the percent-of-revenue rates implied by the PDD benchmark ratio. If that benchmark were to be used to set the headline rate, the per-subscriber backstop would need to be reduced to about 25 cents per subscriber. Because I conclude that the ultimate headline rate should be set closer to the ones implied by the non-interactive and Prime benchmarks, I conclude that a 40-cent backstop is appropriate.

than subscribers of a paid subscription service. I instead calculate appropriate levels for TCC backstops for free, ad-supported services.

- (255) Figure 44 below uses my benchmark approach to determine appropriate TCC backstops for free, ad-supported services.<sup>376</sup> It finds rates of 11.0% to 20.8%, depending on the benchmark.

**Figure 44: WBWS musical works TCC backstops for ad-supported services under my benchmarks**

Benchmark	WBWS musical works TCC rate (higher MP adjustment)	WBWS musical works TCC rate (lower MP adjustment)
Non-interactive	18.4%	19.6%
PDD	11.0%	14.7%
Prime Music	19.2%	20.8%

## XI.F. Calculation of rates for Amazon Music Prime

- (256) As discussed in Section X.E above, Prime Music is not well suited to either percent-of-revenue or per-subscriber rates. As I discussed in Section XI.B.3, [REDACTED]

[REDACTED] Therefore, as with my Prime Music benchmark, I use three potential market power adjustments for this rate. First, I use an adjustment based on publisher market power derived from the Pandora-ASCAP decision. Alternatively, I assume that publisher market power is similar to the label market power and use my two label market power adjustments: one based on the Web V determination and another based on Amazon's data comparing label rates for the Majors and the Indies. Figure 45 summarizes the resultant WBWS rates from this benchmark.

**Figure 45: WBWS musical works rates for Amazon Music Prime**

Benchmark	Unadjusted musical works benchmark rate	WBWS musical works rate (Publisher MP)	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

- (257) The rates presented in Figure 45 are my preferred benchmark rates for Prime Music. [REDACTED]

<sup>376</sup> My benchmark analysis applies a benchmark ratio to sound recording royalty rates of a given service. Thus, the corresponding TCC for a given benchmark ratio is the same for all services other than Spotify because, to be consistent with the Board's decision in Web V, I use a lower market power adjustment for Spotify. Therefore, I only report combined resultant TCC backstops for each benchmark.

[REDACTED] Thus, this benchmark has many desirable properties that the Board has highlighted in the past.<sup>377</sup>

- (258) As a robustness check, I also use my benchmark ratio approach to derive additional benchmarks for Prime Music. Figure 46 summarizes the application of my benchmark ratios to Amazon Prime’s effective per-play sound recording rates to determine WBWS per-play musical works rates for Prime Music. These result in a range of [REDACTED].

**Figure 46: WBWS musical works rates for Amazon Music Prime**

Benchmark	Unadjusted musical works benchmark rate	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)
Non-interactive		[REDACTED]	
PDD - MP Web V			

<sup>377</sup> See Section XI.A for details.

## XII. Reasonable musical works royalty rates: summary of benchmark results

- (259) My benchmark approach yields a range of WBWS percent-of-revenue rates of from 6.0% to 11.6% and Prime Music per play-rates from [REDACTED]. For all services but Prime Music, the non-interactive streaming benchmark is the most appropriate benchmark because it lies the middle of my three benchmarks and is the only benchmark ratio based on explicit WBWS rates on both the sound recording and musical works sides of the market. Combining the rates implied by the midpoint of the non-interactive streaming benchmark range with the associated backstops yields the WBWS musical works rates and rate structure shown in Figure 47 below. For Prime Music, [REDACTED] and [REDACTED] of the WBWS musical works rates for that benchmark in Figure 47 below.

**Figure 47: Musical works headline rates and backstops for all-in musical works royalties based on preferred benchmark**

Service type	Musical works rate	Backstop
Standalone Portable	10.54%	\$0.80 per subscriber
Free Non-Subscription/Ad-Supported	10.54%	19.0% TCC
Bundled Subscription	10.54%	Backstop that would apply to the music component of the bundle if it were offered on a standalone basis
Standalone Non-Portable Streaming	10.54%	\$0.40 per subscriber
Amazon Music Prime	\$0.00085 per play	N/A



**Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
The Library of Congress**

**In the Matter of:**

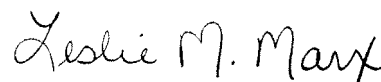
**DETERMINATION OF RATES  
AND TERMS FOR MAKING AND  
DISTRIBUTING PHONORECORDS  
(*Phonorecords IV*)**

**Docket No. 21-CRB-0001-PR  
(2023-2027)**

**DECLARATION OF LESLIE M. MARX**

I, Leslie M. Marx, declare under penalty of perjury that the statements contained in my Written Direct Testimony in the above-captioned proceeding are true and correct to the best of my knowledge, information, and belief.

Dated: March 8, 2022



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Leslie M. Marx

## Appendix A. Curriculum vitae for Professor Leslie Marx

### A.1. Summary of experience

Leslie M. Marx is the Robert A. Bandeen Professor of Economics at the Fuqua School of Business at Duke University. She is an expert in auctions, vertical contracting, antitrust liability, and cartels. Dr. Marx is well known for her innovative ideas in the areas of industrial organization, applied game theory, auctions, procurements, and collusion. She served as Chief Economist of the Federal Communications Commission from August 2005 through August 2006.

Dr. Marx has published extensively in peer-reviewed journals and elsewhere on topics related to industrial organization, applied game theory, auctions, procurements, and collusion. Her published work includes papers on collusive mechanisms, incentives in procurement contracting, slotting allowances, and exclusive dealing. In addition, Dr. Marx has been named among the *Who's Who Legal* of Competition Economists since 2017.

### A.2. Education

- PhD, Economics, Northwestern University
- MA, Economics, Northwestern University
- BS, Mathematics, Duke University

### A.3. Professional experience

- Fuqua School of Business and Department of Economics, Duke University
  - Robert A. Bandeen Professor of Economics, 2013–present
  - William and Sue Gross Research Fellow and Professor of Economics, 2012–2013
  - Professor of Economics, 2008–2013
  - Associate Professor of Economics, 2002–2008 (with tenure). On leave 2005–2006
- Toulouse School of Economics, Visiting Scholar, 2018
- University of Melbourne
  - Visiting Eminent Scholar, 2014, 2016, 2019

- Academic Visitor, 2012
- US Federal Communications Commission (FCC), Chief Economist, 2005–2006
- W.E. Simon Graduate School of Business Administration, University of Rochester
  - Associate Professor of Economics and Management, 2000–2002 (with tenure), 1999–2000
  - Assistant Professor of Economics and Management, 1994–1999
- California Institute of Technology, Visiting Associate, 2000

## A.4. Teaching

- MBA: Managerial Economics, Environmental Economics, Managerial Decision Analysis, Managerial Game Theory
- Executive MBA: Environmental Economics, Managerial Decision Analysis, Managerial Economics, Managerial Game Theory
- PhD: Game Theory, Industrial Organization

## A.5. Selected consulting experience

- On behalf of Spotify, submitted expert reports in *Thomas Morgan Robertson et al. v. Spotify USA Inc.* and *Robert Gaudio et al. v. Spotify USA Inc.* Analyzed the economic choices faced by relevant actors in the music streaming industry, calculated the actual economic damages caused by Spotify's alleged infringement, and analyzed plaintiffs' statutory damage request in light of actual economic damages.
- On behalf of several direct action plaintiffs that include large electronic component distributors and contract manufacturers, submitted expert reports in *In re Capacitors Antitrust Litigation*. The plaintiffs allege that more than 15 capacitor manufacturers colluded to fix the prices of aluminum, film, and tantalum capacitors in the United States for at least 12 years.
- Provided economic analysis in consulting capacity related to two mergers in the retail gasoline industry. Analyzed the relevant antitrust markets, price patterns, and market positioning of the merging parties. Opined on whether the proposed mergers would substantially lessen competition in the retail gasoline market.
- In the matter *In re Optical Disk Drive Products Antitrust Litigation*, testified on behalf of Dell Inc. and Dell Products, Inc.

- Retained by the Department of Justice (DOJ) to evaluate the potential competitive effects of Sinclair Broadcast Group’s proposed acquisition of Tribune Media. Analyzed potential competitive effects of the merger, which would have expanded Sinclair’s reach to more than 70% of US homes. Tribune ultimately terminated the merger agreement.
- In the case *SOCAN-Re: Sound Pay Audio Services Tariffs, 2007–2016* (Copyright Board of Canada proceeding), submitted an expert report and testified on behalf of Stingray Digital and the broadcasting distribution undertakings in Canadian Copyright Board litigation involving performing rights royalties for pay audio services payable for musical works and sound recordings.
- In *In re Determination of Rates and Terms for Making and Distributing Phonorecords*, testified on behalf of Spotify USA Inc. regarding royalty payments under Section 115 of the Copyright Act.
- Submitted an expert report in *In re Cathode Ray Tube (CRT) Antitrust Litigation* on behalf of a class of direct purchasers. Analyzed economic evidence related to defendant’s role in alleged price-fixing conspiracy.
- Prepared as a testifying expert on behalf of DOJ in support of its successful challenge of the proposed \$34.6 billion merger of Halliburton and Baker Hughes.
- Served as testifying expert at trial on behalf of a large coalition of direct action plaintiffs in *In re Urethane Antitrust Litigation*. Analyzed impact and estimated damages. Analysis indicated that plaintiffs were overcharged by \$608 million, or 11%, between 1994 and 2003 as a result of alleged price-fixing conspiracy among chemicals suppliers. Direct action plaintiffs reached settlements, including a \$400 million settlement with The Dow Chemical Company.
- In the matter *ACCC v. Informed Sources*, provided economic analysis on behalf of the Australian Competition and Consumer Commission in its Federal Court of Australia proceedings against Informed Sources. Analyzed whether the retail gasoline price information provided by Informed Sources to fuel retailers that subscribed to the service likely lessened competition in metropolitan Melbourne.
- In the matter *Anderson News, LLC v. American Media, Inc.*, submitted expert reports on behalf of Anderson News regarding allegations that leading magazine publishers and distributors engaged in a conspiracy to boycott magazine wholesaler Anderson.
- In the matter *In re Petition of Pandora Media, Inc.*, served as testifying expert on behalf of Pandora in its litigation with the American Society of Composers, Authors, and Publishers (ASCAP). The court ultimately adopted key aspects of Dr. Marx’s analysis of proposed benchmarks and set a rate within the range of rates proposed by Dr. Marx.
- Served as a testifying damage expert on behalf of plaintiffs in *In re TFT-LCD (Flat Panel) Antitrust Litigation*.

- In the matter *In re Chocolate Confectionary Antitrust Litigation*, assisting testifying expert on behalf of defendant regarding its participation in an alleged price-fixing conspiracy of chocolate candy products in the United States.
- Filed a report with the FCC on behalf of Verizon regarding proposals to restrict Verizon's and AT&T's participation in the upcoming Incentive Auction for wireless spectrum.
- Assisted lead testifying expert in *United States ex rel. Bunk v. Birkart Globistics* and *United States ex rel. Ammons v. Pasha Group*. On behalf of the United States, provided support on economic damages related to a conspiracy by Department of Defense contractors for moving services.
- Submitted a white paper to and participated in meetings with DOJ and the FCC on behalf of the Communications Workers of America (CWA), an interested party in the proposed T-Mobile/AT&T merger. Opined on the appropriate methods of analysis and horizontal and vertical concerns with the proposed merger.
- Provided economic analysis related to the Comcast-NBCU merger on behalf of Bloomberg, LP. Conditions were imposed on the transaction to protect Bloomberg TV and other competitors of Comcast-NBCU's business news network CNBC from being disadvantaged.
- Served as a testifying expert in *In re Electrical Carbon Products Antitrust Litigation*. Submitted an expert report on damages.
- In *In re Vitamins Antitrust Litigation*, served as a consulting expert. Worked closely with Bates White professionals to examine whether the economic evidence was inconsistent with noncooperative conduct during a period of time predating the defendants' guilty pleas.
- In *Oxford Health Plans v. Liberty Surplus Ins. Corp.*, provided expert testimony for Liberty Surplus Insurance Corporation in litigation that concerned Oxford Health Plans' settlement negotiations in a securities class action lawsuit.

## A.6. Testifying experience

- *In Re Rail Freight Fuel Surcharge Antitrust Litigation*, MDL No. 1869, Case No. 07-489. Expert report and deposition testimony: 2020–2021.
- *Thomas Morgan Robertson et al. v. Spotify USA Inc.*, No. 3:17-cv-01616 (M.D. Tenn., filed 2017) and *Robert Gaudio et al. v. Spotify USA Inc.*, No. 3:17-cv-01052 (M.D. Tenn., filed 2017). Expert reports, deposition testimony: 2018–2019.
- *In re Capacitors Antitrust Litigation*, No. 3:14-cv-03264 (N.D. Cal. filed 2014). Expert reports, deposition, and Daubert hearing testimony: 2018–2020.

- *Dell Inc. and Dell Products L.P. v. Hitachi-LG Data Storage Korea, Inc., et al.*, No. 3:13-cv-03550-RS (W.D. Texas). Expert report and deposition testimony: 2017.
- United States Copyright Royalty Judges, *Determination of Rates and Terms for Making and Distributing Phonorecords* (Phonorecords III), Docket No. 16-CRB-0003-PR (2018–2022). Written direct, rebuttal, and remand testimony, deposition, and hearing testimony: 2016–2022.
- *ACCC v. Informed Sources (Australia) Pty Ltd & Ors* VID450/2014. Provided economic analysis on behalf of the Australian Competition and Consumer Commission in its Federal Court of Australia proceedings against Informed Sources. Expert report: 2015.
- *In Re Cathode Ray Tube (CRT) Antitrust Litigation*, Master File No. C-07-5944 JST, MDL No. 1917. Expert report: 2016.
- *SOCAN-Re:Sound Pay Audio Services Tariffs, 2007–2016* (Copyright Board of Canada proceeding). Expert report and trial testimony: 2016.
- Expert report and testimony in arbitration involving two large telecommunications companies: 2016.
- *In re Urethane Antitrust Litig.*, No. 08-cv-05169 (D.N.J. filed 2008). Expert report, deposition, and trial testimony: 2013–2016.
- *In re Anderson News, L.L.C. v. Am. Media, Inc.*, No. 09-cv-2227 PAC (S.D.N.Y.). Expert report and deposition testimony: 2014.
- *In re Petition of Pandora Media, Inc.*, No. 12-cv-8035 (S.D.N.Y. filed 2013). Expert reports, declaration, deposition, and trial testimony: 2013–2014.
- *In re Urethane Antitrust Litig.*, MDL No. 04-1616 (D. Kan. filed 2004). Rule 26 Disclosure and deposition testimony: 2013.
- *In re TFT-LCD (Flat Panel) Antitrust Litig.*, MDL No. 07-1827 (N.D. Cal. filed 2007). Expert reports and deposition testimony: 2011–2014.
- *In re Elec. Carbon Prod. Antitrust Litig.*, No. 05-6042 (D.N.J. filed 2006) Expert report: 2009.
- *Oxford Health Plans v. Liberty Mutual Insurance Company et al.*, C.A. No. 03C-04-268 (W.C.C.) (Del. Super. Ct. filed 2004). Expert report and deposition.

## A.7. Consulting

- Bates White Economic Consulting, Washington, DC, 2002–2005, 2007–present
- Bloomberg, LP, 2010
- Federal Communications Commission, Washington, DC, 2006–2007

- Latex International, Ansonia, CT, 2001
- Xerox Corp., Rochester, NY, 1999
- Rochester Gas & Electric Corp., Rochester, NY, 1997, 1998
- Eastman Kodak Company, Rochester, NY, 1995, 1996, 1999

## A.8. Publications

### A.8.a. Research papers in academic journals

- “Bilateral Trade with Multi-Unit Demand and Supply.” With Simon Loertscher. Forthcoming in *Management Science*.
- “Incomplete Information Bargaining with Applications to Mergers, Investment, and Vertical Integration.” (With Simon Loertscher.) *American Economic Review* 112, no. 2 (2022), 616–649.
- “Coordinated Effects in Merger Review.” With Simon Loertscher. *Journal of Law & Economics* 64, no. 4 (2021): 705–744.
- “The Possibility of Social-Surplus-Reducing Vertical Mergers.” With Simon Loertscher. *CPI Antitrust Chronical* (October 2020): 1–5.
- “Digital Monopolies: Privacy Protection or Price Regulation?” With Simon Loertscher. *International Journal of Industrial Organization* 71 (2020): 1–13.
- “Asymptotically Optimal Prior-Free Clock Auctions.” With Simon Loertscher. *Journal of Economic Theory* 187 (2020).
- “A Dominant Strategy Asset Market Mechanism.” With Simon Loertscher. *Games and Economic Behavior* 120 (2020): 1–15.
- “Merger Review with Intermediate Buyer Power.” With Simon Loertscher. *International Journal of Industrial Organization* 67 (2019): 1–16.
- “Mix-and-Match Divestitures and Merger Harm.” With Simon Loertscher. *Japanese Economic Review* 70, no. 3 (2019): 346–66.
- “Merger Review for Markets with Buyer Power.” With Simon Loertscher. *Journal of Political Economy* 127, no. 9 (2019).
- “Two-Sided Allocation Problems, Decomposability, and the Impossibility of Efficient Trade.” With David Delacrétaz, Simon Loertscher, and Tom Wilkening. *Journal of Economic Theory* 179 (2019): 416–54.

- “Auctions with Bid Credits and Resale.” With Simon Loertscher. *International Journal of Industrial Organization* 55 (2017): 58–90.
- “Defending Against Potential Collusion by Your Suppliers—26th Colin Clark Memorial Lecture.” *Economic Analysis and Policy* 53 (2017): 123–28.
- “Club Good Intermediaries.” With Simon Loertscher. *International Journal of Industrial Organization* 50 (2017): 430–59.
- “A Long Way Coming: Designing Centralized Markets with Privately Informed Buyers and Sellers.” With Simon Loertscher and Tom Wilkening. *Journal of Economic Literature* 53(4) (2015): 857–97.
- “Antitrust Leniency with Multi-Market Colluders.” With Claudio Mezzetti and Robert C. Marshall. *American Economic Journal: Microeconomics* 7, no. 3 (2015): 205–40.
- “Buyer Resistance for Cartel versus Merger.” With Vikram Kumar, Robert C. Marshall, and Lily Samkharadze. *International Journal of Industrial Organization* 39 (2015): 71–80.
- “Effects of Antitrust Leniency on Concealment Effort by Colluding Firms.” With Claudio Mezzetti. *Journal of Antitrust Enforcement* 2, no. 2 (2014): 305–32.
  - Winner of Best Economics Article—2015 Antitrust Writing Awards.
- “An Oligopoly Model for Analyzing and Evaluating (Re)-Assignments of Spectrum Licenses.” With Simon Loertscher. *Review of Industrial Organization* 45, no. 3 (2014): 245–73.
- “Plus Factors and Agreement in Antitrust Law.” With William E. Kovacic, Robert C. Marshall, and Halbert L. White. *Michigan Law Review* 110, no. 3 (2011): 393–436.
  - Winner of the 10th Annual Jerry S. Cohen Memorial Fund Writing Award for the best antitrust piece during the prior year.
- “Bidder Collusion at First-Price Auctions.” With Giuseppe Lopomo and Peng Sun. *Review of Economic Design* 15, no. 3 (2011): 177–211.
- “Carbon Allowance Auction Design: An Assessment of Options for the U.S.” With Giuseppe Lopomo, David McAdams, and Brian Murray. *Review of Environmental Economics and Policy* 5, no. 1 (2011): 25–43.
- “Coordinated Effects in the 2010 Horizontal Merger Guidelines.” With Wayne-Roy Gayle, Robert C. Marshall, and Jean-Francois Richard. *Review of Industrial Organization* 39, no. 1 (2011): 39–56.
- “The Economics of Contingent Re-Auctions.” With Sandro Brusco and Giuseppe Lopomo. *American Economic Journal: Microeconomics* 3, no. 2 (2011): 165–93.



- “Break-Up Fees and Bargaining Power in Sequential Contracting.” With Greg Shaffer. *International Journal of Industrial Organization* 28, no. 5 (2010): 451–63.
- “Slotting Allowances and Scarce Shelf Space.” With Greg Shaffer. *Journal of Economics & Management Strategy* 19, no. 3 (2010): 575–603.
- “Cartels as Two-Stage Mechanisms: Implications for the Analysis of Dominant-Firm Conduct.” With Randal D. Heeb, William E. Kovacic, and Robert C. Marshall. *Chicago Journal of International Law* 10, no. 1 (2009): 213–31.
- “Individual Accountability in Teams.” With Francesco Squintani. *Journal of Economic Behavior & Organization* 72, no. 1 (2009): 260–73.
- “Quantitative Analysis of Coordinated Effects.” With William E. Kovacic, Robert C. Marshall, and Steven P. Schulenberg. *Antitrust Law Journal* 76, no. 2 (2009): 397–430.
- “The ‘Google Effect’ in the FCC’s 700 MHz Auction.” With Sandro Brusco and Giuseppe Lopomo. *Information Economics and Policy* 21, no. 2 (2009): 101–14.
- “The Vulnerability of Auctions to Bidder Collusion.” With Robert C. Marshall. *Quarterly Journal of Economics* 124, no. 2 (2009): 883–910.
- “Cartel Price Announcements: The Vitamins Industry.” With Robert C. Marshall and Matthew E. Raiff. *International Journal of Industrial Organization* 26, no. 3 (2008): 762–802.
- Awarded the 2009 Paul Geroski Best Article Prize for one of the best two articles published in the *International Journal of Industrial Organization* in 2008.
- “Bidder Collusion.” With Robert C. Marshall. *Journal of Economic Theory* 133, no. 1 (2007): 374–402.
- “Exploring Relations between Decision Analysis and Game Theory.” With Jules van Binsbergen. *Decision Analysis* 4, no. 1 (2007): 32–40.
- “Rent Shifting and the Order of Negotiations.” With Greg Shaffer. *International Journal of Industrial Organization* 25, no. 5 (2007): 1109–25.
- “Upfront Payments and Exclusion in Downstream Markets.” With Greg Shaffer. *RAND Journal of Economics* 38, no. 3 (2007): 823–43.
- “Economics at the Federal Communications Commission.” Review of *Industrial Organization* 29, no. 4 (2006): 349–68.
- “Inefficiency of Collusion at English Auctions.” With Giuseppe Lopomo and Robert C. Marshall. *B. E. Journal of Theoretical Economics* 5, no. 1 (2005).
- “Opportunism and Menus of Two-Part Tariffs.” With Greg Shaffer. *International Journal of Industrial Organization* 22, no.10 (2004): 1399–1414.

- “Opportunism in Multilateral Vertical Contracting: Nondiscrimination, Exclusivity, and Uniformity: Comment.” With Greg Shaffer. *American Economic Review* 94, no. 3 (2004): 796–801.
- “The Joint Determination of Leverage and Maturity.” With Michael J. Barclay and Clifford W. Smith, Jr. *Journal of Corporate Finance* 9, no. 2 (2003): 149–67.
  - Winner of Outstanding Paper in Corporate Finance at the 1997 Southern Finance Association Meetings.
- “Adverse Specialization.” With Glenn M. MacDonald. *Journal of Political Economy* 109, no. 4 (2001): 864–99.
- “Insurer Ownership Structure and Executive Compensation as Complements.” With David Mayers and Clifford W. Smith, Jr. *Journal of Risk and Insurance* 68, no. 3 (2001): 449–63.
  - Winner of Outstanding Paper in Financial Services at the 1998 Southern Finance Association Meetings.
- “Dynamic Voluntary Contribution to a Public Project.” With Steven A. Matthews. *Review of Economic Studies* 67, no. 2 (2000): 327–58.
- “Adaptive Learning and Iterated Weak Dominance.” *Games and Economic Behavior* 26, no. 2 (1999): 253–78.
- “Odd-Eighth Avoidance as a Defense against SOES Bandits.” With Eugene Kandel. *Journal of Financial Economics* 51, no.1 (1999): 85–102.
- “Payments for Order Flow on NASDAQ.” With Eugene Kandel. *Journal of Finance* 54, no. 1 (1999): 35–66.
- “Predatory Accommodation: Below-Cost Pricing without Exclusion in Intermediate Goods Markets.” With Greg Shaffer. *RAND Journal of Economics* 30, no. 1 (1999): 22–43.
- “Process Variation as a Determinant of Bank Performance: Evidence from the Retail Banking Study.” With Frances Frei, Ravi Kalakota, and Andrew Leone. *Management Science* 45, no. 9 (1999): 1210–20.
- “Efficient Venture Capital Financing Combining Debt and Equity.” *Review of Economic Design* 3, no. 4 (1998): 371–87.
  - Winner of the Koç University Prize for the Best Paper of the Year in *Review of Economic Design*.
- “The Effects of Transaction Costs on Stock Prices and Trading Volume.” With Michael J. Barclay and Eugene Kandel. *Journal of Financial Intermediation* 7, no. 2 (1998): 130–50.

- “Cost Effective Use of Muscle Relaxants: A Decision Analysis.” With Jeffrey S. Rubenstein, Wendy Colin, Darryl Jackson, Craig Lockwood, and Janice Molloy. *Pediatrics* 100, no. 3 (1997): 451–52.
- “NASDAQ Market Structure and Spread Patterns.” With Eugene Kandel. *Journal of Financial Economics* 45, no. 1 (1997): 35–60.
- “Order Independence for Iterated Weak Dominance.” With Jeroen M. Swinkels. *Games and Economic Behavior* 18, no. 2 (1997): 219–45. Corrigendum, *Games and Economic Behavior* 31 (2000): 324–29.

#### **A.8.b. Research papers published in books and conference volumes**

- “What Next? Cartel Strategy after Getting Caught.” With Robert C. Marshall and Claudio Mezzetti. In *Competition Law and Economics: Developments, Policies, and Enforcement Trends in the US and Korea*, eds. Jay Pil Choi, Wonhuyk Lim, and Sang-Hyop Lee, 125–144. Edward Elgar Publishing, 2020.
- “A Tussle over Royalties: *Pandora v. ASCAP*, *Pandora v. BMI*, and the DOJ’s Consent Decree Review.” With Keith Waehrer. In *The Antitrust Revolution*, 7th ed., eds. John Kwoka and Lawrence White. Oxford University Press, 2018.
- “Leniency, Profiling and Reverse Profiling: Strategic Challenges for Competition Authorities.” With Claudio Mezzetti. In *Anti-Cartel Enforcement in a Contemporary Age: The Leniency Religion*, eds. C. Beaton-Wells and C. Tran. Hart Publishing, 2015.
- “Tacit Collusion in Oligopoly.” With Edward J. Green and Robert C. Marshall. In *Oxford Handbook of International Antitrust Economics*, vol. 2, eds. Roger D. Blair and D. Daniel Sokol. Oxford University Press, 464–497 (2015).
- “Section 1 Compliance from an Economic Perspective.” With Robert C. Marshall. In *William E. Kovacic: An Antitrust Tribute Liber Amicorum*, vol. 2, eds. Nicolas Charbit and Elisa Ramundo, 293–302. Institute of Competition Law, 2014. Reprinted in *Concurrences* 1 (2016).
- “Economics and the Efficient Allocation of Spectrum Licenses.” With Simon Loertscher. In *Mechanisms and Games for Dynamic Spectrum Access*, eds. Tansu Alpcan, Holger Boche, Michael L. Honig, and H. Vincent Poor. Cambridge University Press, 2014.
- “The Economics of Auctions and Bidder Collusion.” With Robert C. Marshall and Michael J. Meurer. In *Game Theory and Business Applications*, 2nd ed., eds. Kalyan Chatterjee and William F. Samuelson. Kluwer Academic Publishers, 2014.
- “Coordinated Effects in Merger Review: Quantifying the Payoffs from Collusion.” With William E. Kovacic, Robert C. Marshall, and Steven P. Schulenberg. In *Annual Proceedings of the*

*Fordham Competition Law Institute: International Antitrust Law & Policy*, ed. Barry E. Hawk, 271–85. Juris Publishing, Inc., 2007.

- “Lessons for Competition Policy from the Vitamins Cartel.” With William E. Kovacic, Robert C. Marshall, and Matthew E. Raiff. In *The Political Economy of Antitrust*, vol. 282, eds. Vivek Ghosal and Johan Stennek, 149–76. Elsevier, 2007.
- “Bidding Rings and the Design of Anti-Collusion Measures for Auctions and Procurements.” With William E. Kovacic, Robert C. Marshall, and Matthew E. Raiff. In *Handbook of Procurement*, eds. Nicola Dimitri, Gustavo Piga, and Giancarlo Spagnolo, 381–411. Cambridge University Press, 2006.

### A.8.c. Books

- *The Economics of Collusion: Cartels and Bidding Rings*. With Robert C. Marshall. MIT Press, 2012.

## A.9. Honors and awards

- Outstanding paper awards as listed above
- Economic Theory Fellow, Society for the Advancement of Economic Theory, 2021
- Top Women in Antitrust, *Global Competition Review*, 2013, 2021
- Excellence in Teaching Award, Global Executive MBA Class of 2019
- Fellow of the Game Theory Society, 2019
- *Who’s Who Legal* of Competition Economists, 2017–present
- Outstanding Antitrust Litigation Achievement in Economics, American Antitrust Institute, October 2016
- FCC Woman Leader, Minority Media and Telecommunications Council, April 2013
- Business School Professor of the Week, *Financial Times*, July 2012
- Alfred P. Sloan Doctoral Dissertation Fellowship, 1993–1994
- Teaching Honor Roll, Simon School of Business, University of Rochester, 1999, 2001
- National Science Foundation Graduate Fellowship, 1989–1992
- Mary Love Collins Memorial Scholarship, 1989–1990
- Julia Dale Memorial Award in Mathematics, 1989

- Marie James Postgraduate Scholarship, 1989
- Phi Eta Sigma Graduate Scholarship, 1989
- Duke University Valedictorian, 1989
- Alice M. Baldwin Scholarship 1988–1989
- Duke University Faculty Scholar Award, 1988–1989
- Phi Chi Theta Foundation Scholarship, 1988–1989
- Phi Eta Sigma Senior Award, 1988–1989
- Golden Key National Honor Society Scholarship, 1987–1988
- National Merit Scholarship, 1985
- Phi Beta Kappa Scholarship, 1985

## A.10. Professional activities

- Co-editor, *American Economic Journal: Microeconomics*, 2019–present
- Research Fellow, Mannheim Centre for Competition and Innovation (MaCCI), 2022–present
- Chair of the Program Committee, Asia-Pacific IO Conference, 2022
- Scientific Committee, 2021 EARIE Conference
- Selection Committee for YEEA awards, 2021 EARIE Conference
- Asia-Pacific IO Society, Scientific Board, 2021–present
- Scientific Committee, CEPR Virtual IO Seminar Series, 2021
- Program Committee, Asia-Pacific IO Conference, 2021
- Executive Committee, European Association for Research in Industrial Economics, 2020–present
- Guest Editor, EARIE 2020 Special Issue of *International Journal of Industrial Organization*
- Chair of the Scientific Committee, European Association for Research in Industrial Economics, 47th Annual Conference, 2020
- Scientific Committee, CRESSE, 2019–present
- CRESSE Associate (Academics – Economists), 2018–2019
- Scientific Advisory Board, *International Journal of Industrial Organization*, 2018–present
- Co-Editor, *American Economic Journal: Microeconomics*, 2019–present

- Editorial Board, *American Economic Journal: Microeconomics*, 2007–2019
- Academic Affiliate, Center for the Study of Auctions, Procurements and Competition Policy at Penn State University, 2007–present
- Editorial Board, *International Journal of Game Theory*, 2009–2021
- Council Member, Game Theory Society, 2013–2019
- Academic Steering Committee, Concurrences Journal Antitrust Writing Awards, 2015–2016
- Editorial Board, *Journal of Economic Literature*, 2010–2013
- Advisory Editor, *Games and Economic Behavior*, 2010–2012
- Associate Editor, *International Economic Review*, 2002–2005
- Referee: *American Economic Review*, *Econometrica*, *Games and Economic Behavior*, *International Journal of Industrial Organization*, *Journal of Economic Theory*, *RAND Journal of Economics*, *Review of Economic Studies*, *Review of Industrial Organization*

## A.11. Selected speaking engagements

- “Incomplete Information Models in Industrial Organization,” Invited semi-plenary speaker, 6th World Congress of the Game Theory Society, July 22, 2021.
- “Incomplete Information Models in Industrial Organization,” Invited semi-plenary speaker, Econometric Society and Bocconi University Virtual World Congress, August 21, 2020.
- “Vertical Mergers: Enforcement Developments and Guidelines.” Panelist, Online CRESSE Special Policy Sessions, July 1, 2020.
- “Competition Policy and Procurement,” Invited keynote speaker, 4th Asia-Pacific IO Conference, Tokyo, December 13, 2019.
- “Digital Monopolies: Privacy Protection or Price Regulation?” Invited keynote speaker, Japan Fair Trade Commission, 18th CPRC International Symposium, Tokyo, December 12, 2019.
- “Merger Review for Markets with Buyer Power and Coordinated Effects,” Invited speaker, US Department of Justice, Washington, DC, March 26, 2019.
- “Budget-Constrained Procurement.” Invited speaker, 13th CRESS Conference, Advances in the Analysis of Competition Policy and Regulation. Crete, Greece, June 29, 2018.
- “Fundamentals: Economics.” Invited panelist, 2017 ABA Antitrust Law Spring Meeting Panel. Washington, DC, March 29, 2017.

- “A Mechanism Design Approach to Merger Review.” Invited keynote speaker, 9th annual Federal Trade Commission Microeconomics Conference. Washington, DC, November 4, 2016.
- “A Mechanism Design Approach to Merger Review.” Invited speaker, First Annual Asia-Pacific Industrial Organization Conference (APIOC). Melbourne, Australia, December 12, 2016.
- Invited speaker, ABA Section of Antitrust Law Masters Course. Williamsburg, VA, September 28, 2016.
- “Collaboration, Conversations and Cartels.” Invited speaker, Georgetown Law 9th Annual Global Antitrust Enforcement Symposium. Washington, DC, September 29, 2015.
- “Reverse Auction.” Invited panelist, Digital Policy Institute Webinar on the FCC Incentive Auction. Muncie, IN, May 6, 2014.
- “Coordinated Effects.” Invited speaker, 5th Lear Conference on the Economics of Competition Law. Rome, June 27, 2013.
- “Cartels.” Invited presenter, George Mason University Judicial Education Program. Arlington, VA, October 7, 2013.

## Appendix B. Additional benchmark tables

**Figure 48: WBWS musical works rates under the PDD benchmark (no ratio adjustment)**

Service type	Service	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)
Standalone Portable	Amazon Music Unlimited		
	Apple		
	Google - YouTube Music Premium		
	Pandora Premium		
	Spotify Premium		
	All other services		
Free Non-Subscription/Ad-Supported	Amazon Music Free		
	Google - YouTube Music Free		
	Spotify Free		
	All other services		
Bundled Subscription	Amazon Music Unlimited		
	Apple		
	Spotify Premium		
	All other services		
Limited Offering	Pandora Plus		
	Pandora Premium Access		
	All other services		
Standalone Non-Portable Streaming	Amazon Music Unlimited		
	Spotify		
	All other services		
Paid Locker Service	Apple		
<b>Combined</b>	<b>Combined</b>	<b>6.0%</b>	<b>6.5%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.



**Figure 49: WBWS musical works rates under the PDD benchmark (Label MP - Major-Indie ratio adjustment)**

Service type	Service	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)
Standalone Portable	Amazon Music Unlimited		
	Apple		
	Google - YouTube Music Premium		
	Pandora Premium		
	Spotify Premium		
	All other services		
Free Non-Subscription/Ad-Supported	Amazon Music Free		
	Google - YouTube Music Free		
	Spotify Free		
	All other services		
Bundled Subscription	Amazon Music Unlimited		
	Apple		
	Spotify Premium		
	All other services		
Limited Offering	Pandora Plus		
	Pandora Premium Access		
	All other services		
Standalone Non-Portable Streaming	Amazon Music Unlimited		
	Spotify		
	All other services		
Paid Locker Service	Apple		
<b>Combined</b>	<b>Combined</b>	<b>7.6%</b>	<b>8.2%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

**Figure 50: WBWS musical works rates under the PDD benchmark (Label MP - Web V ratio adjustment)**

Service type	Service	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)
Standalone Portable	Amazon Music Unlimited		
	Apple		
	Google - YouTube Music Premium		
	Pandora Premium		
	Spotify Premium		
	All other services		
Free Non-Subscription/Ad-Supported	Amazon Music Free		
	Google - YouTube Music Free		
	Spotify Free		
	All other services		
Bundled Subscription	Amazon Music Unlimited		
	Apple		
	Spotify Premium		
	All other services		
Limited Offering	Pandora Plus		
	Pandora Premium Access		
	All other services		
Standalone Non-Portable Streaming	Amazon Music Unlimited		
	Spotify		
	All other services		
Paid Locker Service	Apple		
<b>Combined</b>	<b>Combined</b>	<b>6.9%</b>	<b>7.4%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

**Figure 51: WBWS musical works rates under the Prime Music benchmark (all adjustments)**

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)	WBWS musical works rate (Publisher MP, Label MP - Web V)	WBWS musical works rate (Publisher MP, Label MP - Major-Indie)
Standalone Portable	Amazon Music Unlimited					
	Apple					
	Google - YouTube Music Premium					
	Pandora Premium					
	Spotify Premium					
	All other services					
Free Non-Subscription/Ad-Supported	Amazon Music Free					
	Google - YouTube Music Free					
	Spotify Free					
	All other services					
Bundled Subscription	Amazon Music Unlimited					
	Apple					
	Spotify Premium					
	All other services					
Limited Offering	Pandora Plus					
	Pandora Premium Access					
	All other services					
Standalone Non-Portable Streaming	Amazon Music Unlimited					
	Spotify					
	All other services					
Paid Locker Service	Apple					
<b>Combined</b>	<b>Combined</b>	<b>12.9%</b>	<b>10.7%</b>	<b>11.6%</b>	<b>10.7%</b>	<b>10.9%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

## Appendix C. Benchmark results assuming no reduced label market power against Spotify

Figure 52: WBWS musical works rates under the non-interactive streaming benchmark (no market power reduction for Spotify)

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)
Standalone Portable	Amazon Music Unlimited			
	Apple			
	Google - Youtube Music Premium			
	Pandora Premium			
	Spotify Premium			
	All other services			
Free Non-Subscription/Ad-Supported	Amazon Music Free			
	Google - YouTube Music Free			
	Spotify Free			
	All other services			
Bundled Subscription	Amazon Music Unlimited			
	Apple			
	Spotify Premium			
	All other services			
Limited Offering	Pandora Plus			
	Pandora Premium Access			
	All other services			
Standalone Non-Portable Streaming	Amazon Music Unlimited			
	Spotify			
	All other services			
Paid Locker Service	Apple			
<b>Combined</b>	<b>Combined</b>	<b>12.2%</b>	<b>9.7%</b>	<b>10.7%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

**Figure 53: WBWS musical works rates under the PDD benchmark (no market power reduction for Spotify)**

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (higher MP adjustment)	WBWS musical works rate (lower MP adjustment)
Standalone Portable	Amazon Music Unlimited			
	Apple			
	Google - Youtube Music Premium			
	Pandora Premium			
	Spotify Premium			
	All other services			
Free Non-Subscription/Ad-Supported	Amazon Music Free			
	Google - YouTube Music Free			
	Spotify Free			
	All other services			
Bundled Subscription	Amazon Music Unlimited			
	Apple			
	Spotify Premium			
	All other services			
Limited Offering	Pandora Plus			
	Pandora Premium Access			
	All other services			
Standalone Non-Portable Streaming	Amazon Music Unlimited			
	Spotify			
	All other services			
Paid Locker Service	Apple			
<b>Combined</b>	<b>Combined</b>	<b>7.3%</b>	<b>5.8%</b>	<b>8.0%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

**Figure 54: WBWS musical works rates under the Prime Music benchmark (no market power reduction for Spotify)**

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (Label MP – Major-Indie)	WBWS musical works rate (Label MP - Web V)	WBWS musical works rate (Publisher MP)
Standalone Portable	Amazon Music Unlimited				
	Apple				
	Google - Youtube Music Premium				
	Pandora Premium				
	Spotify Premium				
	All other services				
Free Non-Subscription/Ad-Supported	Amazon Music Free				
	Google - YouTube Music Free				
	Spotify Free				
	All other services				
Bundled Subscription	Amazon Music Unlimited				
	Apple				
	Spotify Premium				
	All other services				
Limited Offering	Pandora Plus				
	Pandora Premium Access				
	All other services				
Standalone Non-Portable Streaming	Amazon Music Unlimited				
	Spotify				
	All other services				
Paid Locker Service	Apple				
<b>Combined</b>	<b>Combined</b>	<b>12.9%</b>	<b>10.3%</b>	<b>11.3%</b>	<b>10.4%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

## Appendix D. Benchmark results using Dr. Eisenach’s processed MLC data, excluding Dr. Eisenach’s adjustments to the data

**Figure 55: Musical works headline rates and backstops for all-in musical works royalties based on preferred benchmark (alternative Figure 1)**

Service type	Musical works rate	Backstop
Standalone portable	10.83%	\$0.80 per subscriber
Free non-subscription/ad-supported	10.83%	19.0% TCC
Bundled subscription	10.83%	Backstop that would apply to the music component of the bundle if it were offered on a standalone basis
Standalone Non-Portable Streaming	10.83%	\$0.40 per subscriber
Amazon Music Prime	\$0.00085 per play	N/A

**Figure 56: Service revenue and weights for each service (June 2020–May 2021) (alternative Figure 37)**

Service type	Service	Service revenue	Service weight
Standalone Portable			
Free Non-Subscription/Ad-Supported			
Bundled Subscription			
Limited Offering			
Standalone Non-Portable Streaming			
Paid Locker Service			

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

**Figure 57: Summary of musical works percent of revenue rates from the benchmark analyses (Alternative Figure 38)**

Benchmark	Musical works percentage of revenue rates
Non-interactive streaming benchmark	10.4% – 11.3%
PDD benchmark	6.2% – 8.4%
Prime Music Benchmark	11.0% – 11.9%
<b>Overall</b>	<b>6.2% – 11.9%</b>

**Figure 58: WBWS musical works rates under the non-interactive streaming benchmark (alternative Figure 39)**

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (higher MP adjustment)	WBWS musical works rate (lower MP adjustment)
Standalone Portable				
Free Non-Subscription/Ad-Supported				
Bundled Subscription				
Limited Offering				
Standalone Non-Portable Streaming				
Paid Locker Service				
<b>Combined</b>	<b>Combined</b>	<b>12.5%</b>	<b>10.4%</b>	<b>11.3%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

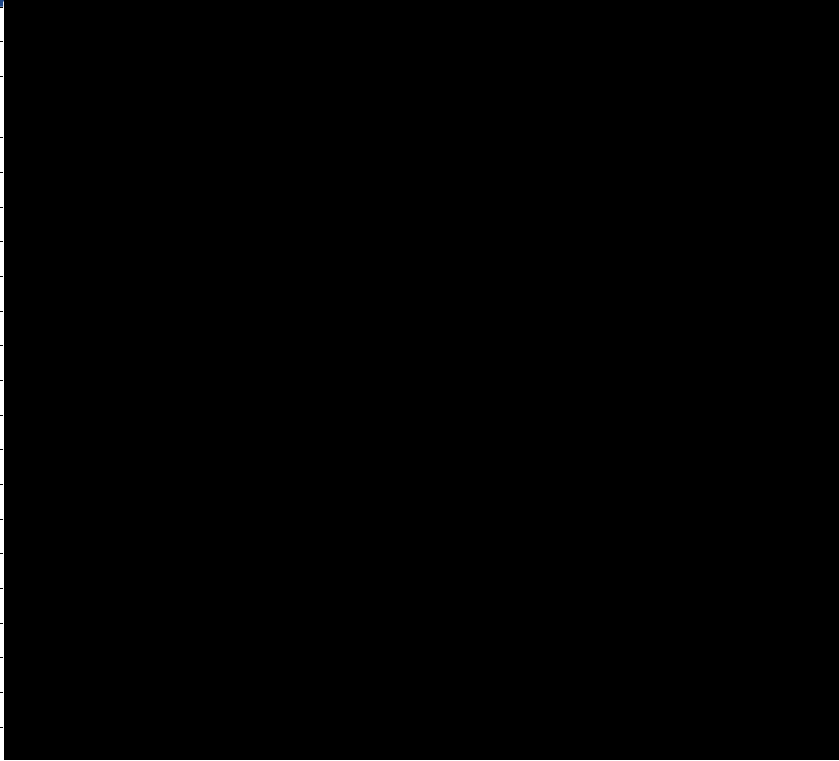


**Figure 59: WBWS musical works rates under the PDD benchmark (alternative Figure 40)**

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (higher MP adjustment)	WBWS musical works rate (lower MP adjustment)
Standalone Portable				
Free Non-Subscription/Ad-Supported				
Bundled Subscription				
Limited Offering				
Standalone Non-Portable Streaming				
Paid Locker Service				
<b>Combined</b>	<b>Combined</b>	<b>7.5%</b>	<b>6.2%</b>	<b>8.4%</b>

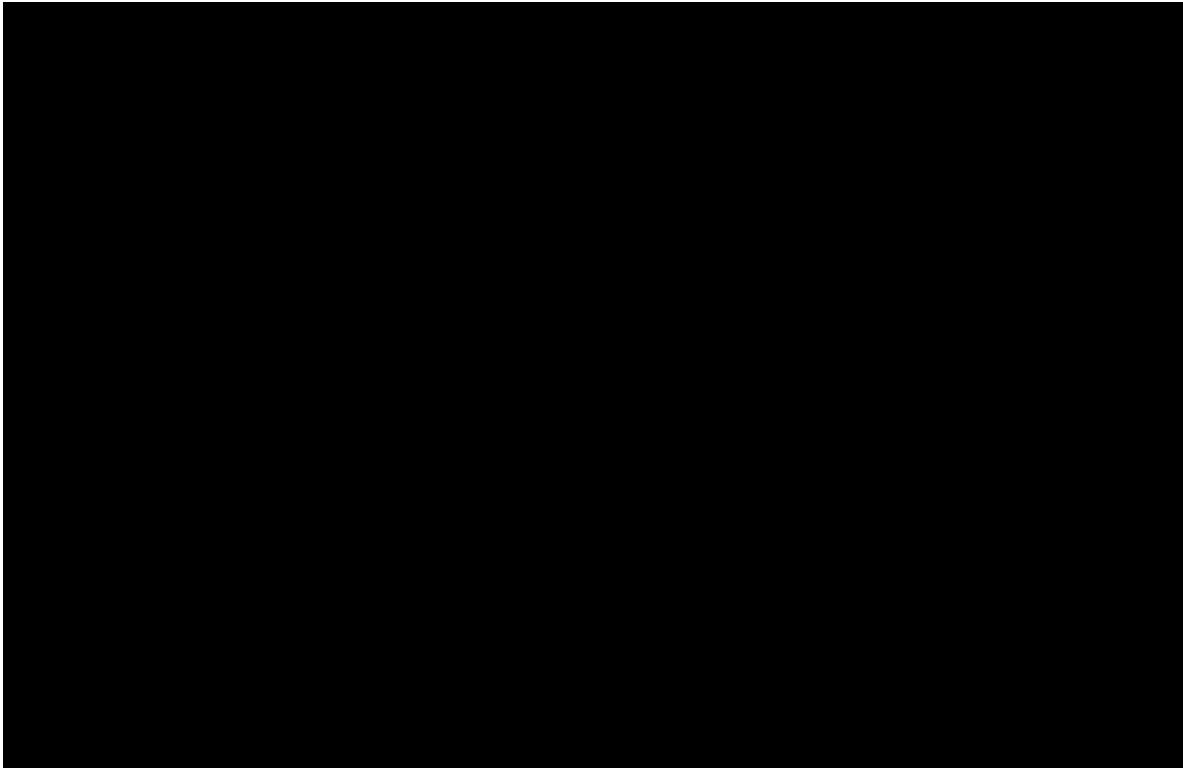
Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

**Figure 60: WBWS musical works rates under the Prime Music benchmark (alternative Figure 41)**

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (higher MP adjustment)	WBWS musical works rate (lower MP adjustment)
Standalone Portable				
Free Non-Subscription/Ad-Supported				
Bundled Subscription				
Limited Offering				
Standalone Non-Portable Streaming				
Paid Locker Service				
<b>Combined</b>	<b>Combined</b>	<b>13.2%</b>	<b>11.0%</b>	<b>11.9%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

**Figure 61: WBWS musical works per-subscriber equivalents from benchmark analyses for standalone portable subscriptions (alternative Figure 42)**



Note: Figures containing the complete set of services making up the “All other services” columns in this figure are available in my backup materials.

## Appendix E. Materials relied upon

- (269) I incorporate by reference all materials cited in my expert report. Additional materials are listed below.

### E.1. Amazon-produced data

#### E.1.a. Amazon royalty rate data

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

#### E.1.b. Other Amazon-produced data

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

## E.2. Other services' data

### E.2.a. Dr. Eisenach's processed MLC royalty data

■ [REDACTED]

## E.3. Public data

### E.3.a. Articles

- Tim Ingham, “How much money is the US music publishing industry making? A billion dollars more than it was 4 years ago,” *Music Business Worldwide*, June 16, 2019, <https://www.musicbusinessworldwide.com/how-much-money-is-the-us-music-publishing-industry-making-a-billion-dollars-more-than-it-was-four-years-ago/>.
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- Ed Christman, “Music Publishing Revenue Topped \$4B in 2020, Says NMPA,” *Billboard*, June 9, 2021, <https://www.billboard.com/articles/business/publishing/9585238/music-publishing-revenue-2020-nmpa/>.

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### **E.3.b. RIAA data**

- Joshua P. Friedlander, “News and Notes on 2014 RIAA Shipment and Revenue Statistics,” Recording Industry Association of America, 2015, [https://www.riaa.com/wp-content/uploads/2015/09/2013-2014\\_RIAA\\_YearEndShipmentData.pdf](https://www.riaa.com/wp-content/uploads/2015/09/2013-2014_RIAA_YearEndShipmentData.pdf).
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- “US Sales Database,” RIAA, accessed October 2, 2021, <https://www.riaa.com/u-s-sales-database/>.

### **E.3.c. Statista data**

- “Projected Consumer Price Index in the United States from 2010 to 2026,” Statista, April 2020, <https://www.statista.com/statistics/244993/projected-consumer-price-index-in-the-united-states/>.
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- Vivendi Financial Report and Audited Consolidated Financial Statements (February 19, 2016).
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- Warner Music Group, Annual Report (Form 10-K) (September 30, 2016).
- Warner Music Group, Annual Report (Form 10-K) (September 30, 2017).
- Warner Music Group, Annual Report (Form 10-K) (September 30, 2020).

# Exhibit C.4



Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
The Library of Congress

In the Matter of:

**DETERMINATION OF RATES  
AND TERMS FOR MAKING AND  
DISTRIBUTING PHONORECORDS**  
*(Phonorecords IV)*

**Docket No. 21-CRB-0001-PR  
(2023-2027)**

**AMENDED WRITTEN DIRECT TESTIMONY OF LESLIE M. MARX, PHD**

**~~October 13, 2021~~ March 8, 2022**

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# I. Introduction

## I.A. Qualifications

- (1) My name is Leslie Marx. I am the Robert A. Bandeen Professor of Economics at the Fuqua School of Business at Duke University. In addition, I am a Partner at Bates White, LLC, a professional services firm that performs economic and statistical analysis in a variety of industries and forums. I specialize in microeconomics, particularly the fields of industrial organization and applied game theory. I received my PhD in Economics from Northwestern University and my BS in Mathematics from Duke University, where I graduated summa cum laude and was the valedictorian.
- (2) Prior to joining the faculty at Duke, I was an Associate Professor of Economics and Management at the W.E. Simon Graduate School of Business Administration at the University of Rochester. I have taught PhD-level courses in game theory and industrial organization and MBA courses on managerial decision analysis, managerial economics, managerial game theory, and environmental economics.
- (3) From 2005 to 2006, I was the Chief Economist for the Federal Communications Commission. Among other things, a focus of my work was competition issues in media markets and markets for multichannel video programming distribution.
- (4) I was qualified as an expert in economics and industrial organization in the Phonorecords III proceeding, during which I submitted written direct, rebuttal, and remand testimony and provided live testimony before the Copyright Royalty Board (Board).<sup>1</sup> I have also been qualified as an expert in a number of other proceedings involving the music industry. In *In re Petition of Pandora Media, Inc.*, I served as a testifying expert on behalf of Pandora in its litigation with the American Society of Composers, Authors and Publishers (ASCAP). I provided an opinion regarding reasonable royalty terms for Pandora's blanket license for the ASCAP repertory based on an analysis of the extent to which relevant benchmarks reflected competitive fair market value. The Court ultimately adopted key aspects of my analysis and set a rate within the range of rates that I proposed. I have also testified before the Copyright Board of Canada in a music royalty proceeding.
- (5) Throughout my career, I have pursued a research program focusing on auctions, procurement, cartels, and collusive behavior. My research incorporates my training in economic theory and econometrics. I have authored papers in many areas relevant to competition policy, including papers examining the conduct of the vitamins cartel, papers related to collusion at auctions, and papers on coordinated

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<sup>1</sup> Determination of Royalty Rates and Terms for Making and Distributing Phonorecords (Phonorecords III), Case No. 16-CRB-0003-PR (Copyright Royalty Board, February 5, 2019) [hereinafter "Phono III Final Determination"].

effects related to merger analysis. These and other of my professional papers have been published in peer-reviewed publications, as shown in my attached curriculum vitae. I am the coauthor of a book published by MIT Press titled *The Economics of Collusion: Cartels and Bidding Rings*.<sup>2</sup>

- (6) In addition to my teaching responsibilities at Duke University, I have taught economics to federal judges. I have twice been paired with another economist to teach the sessions on “Cartels” and “Agreement and Facilitation Practices” at the Antitrust Law & Economics Institute for Judges, cosponsored by the American Bar Association (ABA) Section of Antitrust Law and the Law & Economics Center at George Mason University School of Law. I have also taught sessions on the economics of cartels and the economics of mergers to participants in the ABA’s Antitrust Master’s Program.
- (7) Additional information about my previous testifying experience and my professional experience as an economist, including publications and affiliations, is included in my curriculum vitae, attached as Appendix A.

## I.B. Scope of charge

- (8) I was retained by counsel for Amazon.com Services LLC (“Amazon”) to help determine the reasonable terms and rates for interactive streaming royalty payments under Section 115 of the Copyright Act for the period 2023–2027. Section 115 grants a compulsory license that allows for the making and distributing of physical and digital phonorecords of a songwriter’s work, once a phonorecord of that work has been distributed to the public with the permission of that artist. Songwriters are due “mechanical royalties” under this license. Mechanical royalties are one component, together with performance royalties, of the royalties that interactive streaming services pay to holders of musical works rights.
- (9) I was asked for my opinions on reasonable musical works royalty rate structures and royalty rates for interactive streaming services, as well as appropriate alternative prongs to serve as royalty “backstops” for services offered by Amazon. In making my determination, I was advised that the reasonable terms and rates for interactive streaming mechanical royalty payments should satisfy a “willing buyer/willing seller” standard, as defined in the 2018 Music Modernization Act.<sup>3</sup>

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<sup>2</sup> Robert C. Marshall and Leslie M. Marx, *Economics of Collusion* (Boston: MIT Press, 2012).

<sup>3</sup> Music Modernization Act, 17 USC § 115 (2018).

(10) I filed my original Written Direct Testimony in this matter on October 13, 2021. I have prepared this Amended Written Direct Testimony that incorporates additional MLC royalty rate data that were submitted by Dr. Eisenach.<sup>4</sup> Section XI.D contains additional detail on these data.

## I.C. Summary of opinions

~~(10)~~(11) My primary conclusions can be summarized as follows:

- The growth of interactive streaming has led to a resurgence of revenues for the music industry, which had been declining prior to interactive streaming due to piracy. After a decade-long decline in recorded music industry revenues attributable to piracy, US recorded music industry revenue stabilized and then grew alongside the growth of interactive streaming. Owners of musical works copyrights have benefitted from a re-monetization of their catalogs from interactive streaming, and publishing catalogs have seen high valuations in recent sales.
- Despite their rapid growth in subscribers and revenue, interactive streaming services have struggled with profitability. [REDACTED]. Spotify has also reported negative profits.
- A willing buyer/willing seller standard, which governs this proceeding, refers to transactions that occur between a willing buyer and a willing seller in an effectively competitive market. An effectively competitive market, although not perfectly competitive, is not distorted by substantial market power.
- Labels and publishers possess substantial market power against interactive streaming services. The complementary oligopoly power of labels and publishers mean that the rates that they charge interactive streaming services in an unregulated market are not effectively competitive and need to be adjusted to determine rates under a willing buyer/willing seller standard.
- An increase in mechanical royalty rates is not necessary to make songwriting a viable profession. Songwriters earn money from all musical works royalties, including performance royalties, not just mechanical royalties. Any perceived undercompensation of songwriting can be more efficiently corrected in ways other than increasing mechanical royalty rates.
- Economic efficiency dictates a percent-of-revenue rate structure when practical. Both copyright owners and services benefit from a rate structure that maximizes available surplus to be divided between them. A percent-of-revenue rate aligns the incentives of services and copyright owners

<sup>4</sup> Written Direct Testimony of Jeffrey A. Eisenach (on behalf of Copyright Owners), October 13, 2021 [hereinafter “Eisenach WDT”], Appendix C.

with surplus maximization, reflecting what willing buyers and willing sellers would negotiate in an effectively competitive market, when it can be practically implemented.

- If backstops to a percent-of-revenue rate are required, they must account for the particulars of service offerings. Backstops to percent-of-revenue rates can protect against revenue misattribution. Such backstops should be targeted toward particular categories of streaming services. An all-in per-subscriber fee provides a reasonable backstop for paid subscription services, while a total content cost (TCC) backstop is more appropriate for free, ad-supported services.
- Reasonable backstops focus on all-in musical works royalties and not mechanical-only royalties. Economic decisions are driven by total payments to musical works rightsholders and total payments to sound recording rightsholders, whatever their sub-components.
- Amazon Music Prime has features that make it not well suited to either percent-of-revenue or per-subscriber rates. A per-play rate is a more appropriate rate structure for that service. For Amazon Music Prime, a percent-of-revenue rate is difficult to apply due to difficulties in attributing revenue to a narrow catalog interactive streaming service that is bundled with a wide range of non-music goods. In addition, per-subscriber rates pose challenges due to wide variation in usage among users. A per-play rate, [REDACTED], is better suited to the characteristics of Amazon Music Prime.
- A benchmarking approach can be useful to determine willing buyer/willing seller rates. I identify several comparable markets that, when properly adjusted for market power, yield reasonable all-in musical works rates for interactive streaming services.
- My benchmark approach yields a range of willing buyer/willing seller percent-of-revenue musical works rates from 6.0% to 11.56% and Amazon Music Prime per-play rates from \$0.00045 to \$0.0009. Figure 1 summarizes the results of my preferred benchmark, including backstops.

**Figure 1: Musical works headline rates and backstops for all-in musical works royalties based on preferred benchmark**

Service type	Musical works rate	Backstop
Standalone portable	10.54%	\$0.80 per subscriber
Free non-subscription/ad-supported	10.54%	19.40% TCC
Bundled subscription	10.54%	Backstop that would apply to the music component of the bundle if it were offered on a standalone basis
Standalone Non-Portable Streaming	10.54%	\$0.40 per subscriber
Amazon Music Prime	\$0.00085 per play	N/A

(11)(12) The rest of this report more fully states and explains the opinions that I am offering in this matter and the bases for them.

## II. Music distribution and its evolution

~~(12)~~(13) Consumers access recorded music through a variety of distribution channels—most notably streaming services, which have grown dramatically over the last decade, but also digital downloads, terrestrial and satellite radio, CDs, and even vinyl records, which saw a 29% sales increase in 2020 alone.<sup>5</sup> The ways in which people access music have changed dramatically in recent years alongside changes in technology. Over the last decade, music streaming has become the dominant distribution channel for recorded music, driving revenue growth in an industry whose revenue had—prior to the rise of music streaming—been steadily declining.<sup>6</sup>

### II.A. Current recorded music distribution channels

~~(13)~~(14) Interactive streaming first began to attract a significant number of subscribers in the United States in 2011. By 2016, roughly 39% of recorded music revenue in the United States came from interactive streaming services, according to the Recording Industry Association of America (RIAA).<sup>7</sup> Just four years later, in 2020, interactive streaming represented roughly 73% of recorded music revenue.<sup>8</sup> During this time, driven primarily by the rise in music streaming, total recorded music revenue in the United States rose from \$7.5 billion to \$12.2 billion.<sup>9</sup> Figure 2 summarizes estimated recorded music revenue in the United States by distribution channel in 2016 and 2020.

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<sup>5</sup> Calculated using RIAA sales data. *See also* Noah Yoo, “Vinyl Record Sales Increased Almost 30% in 2020, RIAA Says,” *Pitchfork*, February 26, 2021.

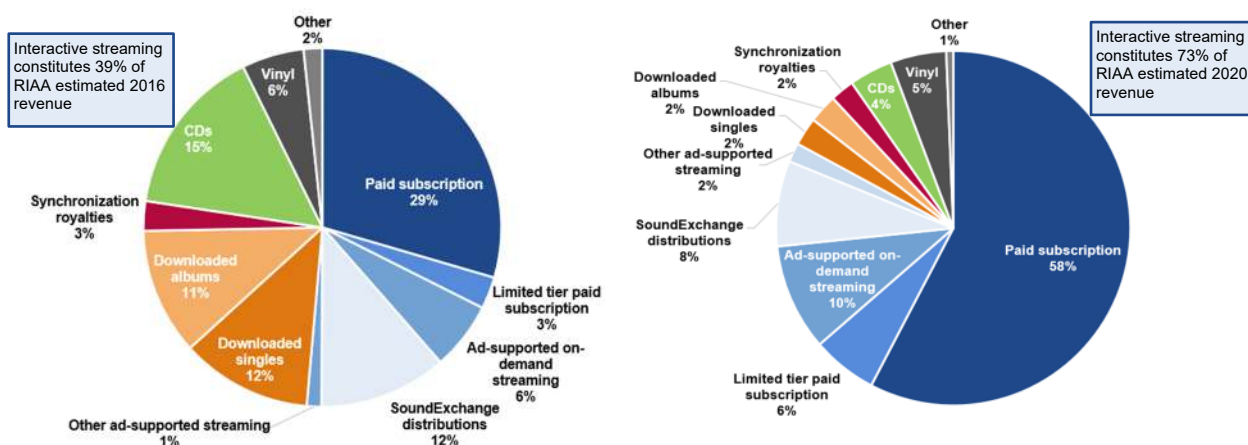
<sup>6</sup> See Figure 4.

<sup>7</sup> Joshua P. Friedlander, “News and Notes on 2016 RIAA Shipment and Revenue Statistics,” Recording Industry Association of America, 2017, p. 4, <https://www.riaa.com/wp-content/uploads/2017/03/RIAA-2016-Year-End-News-Notes.pdf>.

<sup>8</sup> Joshua P. Friedlander, “Year-End 2020 RIAA Revenue Statistics” Recording Industry Association of America, 2021, p. 3, <https://www.riaa.com/wp-content/uploads/2021/02/2020-Year-End-Music-Industry-Revenue-Report.pdf>.

<sup>9</sup> See Figure 4.



**Figure 2: RIAA estimated US recorded music revenue by distribution channel, 2016 and 2020**

Sources: Joshua P. Friedlander, “Year-End 2020 RIAA Revenue Statistics,” Recording Industry Association of America, 2021, <https://www.riaa.com/wp-content/uploads/2021/02/2020-Year-End-Music-Industry-Revenue-Report.pdf>; Joshua P. Friedlander, “News and Notes on 2016 RIAA Shipment and Revenue Statistics,” Recording Industry Association of America, 2017, <https://www.riaa.com/wp-content/uploads/2017/03/RIAA-2016-Year-End-News-Notes.pdf>.

Notes:

1. Revenue is based on value of shipments at recommended or estimated list price, or wholesale value for formats with no retail value equivalent.
2. “Limited-tier paid subscription streaming” includes streaming services with interactivity limitations by availability, device restriction, catalog limitations, on-demand access, or other factors. “SoundExchange distributions” are estimated payments to performers and copyright holders for digital and customized radio services under statutory licenses. “Other” includes ringtones and ringbacks, kiosks, music video downloads, physical music videos, cassettes, DVD audio, super audio CDs (SACDs), and other digital and physical music sales.
3. RIAA does not track terrestrial radio revenue or live music revenue; thus, those distribution channels are not included in this figure.

(14)(15) In this section, I describe the various channels of music distribution in more detail and introduce some of the nomenclature I will be using throughout this report.

### II.A.1. Streaming services

(15)(16) Music streaming services allow users to play music to a variety of devices over the internet without having to download a music file onto their device. Some streaming services allow users to download songs locally in a limited way to play music when an internet connection is not available.<sup>10</sup>

(16)(17) Streaming services can be classified as interactive or non-interactive. Interactive streaming services generally allow users to play the exact songs that they request from a library of offerings.<sup>11</sup> Examples

<sup>10</sup> This is defined by statute as a “limited download” that is accessible to listening for a limited period of time—typically one month—or on a limited number of occasions—typically twelve. Phono III Final Determination, p. 2032.

<sup>11</sup> Scope of Exclusive Rights in Sound Recordings, 17 USC § 114 (“An “interactive service” is one that enables a member of the public to receive a transmission of a program specially created for the recipient, or on request, a transmission of a particular sound recording, whether or not as part of a program, which is selected by or on behalf of the recipient. The ability of individuals to request that particular sound recordings be performed for reception by the public at large, or in the case of a subscription service, by all subscribers of the service, does not make a service interactive, if the



of this kind of service include Amazon Music Unlimited (“Unlimited”), Spotify, and Apple Music.<sup>12</sup> Non-interactive streaming services generally do not allow users to choose specific songs, but rather provide them with “pre-programmed or semi-random combination of tracks, the specific selection and order of which remain unknown to the listener (i.e. no pre-published playlist).”<sup>13</sup> Non-interactive streaming makes up a much smaller share of RIAA estimated recorded music revenue than interactive streaming.<sup>14</sup>

~~(17)~~(18) Streaming services generate revenue primarily by charging users subscription fees and by collecting advertising revenue. “Premium” services are often ad-free, while free ad-supported services rely on advertisements to generate revenue.<sup>15</sup>

## II.A.2. Purchased music

~~(18)~~(19) Purchased music, which includes digital singles and albums as well as physical CDs and vinyl records, was once the dominant distribution channel for recorded music, but now makes up a relatively small portion of US recorded music revenue. As shown in Figure 2, revenue for digital and physical music purchases declined from 45% of RIAA estimated US recorded music revenue in 2016 to only about 15% in 2020.<sup>16</sup>

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programming on each channel of the service does not substantially consist of sound recordings that are performed within 1 hour of the request or at a time designated by either the transmitting entity or the individual making such request. If an entity offers both interactive and non-interactive services (either concurrently or at different times), the noninteractive component shall not be treated as part of an interactive service.”).

<sup>12</sup> Amazon Music Free includes functionality that takes it outside the scope of a Section 114 non-interactive license, but in most respects it is a non-interactive service. See Section IV.C.

<sup>13</sup> “Licensing 101,” *SoundExchange*, accessed October 2, 2021, <https://www.soundexchange.com/service-provider/licensing-101/> (“Noninteractive services are very generally defined as those in which the user experience mimics a radio broadcast. That is, the users may not choose the specific track or artist they wish to hear, but are provided a pre-programmed or semi-random combination of tracks, the specific selection and order of which remain unknown to the listener (i.e., no pre-published playlist).”).

<sup>14</sup> Non-interactive streaming services make up a portion of the 8% of revenue attributed to “SoundExchange distributions” in the first half of 2020 in Figure 2. Interactive streaming services made up 73% of RIAA estimated recorded music revenue in the first half of 2020. See Figure 2, which shows that 58% of revenue is associated with paid subscriptions, 6% with limited tier subscriptions, and 10% with ad-supported on-demand streaming.

<sup>15</sup> Examples of premium services are Amazon Music Unlimited and Spotify Premium. Examples of ad-supported services are Amazon Music Free and Spotify Free. Most ad-supported services are free, although in August 2021, Spotify piloted a low-cost ad-supported subscription tier, Spotify Plus. Jon Porter, “Spotify Is Testing a Less Restrictive Ad-Supported Tier Costing \$0.99 a Month,” *The Verge*, August 3, 2021, <https://www.theverge.com/2021/8/3/22607203/spotify-plus-ad-supported-tier-unlimited-skips-on-demand-listening>.

<sup>16</sup> “Digital purchases” includes “Download single,” “Download album,” and “Other digital” distribution channels. “Physical purchases” includes “CD,” “Vinyl,” and “Other physical” distribution channels. Joshua P. Friedlander, “Year-End 2020 RIAA Revenue Statistics,” Recording Industry Association of America, 2021, <https://www.riaa.com/wp-content/uploads/2021/02/2020-Year-End-Music-Industry-Revenue-Report.pdf>.

Recorded music revenue for digital purchases declined from 24% of RIAA estimated recorded music revenue in 2016 to only 5% in 2020. Recorded music revenue for physical purchases declined from 21% of RIAA estimated recorded music revenue in 2016 to only 9% in 2020. See Figure 2.

(19)(20) Physical purchases tend to bundle an album of songs onto one CD or record, whereas digital purchases tend to allow per-song purchasing. Unlike in the case of streaming, purchased music conveys an ownership right rather than just temporary access.

### II.A.3. Other ways of accessing music

(20)(21) Although terrestrial radio is not included in the revenue breakdown in Figure 2, it continues to be a major source of music for listeners. As of December 2020, there were 6,699 commercial FM radio stations in the United States.<sup>17</sup> [REDACTED]

(21)(22) Satellite radio offers largely ad-free music, as well as other content, to paid subscribers. SiriusXM, the only satellite radio service in the United States, has more than 350 channels, over 90 of which are music channels.<sup>19</sup> As with terrestrial radio, listeners have no control over exactly which songs they listen to on satellite radio, beyond picking a station.

(22)(23) [REDACTED]  
[REDACTED] According to one report:

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

(23)(24) In recent years, online video platforms, particularly YouTube, have also served as a major source of music for listeners. According to Google, 2 billion people stream music videos on YouTube each month.<sup>21</sup> [REDACTED]

<sup>17</sup> Federal Communications Commission, “Broadcast Station Totals as of December 31, 2020,” news release, January 5, 2021, <https://docs.fcc.gov/public/attachments/DOC-369041A1.pdf>.

<sup>18</sup> Edison Research, “Share of Ear: Americans’ Share of Time Spent Listening to Audio Sources Q4 2020,” 2020.

<sup>19</sup> “SiriusXM Channel Lineup,” SiriusXM.com, accessed October 2, 2021, [https://www.siriusxm.com/content/dam/sxm-com/pdf/lineup/SXM\\_Web\\_Line\\_Ups\\_5-4-HI.pdf](https://www.siriusxm.com/content/dam/sxm-com/pdf/lineup/SXM_Web_Line_Ups_5-4-HI.pdf).

<sup>20</sup> Gabriel Schulman, “Music Publishing in the US,” IBISWorld Industry Report 51223, February 2021.

<sup>21</sup> Lyor Cohen, “Why Marketers Should Care about the Music Industry’s Latest Transformation,” *Think Global*, November 2020, <https://www.thinkwithgoogle.com/marketing-strategies/video/music-industry-changes/>.

<sup>22</sup> Edison Research, “Share of Ear: Americans’ Share of Time Spent Listening to Audio Sources Q4 2020,” 2020. Rights holders receive synchronization royalties from YouTube (known as “micro-sync” royalties) when videos that use their music generate ad revenue. Seth Lorinczi, “YouTube 101: A Beginner’s Guide,” *Songtrust* (blog), June 12, 2020, <https://blog.songtrust.com/youtube-101-a-beginners-guide>. Additionally, YouTube shares subscription revenues from its YouTube Premium service with content creators on its site. “YouTube Partner Earnings Overview,” accessed October 2,

## II.A.4. Blurred distinctions between channels

~~(24)~~(25) For royalty purposes, each distribution channel is classified in a particular category that entails paying a particular set of royalties—some statutory, some negotiated, and some negotiated under court oversight. However, the distinctions between distribution channels are sometimes blurred. For instance, although interactive streaming services are sometimes characterized as promoting “lean forward” or “active” listening in contrast to the “lean back” or “passive” listening associated with non-interactive streaming services, over time interactive streaming services have incorporated more features associated with “lean back” listening.<sup>23</sup> Amazon’s paid subscription interactive streaming service, Unlimited, offers its subscribers “lean forward” interactive streaming but also includes radio and playlist services that are more akin to “lean back” non-interactive streaming services such as Pandora’s non-interactive service.<sup>24</sup> Another of Amazon’s services covered by this proceeding, Amazon Music Free (“Free”), is essentially “lean back.”<sup>25</sup> Many terrestrial radio stations now offer their content via online streaming, allowing people to listen in over the internet rather than a traditional radio receiver.<sup>26</sup>

~~(25)~~(26) A large share of plays on Amazon’s interactive streaming services are “lean back” plays. Figure 3 shows the percentage of programmed plays for each of Amazon’s interactive streaming services from 2017 to 2021.<sup>27</sup> I describe the differences between these services in more detail in Section IV below.

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2021, <https://support.google.com/youtube/answer/72902?hl=en>. YouTube reported paying more than \$3 billion to the music industry in 2019. Susan Wojcicki, “YouTube at 15: My Personal Journey and the Road Ahead,” *YouTube Official Blog*, February 14, 2020, <https://blog.youtube/news-and-events/youtube-at-15-my-personal-journey>.

<sup>23</sup> In late 2017, one industry observer noted, “For the best part of a decade Pandora had almost all of the market to itself, but it is now buckling under the impact of on-demand streaming. Pandora was meant to be different to Spotify, and it was, until Spotify started stealing Pandora’s clothes. Pandora grew its user base by delivering a lean back, but personalized listening experience. Radio on its users’ terms. Spotify soon recognized the value of lean back listening, bringing in a vast selection of curated playlists, directly and via partners. Beats Music followed suit and soon became the foundation for Apple Music’s curated streaming proposition.” “Pandora’s Loss Is Sirius XM’s Gain,” *Music Industry blog*, November 9, 2017, <https://musicindustryblog.wordpress.com/tag/semi-interactive-radio/>.

<sup>24</sup> Amazon, “What are the Differences Between the Amazon Music Subscriptions?,” accessed on August 11, 2021, <https://www.amazon.com/gp/help/customer/display.html?nodeId=GW3PHAUCZM8L7W9L>.

<sup>25</sup> See Section IV.C.

<sup>26</sup> Web V Determination, No. 19-CRB-0005-WR (CRB July 22, 2021) [hereinafter “Web V Determination”], at 249 (“Based on the entirety of the record in this proceeding and for the foregoing reasons, the Judges do not find that a separate rate category for simulcasters is warranted. Additionally, significant evidence in the record persuades the Judges that simulcasters and other commercial webcasters compete in the same submarket and therefore should be subject to the same rate.”).

<sup>27</sup> “Programmed plays” are defined as plays of songs on a programmed playlist, algorithmic playlist, music station, or algorithmic station. Unlimited’s auto play feature is also treated as a programmed play.

**Figure 3: Percentage of programmed plays by Amazon music service, 2017–2021**

Service	2017	2018	2019	2020	2021
Amazon Music Unlimited					
Amazon Music Prime					
Amazon Music Free					

Source: Amazon data.

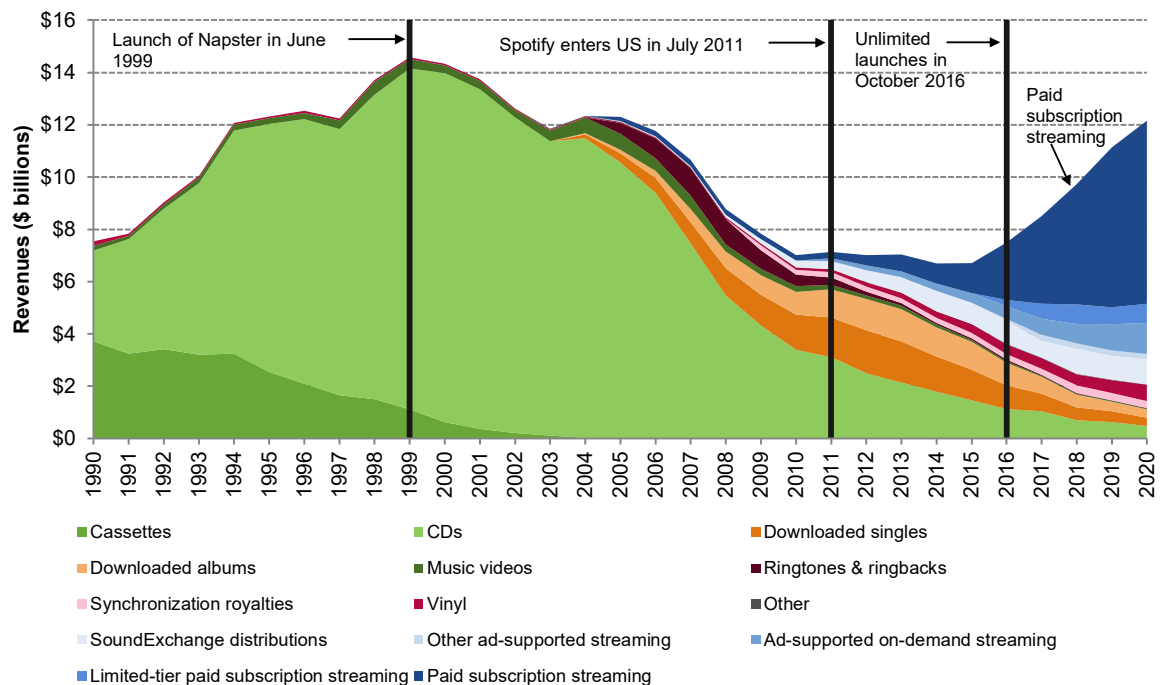
Notes:

1. 2021 data are through July only.
2. “Programmed plays” are defined as plays of songs on a programmed playlist, algorithmic playlist, music station, or algorithmic station. Unlimited’s auto play feature is also treated as a programmed play.
3. Free is entirely programmed and does not appear that way in the table only because of internal testing done by Amazon Music.

## II.B. Changes in music distribution over time

~~(26)~~(27) The last two decades have seen a dramatic shift in the form of music distribution from physical media, such as CDs and cassettes, to digital content. The first transition was from physical media to permanent digital downloads (PDDs). More recently, the shift has been away from both physical media and PDDs to streaming services. As shown in Figure 4 below, revenue attributed to all forms of streaming rose dramatically from 2011 to 2020, according to RIAA estimates.<sup>28</sup>

<sup>28</sup> Joshua P. Friedlander, “News and Notes on 2015 RIAA Shipment and Revenue Statistics,” Recording Industry Association of America, 2016, <http://www.riaa.com/wp-content/uploads/2016/03/RIAA-2015-Year-End-shipments-memo.pdf>, Figure 1; Joshua P. Friedlander, “Year-End 2020 RIAA Revenue Statistics,” Recording Industry Association of America, 2021, <https://www.riaa.com/wp-content/uploads/2021/02/2020-Year-End-Music-Industry-Revenue-Report.pdf>.

**Figure 4: US recorded music industry revenue by distribution channel over time, 1990–2020**

Source: "US Sales Database," RIAA, accessed October 2, 2021, <https://www.riaa.com/u-s-sales-database/>.

Notes:

1. Revenue is based on value of shipments at recommended or estimated list price, or wholesale value for formats with no retail value equivalent.
2. Other definitions: "Limited-tier paid subscription streaming" includes streaming services with interactivity limitations by availability, device restriction, catalog limitations, on demand access, or other factors. "SoundExchange distributions" are estimated payments to performers and copyright holders for digital radio services. "Other" includes DVD audio, SACDs, kiosks, and other digital music licensing.
3. RIAA does not track terrestrial radio revenue or live music revenue; thus, those distribution channels are not included in this figure.

(27)(28) Figure 4 also shows that the recorded music industry in the United States experienced a decline in revenue from 1999 through 2010 that stabilized and then reversed with the rise of streaming. The decline in revenue began after the advent of Napster in 1999 and did not halt and reverse until the growth of interactive streaming services beginning in 2011.<sup>29</sup> In recent years, recorded music revenue has increased substantially, driven by revenue from interactive streaming services. Thanks to streaming, "the music industry is healthier than it's been in more than a decade."<sup>30</sup> The continuing

<sup>29</sup> Napster was a peer-to-peer file-sharing service that popularized illegal sharing of music. See Jeff Tyson, "How the Old Napster Worked," HowStuffWorks, accessed April 6, 2021, <https://computer.howstuffworks.com/napster.htm> ("The problem that the music industry had with Napster was that it was a big, automated way to copy copyrighted material. It is a fact that thousands of people were, through Napster, making thousands of copies of copyrighted songs, and neither the music industry nor the artists got any money in return for those copies."). It was shut down in its original form after a series of lawsuits and is now the name of an online streaming service owned by Rhapsody. Napster, "About Us: We Are Napster," accessed April 6, 2021, <https://us.napster.com/about>.

<sup>30</sup> Frank Pallota, "The Music Industry Was Left for Dead a Few Years Ago. Now It's Booming Again," *CNN Business*, February 28, 2020, <https://www.cnn.com/2020/02/28/media/music-industry-streaming/index.html> ("The music industry today is healthier than it's been in more than a decade," Josh Friedlander, the senior vice president of research at the

shift from “offline” to “online” music “ultimately benefits the industry given the recurring nature and higher ARPU of paid streaming.”<sup>31</sup>

## II.B.1. Decline of piracy

~~(28)~~(29) While technology has created new music distribution channels, it also facilitated the piracy of musical works. Music piracy is a de facto distribution channel that does not contribute to music revenue but instead decreases revenue generated by other channels. Some forms of piracy include downloading music from an illegal file-sharing site, peer-to-peer file sharing, and using stream-ripping software or mobile apps to copy music.<sup>32</sup>

~~(29)~~(30) Piracy has had a substantial impact on music revenue. As shown in Figure 4 above, the original launch of the file-sharing service Napster in 1999, which facilitated a rise in piracy, coincided with a sharp decline in US recorded music industry revenue, widely attributed to piracy.<sup>33</sup> This rapid decline ceased and then reversed alongside the rise of streaming services. By 2020, recorded music revenues had grown sharply for six consecutive years, driven primarily by revenue from interactive streaming services.<sup>34</sup>

~~(30)~~(31) Streaming services help mitigate piracy.<sup>35</sup> Interactive streaming provides easy access to music via a user-friendly interface and the ability to stream specific songs on demand, as well as music discovery algorithms and other added features. Free ad-supported services in particular may provide an alternative to piracy for low willingness to pay (WTP) consumers.<sup>36</sup> One 2018 survey found a 44% reduction in the number of people who illegally download music in the United Kingdom in the previous five years, attributed in part to the rise of music streaming.<sup>37</sup>

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Recording Industry Association of America, told CNN Business. ‘Revenues from streaming services are more than offsetting decreases in physical sales and digital downloads.’ Friedlander added ‘it’s hard to overstate the impact streaming music has had on the music industry.’”)

<sup>31</sup> “Music in the Air,” *Goldman Sachs Equity Research*, May 14, 2020, <https://www.goldmansachs.com/insights/pages/infographics/music-in-the-air-2020/report.pdf>, p. 4.

<sup>32</sup> “About Piracy,” *RIAA Resources & Learning*, accessed October 2, 2021, <https://www.riaa.com/resources-learning/about-piracy/>.

<sup>33</sup> David Goldman, “Music’s Lost Decade: Sales Cut in Half,” *CNN*, February 3, 2010, [https://money.cnn.com/2010/02/02/news/companies/napster\\_music\\_industry/](https://money.cnn.com/2010/02/02/news/companies/napster_music_industry/).

<sup>34</sup> See Figure 4.

<sup>35</sup> See IFPI, “IFPI Digital Music Report 2015,” September 2015, <https://www.riaa.com/wp-content/uploads/2015/09/Digital-Music-Report-2015.pdf>, p. 15 (“Streaming services have also, along with copyright enforcement strategies, helped migrate consumers to licensed services by offering a convenient alternative to piracy.”).

<sup>36</sup> For example, a 2017 survey of people’s reasons for using illegal file-sharing services to stream or download music or radio in the United States found that 66% of respondents did so because it was “cheaper/free,” while only 33% noted that it was “more convenient.” “Reasons for Using Illegal File Sharing Services to Stream or Download Music or Radio in the United States in 2017,” Statista, September 2017, accessed October 5, 2021, <https://www.statista.com/statistics/758917/reasons-illegal-file-sharing-services-download-stream-radio-music/>.

<sup>37</sup> Andre Paine, “‘Spotify Has Everything’: Piracy Drops as Streaming Wins over Illegal Downloaders,” *Music Week*, August 2, 2018, <http://www.musicweek.com/digital/read/spotify-has-everything-piracy-drops-as-streaming-wins-over->

~~(31)~~(32) Despite this progress, music piracy still exists and can rebound. For instance, the global COVID-19 pandemic reportedly triggered a return to “old school” torrenting piracy in the United States, with music-related visits to torrent sites growing by 15.6% from February to March 2020.<sup>38</sup>

~~(32)~~(33) A recent survey conducted by Robert Klein (the “Klein Survey”) that “seeks to understand the music streaming listening habits of Amazon Music customers”<sup>39</sup> finds that over [REDACTED] of the surveyed Unlimited subscribers accessed music through piracy prior to subscribing to the service.<sup>40</sup> He also finds that over [REDACTED] of the surveyed Unlimited subscribers would return to piracy as their method of accessing music if they “could no longer stream music with Amazon Music Unlimited, or any other on-demand streaming service.”<sup>41</sup>

## II.B.2. Re-monetization of old catalogs

~~(33)~~(34) Streaming has allowed a re-monetization of old catalogs of music that had already generated substantial revenue through CD, cassette, and record sales.<sup>42</sup> Iconic bands that profited from high record sales in the prestreaming world have been paid again for the same music since entering the streaming world.<sup>43</sup> For example, The Beatles entered major streaming services in December 2015 and averaged 1.5 billion streams a year on Spotify alone in the next three years.<sup>44</sup> The total stream count for The Beatles is 11 billion on Spotify alone, similar to Queen (14 billion), Linkin Park (11 billion), Red Hot Chili Peppers (9 billion), Michael Jackson (8 billion), Metallica (7 billion), Green Day (6 billion) and Prince (2 billion), all which saw high CD, cassette, and record sales in the prestreaming era.<sup>45</sup> Prince was streamed 17 million times in one week after his catalog was added to streaming services.<sup>46</sup>

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illegal-downloaders/073373 (“[...]10% of those surveyed download music illegally, down from 18% five years ago....The increasing take-up of streaming services – both ad-funded and premium – has seen off a good deal of piracy. YouGov found that 63% of people who have stopped illegally downloading music now use streaming services.”). 44.4% =  $(18\% - 10\%) \div 18\%$ .

<sup>38</sup> Tim Ingham, “Music Piracy Is Going Old School in the Age of COVID-19,” *RollingStone*, May 4, 2020, <https://www.rollingstone.com/pro/features/music-piracy-is-going-old-school-in-the-age-of-covid-19-993412/>.

<sup>39</sup> Written Direct Testimony of Robert L. Klein (on behalf of Amazon Digital Services LLC), October 13, 2021 [hereinafter “Klein WDT”], ¶12.

<sup>40</sup> Klein WDT, Table 22.

<sup>41</sup> Klein WDT, Table 37.

<sup>42</sup> Ben Sisario, “This Man Is Betting \$1.7 Billion on the Rights to Your Favorite Songs,” *New York Times*, December 18, 2020, <https://www.nytimes.com/2020/12/18/arts/music/merck-mercuriadis-hipgnosis.html> (“Mercuriadis’s pitch to investors is that the royalty streams of proven hits are a more stable investment than gold or oil, given the inelastic demand for music—a premise that has largely held up during the pandemic.”).

<sup>43</sup> This applies to both musical works and sound recording royalties.

<sup>44</sup> “Streaming Masters—The Beatles,” *ChartMasters*, November 5, 2018, <https://chartmasters.org/2018/11/streaming-masters-the-beatles/>.

<sup>45</sup> “Most Streamed Artists Ever on Spotify,” *ChartMasters*, accessed October 9, 2021, <https://chartmasters.org/most-streamed-artists-ever-on-spotify/>.

<sup>46</sup> Nicole Bitette, “Prince’s Music Sales and Streams Skyrocketed in the Year Since His Death,” *New York Daily News*,



~~(34)~~(35) The Klein Survey found that over [REDACTED] of the surveyed Unlimited subscribers would “listen to digital music files, CDs, or vinyl records [they] already have” if on-demand streaming were no longer available.<sup>47</sup> In contrast to streaming music, these alternative ways to access already purchased music do not generate additional revenue streams for rightsholders.

~~(35)~~(36) In recent years, private-equity investors have been investing in musical works as an asset class, purchasing whole catalogs of existing songs, expecting to profit from the royalty flow from online streaming of original recordings and covers.<sup>48</sup> For instance, Hipgnosis Songs Fund has spent about \$1.7 billion since 2018 purchasing the rights—mostly publishing rights, but some sound recording rights as well—to more than 57,000 songs, among which are the song catalogs of Shakira, Neil Young, The Red Hot Chili Peppers, and Mark Robson.<sup>49</sup> In addition, during the last 12 months, Primary Wave Music acquired 80% of the publishing catalog of Stevie Nicks for \$100 million;<sup>50</sup> Bob Dylan sold his full catalog to Universal Music Publishing Group for an estimated \$300 million;<sup>51</sup> Warner Chappell Music purchased part of Bruno Mars’ publishing catalog and Warner Music Group

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April 21, 2021, <https://www.nydailynews.com/entertainment/music/prince-music-sales-skyrocketed-death-article-1.3080565>.

<sup>47</sup> Klein WDT, Table 37.

<sup>48</sup> Faith Blackinton, “What’s Behind the Boom in Iconic Boomer Musicians Selling Their Songs,” CNBC, April 4, 2021, <https://www.cnbc.com/2021/04/04/why-theres-a-boom-in-boomer-rock-stars-selling-their-songs.html> (“The deals also come at a time when streaming music—for all of its controversy and skepticism on the part of the musicians themselves about getting a raw deal—has proved to be an economic juggernaut, at least for the record companies. In 2020, Goldman Sachs forecast that global music revenue would reach \$142 billion by the end of the decade, reflecting an 84% increase when compared to the 2019 level of \$77 billion and streaming capture 1.2 billion users by 2030, four times its 2019 level, and primarily benefiting companies like Sony, which bought Simon’s catalog, and Universal, which acquired Dylan’s songs.”).

Ben Sisario, “This Man Is Betting \$1.7 Billion on the Rights to Your Favorite Songs,” *New York Times*, December 18, 2020, <https://www.nytimes.com/2020/12/18/arts/music/merck-mercuriadis-hipgnosis.html> (“Thanks to plentiful investment coffers, rosy projections about online streaming and, less happily, the need of many artists to raise cash during the pandemic, there has been a flurry of deals this year, often at staggering prices. Stevie Nicks sold a majority share in her catalog for \$80 million. Bob Dylan signed away his entire corpus of more than 600 copyrights for a sum estimated at \$300 million to \$400 million.”).

<sup>49</sup> Ben Sisario, “This Man Is Betting \$1.7 Billion on the Rights to Your Favorite Songs,” *New York Times*, December 18, 2020, <https://www.nytimes.com/2020/12/18/arts/music/merck-mercuriadis-hipgnosis.html>.

Reid Nakamura, “Red Hot Chili Peppers to Sell Catalog for \$150 Million,” *MSN.com*, May 4, 2021, <https://www.msn.com/en-us/music/news/red-hot-chili-peppers-to-sell-catalog-for-24150-million/ar-BB1gkgXb?ocid=BingNewsSearch>.

Hipgnosis Songs Fund, “Our Purpose and Business Model,” *Hipgnosissongs.com*, accessed October 4, 2021, <https://www.hipgnosissongs.com/about/our-purpose-business-model/> (“Every Song has two copyrights: Composition (lyrics & melody), held by the Songwriter and Sound Recording (the sound heard), held by those involved in the recording of the Song. Royalties stemming from the Composition Copyright are referred to as Publishing Rights (aka Songwriter Rights). Hipgnosis Songs Fund focuses primarily on acquiring these, but owns selective Sound Recording Rights as well.”).

<sup>50</sup> Jem Aswad, “Stevie Nicks Sells Majority Stake in Publishing Catalog to Primary Wave,” *Variety*, December 4, 2020, <https://www.rollingstone.com/pro/news/stevie-nicks-fleetwood-mac-catalog-primary-wave-1098850/>.

<sup>51</sup> Ben Sisario, “Bob Dylan Sells His Songwriting Catalog in Blockbuster Deal,” *New York Times*, December 7, 2020, <https://www.nytimes.com/2020/12/07/arts/music/bob-dylan-universal-music.html>.



the entire recording catalog of David Guetta, the latter for an estimated \$100 million;<sup>52</sup> Sony Music Publishing acquired Paul Simon’s entire song catalog.<sup>53</sup>

## II.C. Recent developments

### II.C.1. Music Modernization Act

~~(36)~~(37) In 2018, Congress enacted the Orrin G. Hatch–Bob Goodlatte Music Modernization Act (MMA), the most significant piece of legislation dealing with music rights since the Digital Millennium Copyright Act in 1998.<sup>54</sup> Title I of the MMA establishes a blanket licensing system for digital music providers to make and distribute digital phonorecords including interactive streams.<sup>55</sup> It also creates a “mechanical licensing collective” to administer the blanket license, identify rightsholders, and distribute royalties to copyright owners.<sup>56</sup> Finally, as discussed in more detail in Section VIII below, it changes the standard to be applied by the Board in rate-setting proceedings for mechanical license fees for interactive streaming services from the “801(b)” standard that applied in all prior Phonorecords proceedings, to a “willing buyer/willing seller” (WBWS) standard, which the Board has historically applied in setting sound recording royalties for non-interactive streaming services (most recently, in the “Web V” proceeding).<sup>57</sup>

### II.C.2. Impact of COVID-19 pandemic

~~(37)~~(38) The COVID-19 pandemic has been estimated to have caused a 25% decline in global music industry revenue in 2020, mostly through a 75% drop in live music revenue, offset to some extent by slight growth in recorded music revenue.<sup>58</sup> If anything, interactive streaming adoption seems to have

<sup>52</sup> Ed Christman, “Bruno Mars Sells Part of Song Catalog to Warner Chappell Music,” *Billboard*, May 24, 2021, <https://www.billboard.com/articles/business/publishing/9577451/bruno-mars-warner-chappell-song-catalog-sale-wmg/>.

Tim Ingham, “Warner Music Scoops Up David Guetta’s Catalog for \$100 Million,” *Rolling Stone*, June 17, 2021, <https://www.rollingstone.com/pro/news/david-guetta-warner-music-catalog-1185704/>.

<sup>53</sup> Katie Tsai, “Sony Music acquires singer Paul Simon’s song catalog,” *CNBC*, March 31, 2021, <https://www.cnn.com/2021/03/31/sony-music-acquires-singer-paul-simons-song-catalog.html>.

<sup>54</sup> The Digital Millennium Copyright Act is a copyright law passed in 1998 that implemented two 1996 treaties of the World Intellectual Property Organization. The act was designed to combat piracy, criminalizing actions aimed at circumventing controls put in place to protect copyrighted works. Kim Zetter, “Hacker Lexicon: What Is the Digital Millennium Copyright Act?,” *Wired*, June 6, 2016, <https://www.wired.com/2016/06/hacker-lexicon-digital-millennium-copyright-act/>. See also “The Digital Millennium Copyright Act of 1998: US Copyright Office Summary,” December 1998, <https://www.copyright.gov/legislation/dmca.pdf>.

<sup>55</sup> “The Music Modernization Act: Title I, Musical Works Modernization Act,” accessed on October 2, 2021, <https://www.copyright.gov/music-modernization/115/>.

<sup>56</sup> “The Music Modernization Act: Title I, Musical Works Modernization Act,” accessed on October 2, 2021, <https://www.copyright.gov/music-modernization/115/>.

<sup>57</sup> Web V Determination, at 2 (“The Act requires that the Judges ‘establish rates and terms that most clearly represent the rates and terms that would have been negotiated in the marketplace between a willing buyer and a willing seller.’”).

<sup>58</sup> Goldman Sachs, “Music In the Air,” Goldman Sachs Equity Research, May 14, 2020,

accelerated as a result of the pandemic, however. In the United States, in 2020, paid interactive streaming subscriptions had their highest ever single-year increase, growing to 75.5 million subscribers from 60.4 million in 2019.<sup>59</sup> And while the overall US economy suffered in 2020 as a result of the pandemic, the recorded music industry experienced another year of growth, almost entirely due to the success of interactive streaming.<sup>60</sup>

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<https://www.goldmansachs.com/insights/pages/infographics/music-in-the-air-2020/report.pdf>, p. 4-5.

<sup>59</sup> See Figure 5.

<sup>60</sup> See Figure 4.

### III. Interactive streaming industry

~~(38)~~(39) Revenue growth in the recorded music industry in the United States has been driven in recent years by the success of five large and a variety of smaller interactive streaming services. Competition among and investment by these streaming services have enhanced the music listening experience relative to that of past decades. Interactive streaming subscribers today are able to listen through a variety of devices (mobile phone, computer, tablet, car apps) with easy-to-use interfaces, and are routinely provided suggestions, playlists, and other content personalized to their own music taste and listening habits.

#### III.A. Growth in subscribers and listening

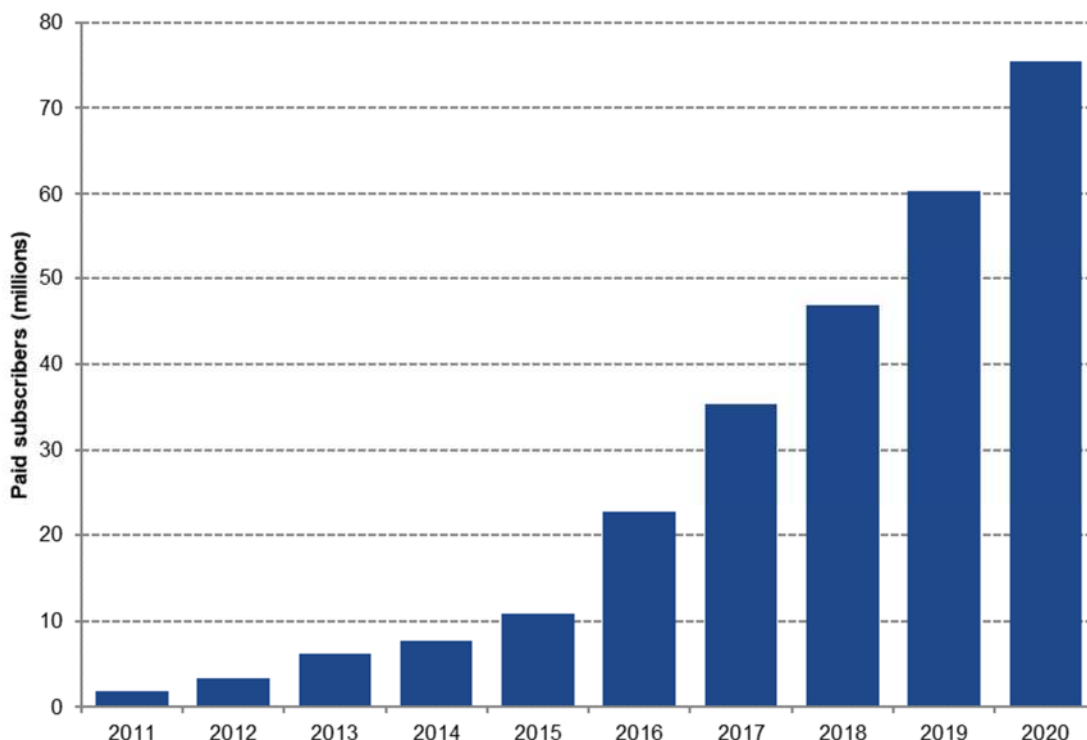
~~(39)~~(40) Increased revenue from interactive streaming services in the United States has been driven by an increase in interactive streaming subscribers in the United States. As shown in Figure 5, from 2016 to 2020, the number of subscribers of paid interactive streaming services increased by almost 250% in the United States to approximately 75 million (as compared with the approximately 120 million households in the United States in 2020).<sup>61</sup> This rise has driven increased music revenue in general and publishing revenue in particular.<sup>62</sup>

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<sup>61</sup> “QuickFacts: Population, Census, April 1, 2020,” US Census Bureau, accessed October 3, 2021, <https://www.census.gov/quickfacts/fact/table/US/POP010220> (showing 120,756,048 US households for 2015-2019).

<sup>62</sup> See Figure 4 above and Figure 14 below.

Figure 5: US paid interactive streaming subscribers, 2011–2020



Source: Joshua P. Friedlander, “Year-End 2020 RIAA Revenue Statistics,” Recording Industry Association of America, 2021, <https://www.riaa.com/wp-content/uploads/2021/02/2020-Year-End-Music-Industry-Revenue-Report.pdf>; Joshua P. Friedlander, “News and Notes on 2015 RIAA Shipment and Revenue Statistics,” Recording Industry Association of America, 2016, <https://www.riaa.com/wp-content/uploads/2016/03/RIAA-2015-Year-End-shipments-memo.pdf>; Joshua P. Friedlander, “News and Notes on 2014 RIAA Shipment and Revenue Statistics,” Recording Industry Association of America, 2015, [https://www.riaa.com/wp-content/uploads/2015/09/2013-2014\\_RIAA\\_YearEndShipmentData.pdf](https://www.riaa.com/wp-content/uploads/2015/09/2013-2014_RIAA_YearEndShipmentData.pdf).

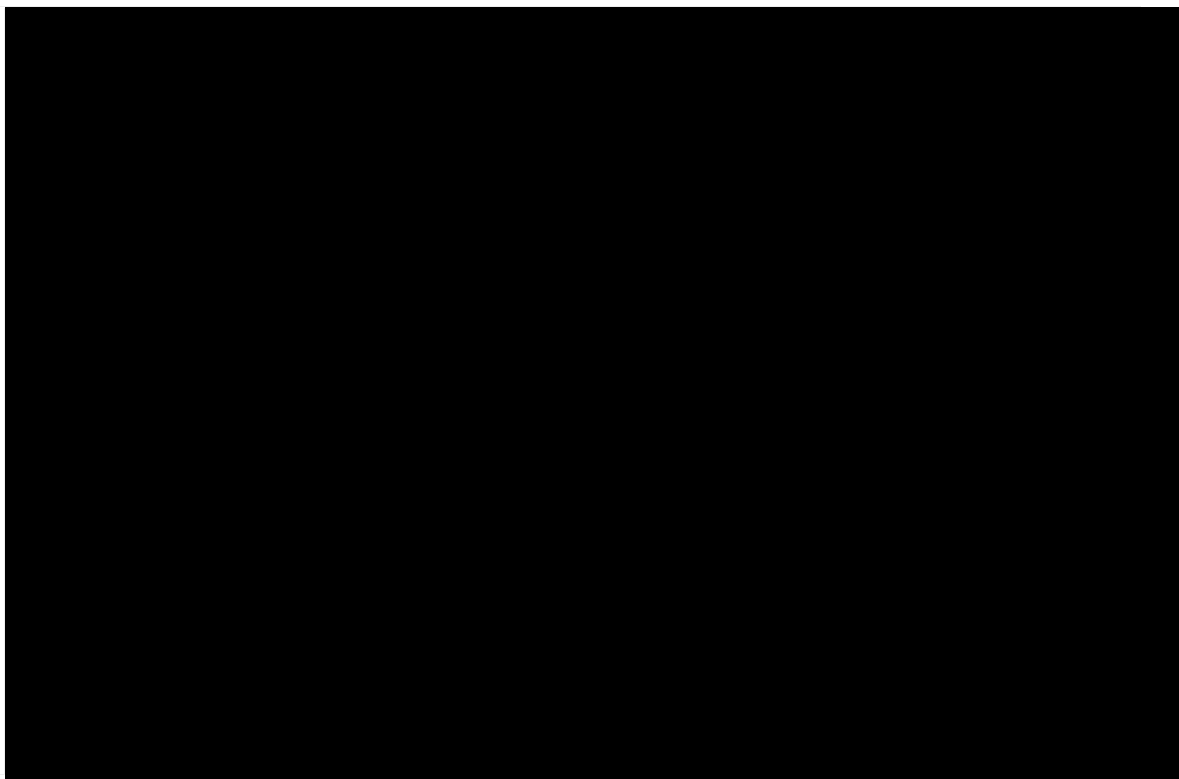
Notes:

1. Excludes “limited tier” streaming subscribers.
2. Subscriber numbers are annual averages.

~~(40)~~(41) In the last five years in particular, interactive streaming has been the fastest growing way in which Americans listen to audio. Edison Research’s “Share of Ear” survey, recording the aggregate time spent listening to various audio sources, shows that [REDACTED]

[REDACTED]

[REDACTED]

**Figure 6: Share of time spent listening to audio sources by US listeners, 2016–2020**

### III.B. Interactive streaming firms in United States

(41)(42) The interactive streaming market is highly competitive and is expected to remain so.<sup>63</sup> In the United States, the five largest interactive streaming services are those offered by Amazon, Spotify, Apple, Google, and Pandora. Other interactive streaming providers in the United States include Tidal, Napster, Deezer, and Soundcloud. The Klein Survey found that respondents who streamed music

<sup>63</sup> See Written Direct Testimony of Tami Hurwitz, October 13, 2021 [hereinafter, “Hurwitz WDT”], ¶¶87-88 (“[REDACTED]”) See also Goldman Sachs, “Music In the Air,” Goldman Sachs Equity Research, May 14, 2020, <https://www.goldmansachs.com/insights/pages/infographics/music-in-the-air-2020/report.pdf>, p. 31 (“We believe the market will remain highly competitive in the coming years given the global expansion of ByteDance’s Resso, the recently announced expansion of Apple Music into 52 new markets (albeit small) and the surge in smart speaker listening amid COVID-19 benefitting Amazon Music.”).

from one of Amazon’s services in “the past month” have also streamed music from [REDACTED]

.<sup>64</sup>

### III.B.1. Amazon

~~(42)~~(43) While mainly known for its online retail business, Amazon entered the interactive streaming business with Amazon Music Prime (“Prime Music”) in 2014, offering a limited library of songs to its Amazon Prime subscribers at no additional cost.<sup>65</sup> It has since expanded its offerings to include a paid subscription service and an ad-supported free service offered to non-Prime subscribers. Unlimited, its paid subscription service, debuted in 2016, while Free, its free ad-supported service, debuted in 2019.<sup>66</sup> I describe the Amazon interactive streaming offerings in more detail in Section IV below.

### III.B.2. Spotify

~~(43)~~(44) Spotify was one of the first major interactive streaming services, first offering service in the United States in 2011.<sup>67</sup> It offers interactive streaming through a paid subscription service and an ad-supported free tier with more limited functionality.<sup>68</sup> Although the subscription-based Spotify Premium is one of the most popular paid services in the United States based on the number of subscribers, it has lost market share as other services have entered the streaming market.<sup>69</sup>

### III.B.3. Apple

~~(44)~~(45) Apple began distributing music with the launch of its iTunes Store in 2003, where it sold PDDs alongside other digital media.<sup>70</sup> Apple launched its interactive streaming service, Apple Music, in

<sup>64</sup> Klein WDT, Table 2.

<sup>65</sup> Edward C. Baig, “New Amazon Prime Benefit: Music,” *USA Today*, June 13, 2014, <https://www.usatoday.com/story/tech/2014/06/12/amazon-prime-adds-prime-music/10359025/>.

<sup>66</sup> Dan Seifert, “Amazon’s Full On-Demand Streaming Music Service Launches Today,” *The Verge*, October 12, 2016, <https://www.theverge.com/2016/10/12/13244158/amazon-music-unlimited-launch-echo-availability-price>; Todd Spangler, “Amazon Music Expands Access to Free Streaming Service, Spotify Stock Falls,” *Variety*, November 18, 2019, <https://variety.com/2019/digital/news/amazon-music-free-streaming-1203408520/>.

<sup>67</sup> Ben Sisario, “New Service Offers Music in Quantity, Not by Song,” *New York Times*, July 13, 2011, <https://www.nytimes.com/2011/07/14/technology/spotify-music-streaming-service-comes-to-us.html>.

<sup>68</sup> According to Spotify’s royalty rate data, Spotify offers a bundled service, a standalone non-portable service, and a standalone portable subscription service, in addition to its free ad-supported service. Spotify’s Premium service offers additional features that its free service lacks, such as the ability to download music or listen to music in “[h]ighest music quality.” For a full list of additional features of Spotify’s Premium service, see <https://support.spotify.com/us/article/premium-plans/>.

<sup>69</sup> Dylan Smith, “Spotify Is Slowly Losing Market Share to Rivals YouTube Music, Tencent Music, Amazon, and Others—Report,” *Digital Music News*, July 14, 2021, <https://www.digitalmusicnews.com/2021/07/14/spotify-market-share-analysis/>. See also Patrick Seitz, “Spotify Losing Market Share to Faster-Growing Subscription Music Rivals,” *Investor’s Business Daily*, July 12, 2021, <https://www.investors.com/news/technology/spotify-stock-streaming-music-leader-losing-market-share/#:~:text=Spotify%20lost%20two%20percentage%20points,is%20other%20services%20grew%20faster>.

<sup>70</sup> Apple Press Release, “Apple Launches the iTunes Music Store,” April 28, 2003,

2015; that quickly grew to become one of the most popular interactive streaming services in the United States.<sup>71</sup>

### III.B.4. Google

~~(45)~~(46) Google's video subsidiary, YouTube, has long hosted music-associated video content, including label-produced music videos as well as user-created videos and music recordings.<sup>72</sup> Google launched its first interactive streaming service, Google Play Music, in 2013.<sup>73</sup> It launched a separate streaming service, YouTube Music, in 2015.<sup>74</sup> In December 2020, Google discontinued the Google Play Music service and moved those users to the YouTube Music interactive streaming service.<sup>75</sup> YouTube Music offers on-demand streaming with a free, ad-supported tier as well as a premium, ad-free tier.<sup>76</sup>

### III.B.5. Pandora

~~(46)~~(47) Pandora first entered music streaming in 2005 with a free non-interactive streaming service that played songs based on an algorithm attuned to the user's preferences.<sup>77</sup> In 2016, Pandora launched Pandora Plus, an ad-free paid service that gives users some access to offline listening and unlimited station skips.<sup>78</sup> In 2017, it added Pandora Premium, a subscription-based interactive streaming service that allows on-demand listening and custom playlists.<sup>79</sup> Pandora also offers Pandora Premium Access,

<https://www.apple.com/newsroom/2003/04/28Apple-Launches-the-iTunes-Music-Store/>.

<sup>71</sup> Alyssa Newcomb, "Apple Music Launch: Hands on with Apple's New Streaming Service," ABC News, June 30, 2015, <https://abcnews.go.com/Technology/apple-music-launch-hands-apples-streaming-service/story?id=32126427>; see Figure 8.

<sup>72</sup> Andrew Ross Sorkin and Jeremy Peters, "Google to Acquire YouTube for \$1.65 Billion," *New York Times*, October 9, 2006, <https://www.nytimes.com/2006/10/09/business/09cnd-deal.html>.

<sup>73</sup> Ron Amadeo, "RIP Google Play Music, 2011–2020," *ARS Technica*, October 28, 2020, <https://arstechnica.com/gadgets/2020/10/rip-google-play-music-2011-2020/>.

<sup>74</sup> Cody Lee, "YouTube Launches Standalone YouTube Music App," *iDownload* (blog), November 12, 2015, <https://www.idownloadblog.com/2015/11/12/youtube-music-app-for-ios/>.

<sup>75</sup> Rita El Khoury, "Google Play Music Is Now Officially Dead, Dead, Dead (Update: ... Dead)," *Android Police*, December 3, 2020, <https://www.androidpolice.com/2020/12/03/google-play-music-is-now-officially-dead-dead-dead/>.

<sup>76</sup> "Get Started with YouTube Music," YouTube Music Help, accessed October 3, 2021, <https://support.google.com/youtubemusic/answer/6313529>.

<sup>77</sup> Stephanie Clifford, "Pandora's Long Strange Trip. Online Radio That's Cool, Addictive, Free, and—Just Maybe—A Lasting Business," February 6, 2020, <https://www.inc.com/magazine/20071001/pandoras-long-strange-trip.html>.

<sup>78</sup> Kelly Laffey, "'What Is the Difference between Pandora Plus and Pandora Premium?': Here's What Pandora's Paid Service Tiers Offer," *Business Insider*, February 12, 2020, <https://www.businessinsider.com/what-is-the-difference-between-pandora-plus-and-pandora-premium>; See also Micah Singleton, "Pandora Launches Pandora Plus, an Improved Version of Its \$5 Subscription Service," *The Verge*, September 15, 2016, <https://www.theverge.com/2016/9/15/12924910/pandora-plus-improved-subscription-service>. Based on Pandora royalty rate files, Pandora Plus is classified as a limited offering interactive service.

<sup>79</sup> Chris Welch, "Pandora Premium Is Now Available to All Users for \$10 Monthly," *The Verge*, April 18, 2017, <https://www.theverge.com/2017/4/18/15336888/pandora-premium-music-service-now-available-all-users>. See also Kelly Laffey, "'What Is the Difference between Pandora Plus and Pandora Premium?': Here's What Pandora's Paid Service Tiers Offer," *Business Insider*, February 12, 2020, <https://www.businessinsider.com/what-is-the-difference-between-pandora-plus-and-pandora-premium>. Based on Pandora royalty rate files, Pandora Premium is classified as a

which allows listeners limited-time access to on-demand content after interacting with an advertisement.<sup>80</sup> In 2019, the satellite radio company SiriusXM acquired Pandora.<sup>81</sup>

### **III.B.6. Comparison of major interactive streaming services**

~~(47)(48)~~ All the major paid subscription interactive streaming services offer similar pricing and catalog size, as shown in Figure 7.

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standalone portable subscription interactive service.

<sup>80</sup> “Premium Access,” Pandora Help, accessed October 5, 2021, <https://help.pandora.com/s/article/Pandora-Premium-Sessions-1519949303783>. Based on Pandora royalty rate files, Pandora Premium Access is classified as a limited offering interactive streaming service.

<sup>81</sup> SiriusXM, “Sirius XM Completes Acquisition of Pandora,” press release, February 1, 2019, <https://investor.siriusxm.com/investor-overview/press-releases/press-release-details/2019/SiriusXM-Completes-Acquisition-of-Pandora/default.aspx>.





**Figure 8: Major interactive streaming services by US subscriber share, 2020 Q1**

Service	Subscribers	Share
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]



### III.B.7. Others

~~(48)~~(49) Other interactive streaming services available in the United States include Tidal, Napster, Deezer, and SoundCloud. In addition, ByteDance, the owner of TikTok, has entered the interactive music streaming space with a service called Resso, currently testing in a few markets internationally and potentially expanding globally.<sup>84</sup>

~~(49)~~(50) A number of other streaming services have come and gone over the years, including Groove music, Grooveshark, Guvera, Rara, Batanga Radio, WiMP, Thumbplay, Rdio, and thesixtyone.<sup>85</sup>

<sup>84</sup> Aniruddha Ganguly, “ByteDance’s Resso Stirs Up Competition in Music Streaming Space,” Nasdaq, December 12, 2019, <https://www.nasdaq.com/articles/bytedances-resso-stirs-up-competition-in-music-streaming-space-2019-12-12>; See also Ingrid Lunden and Manish Singh, “Resso, ByteDance’s Music Streaming App, Officially Launches in India, sans Tencent-Backed Universal Music,” *TechCrunch*, March 4, 2020, <https://techcrunch.com/2020/03/04/resso-music-india-bytedance/>; See also Goldman Sachs, “Music in the Air,” Goldman Sachs Equity Research, May 14, 2020, <https://www.goldmansachs.com/insights/pages/infographics/music-in-the-air-2020/report.pdf>, p. 31 (“We believe the market will remain highly competitive in the coming years given the potential global expansion of ByteDance’s Resso, the recently announced expansion of Apple Music into 52 new markets (albeit small) and the surge in smart speaker listening amid COVID-19 benefiting Amazon Music.”).

<sup>85</sup> “Groove Music and Spotify: FAQ,” Microsoft support, accessed October 12, 2021, <https://support.microsoft.com/en-us/windows/groove-music-and-spotify-faq-7f5e6c92-c662-0e14-a866-45ad8782dd91>; Sam Byford, “Grooveshark is dead,” *The Verge*.com, April 30, 2015, <https://www.theverge.com/2015/4/30/8526105/grooveshark-shuts-down-settles-with-labels>; Michael Bailey, “Guvera ceases operations, co-founder Claes Loberg leaves,” *Financial Review*, May 12, 2017, <https://www.afr.com/technology/guvera-ceases-operations-cofounder-claes-loberg-leaves-20170512-gw40oq>; Tim Ingham, “Rara will be shut or sold as CEO Jez Bell exits,” *Music Business Worldwide*, March 13, 2015, <https://www.musicbusinessworldwide.com/rara-must-be-sold-or-closed-as-ceo-exits/>; “bRadio”, bRadio, accessed on October 12, 2021, <http://www.bradiio.com/>; Coral Williamson, “Wimp and Tidal services merge,” *MusicWeek*, March 23, 2015, <https://www.musicweek.com/digital/read/wimp-and-tidal-services-merge/061258>; “Clear Channel Radio Announces Acquisition of Thumbplay’s Cloud-Based Music Business,” *Business Wire*, March 1, 2011, <https://www.businesswire.com/news/home/20110228007392/en/Clear-Channel-Radio-Announces-Acquisition-Thumbplay%E2%80%99s-Cloud-Based>; Jackie Dana, “thesixtyone.com: a lesson in hubris,” *Festival Peak*, January 15, 2016, <https://festivalpeak.com/thesixtyone-com-a-lesson-in-hubris-48dab1865c0>; Ingrid Lunden, “Pandora To Buy Rdio Assets For \$75M In Cash, Rdio Files Ch.11, Will Shutter Service,” *The Crunch.com*, November 16, 2015, <https://techcrunch.com/2015/11/16/confirmed-pandora-buys-key-rdio-assets-for-75m-in-cash-rdio-files-ch-11-to-shut-down/>.

### III.C. Investments and innovations by interactive streaming services

~~(50)~~(51) Alongside their growth and expansion, interactive streaming services have made numerous improvements to their products and increased their integration with a variety of listening devices. In this section I list some of these innovations, focusing on interactive streaming innovations created by Amazon, for which I currently have access to more information than I do for the other streaming services, though in many cases other services have created similar enhancements.<sup>86</sup>

#### III.C.1. Consumer-facing innovations

~~(51)~~(52) Since 2017, Amazon has made numerous consumer-facing innovations and improvements to its services.<sup>87</sup> Some examples include:

- **Amazon Music HD:** In September 2019, Amazon released a new subscription tier allowing subscribers access to millions of songs in high definition and ultra-high definition (HD).<sup>88</sup> In May 2021, Amazon made high-definition audio available to Unlimited Subscribers at no extra cost.<sup>89</sup>

<sup>86</sup> See, e.g., “Apple Music announces Spatial Audio with Dolby Atmos; will bring Lossless Audio to entire catalog,” Apple, Newsroom, May 17, 2021, <https://www.apple.com/newsroom/2021/05/apple-music-announces-spatial-audio-and-lossless-audio/> (“Apple today announced Apple Music is bringing industry-leading sound quality to subscribers with the addition of Spatial Audio with support for Dolby Atmos. Spatial Audio gives artists the opportunity to create immersive audio experiences for their fans with true multidimensional sound and clarity.”); “6 New Features to ‘Unwrap’ in Your Spotify 2020 Wrapped,” Spotify, Newsroom, December 1, 2020, <https://newsroom.spotify.com/2020-12-01/6-new-features-to-unwrap-in-your-spotify-2020-wrapped/> (“New personalized playlists will help you make the most of what you listened to this year. These range from Your Top Songs, the songs you loved most this year in one convenient place, to Missed Hits, our Wrapped discovery playlist where we recommend popular similar 2020 releases you didn’t listen to that we think you might like.”); “Youtube Music,” Google Play, Apps, accessed October 9, 2021, <https://play.google.com/store/apps/details?id=com.google.android.apps.youtube.music&hl=en&gl=us> (“Personalized playlists and Mixes made just for you, built around your favorite types of music... Song lyrics so you can sing along to your favorites.... Compatible with Google Maps, Waze, Google Assistant, and more.”).

<sup>87</sup> In addition, Amazon has continued to invest in algorithms and curation for creating stations and playlists. See, e.g., Ashley King, “Amazon Is Patenting Technology That Predicts Future Hits and Popular Artists,” *Digital Music News*, January 29, 2020, <https://www.digitalmusicnews.com/2020/01/29/amazon-music-patent-predicts-hits/>; Kyle Rooney, “Amazon Music Launches ‘Rap Rotation’ Playlist,” *Hot New Hip Hop*, June 17, 2019, <https://www.hotnewhiphop.com/amazon-music-launches-rap-rotation-playlist-news.83087.html>; Chris Eggertsen, “Amazon Music’s New R&B Discovery Playlist Launches with Ari Lennox ‘Walk on By’ Cover,” *Billboard*, September 6, 2019, <https://www.billboard.com/articles/business/streaming/8529338/amazon-music-rb-rotation-playlist-ari-lennox/>.

Several of these features are mentioned in the Klein Survey as “[i]mportant criteria in decision to choose a music streaming service.” Klein WDT, Table 21, Table 36, Table 42. See also Hurwitz WDT, ¶¶ 31-45.

<sup>88</sup> Amazon, “Amazon Music Introduces Highest Quality Audio for Streaming with Amazon Music HD,” news release, September 17, 2019, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-introduces-highest-quality-audio-streaming-amazon>. See also Darrell Etherington, “Amazon Launches Amazon Music HD with Lossless Audio Streaming,” *Tech Crunch*, September 17, 2019, <https://techcrunch.com/2019/09/17/amazon-launches-amazon-music-hd-with-lossless-audio-streaming/>.

<sup>89</sup> Amazon, “Amazon Music HD for All, Now at No Extra Cost,” press release, May 17, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-hd-all-now-no-extra-cost>.

- **X-Ray:** In November 2020, Amazon added a feature to its streaming services called X-Ray, which shows facts, trivia, and other insights about a song as it is playing.<sup>90</sup>
- **DJ Mode:** In June 2021, Amazon launched “DJ Mode,” which allows subscribers to select stations for on-demand streaming with DJ commentary from artists and hosts.<sup>91</sup>
- **Car Mode:** In April 2021, Amazon introduced “Car Mode,” a simplified version of the Amazon Music app that interacts with vehicle displays and has larger buttons for easier use while driving.<sup>92</sup>
- **Merchandise availability:** In March 2021, Amazon announced that Amazon Music users would have the ability to buy artist merchandise directly through the Amazon Music app.<sup>93</sup> The merchandise, ranging from t-shirts and other apparel to coffee mugs and vinyl records, appears alongside songs on pages of participating artists.<sup>94</sup>
- **In-app music video streaming:** In 2020, Amazon began offering in-app music video streaming to certain subscribers.<sup>95</sup>
- **Podcasts:** In September 2020, Amazon Music announced the launch of podcasts in the United States, United Kingdom, Germany, and Japan, across all tiers of its streaming service at no additional cost.<sup>96</sup>
- **Hands-free listening:** In September 2017, Amazon added Alexa voice controls to the mobile music app, enabling customers to request music by a song’s lyrics, genre, decade, mood, tempo,

<sup>90</sup> Jon Porter, “Amazon Music Adds Behind-the-Scenes Trivia for Songs with New X-Ray Features,” *The Verge*, November 20, 2020, <https://www.theverge.com/2020/11/20/21583123/amazon-music-x-ray-trivia-song-tracks>.

<sup>91</sup> Amazon, “Amazon Music Launches DJ Mode: The Brand New, On-Demand Listening Experience Blends Music with Commentary from Artists and Hosts, Bringing Fans Even Closer to the Music They Love,” news release, June 10, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-launches-dj-mode-brand-new-demand-listening>.

<sup>92</sup> Ian Campbell, “Amazon Music Now Has a Car Mode for Easier Use While Driving,” *The Verge*, April 7, 2021, <https://www.theverge.com/2021/4/7/22372235/amazon-music-car-mode-driving-bigger-text-buttons-alexa>.

<sup>93</sup> Amazon, “Amazon Music Launches New Shopping Experience, Making It Easier for Fans to Find Merch from Their Favorite Artists,” news release, March 10, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-launches-new-shopping-experience-making-it-easier>.

<sup>94</sup> Some of the artist offerings are exclusive to Amazon, and the “majority” are available for Prime shipping to Prime members. Amazon, “Amazon Music Launches New Shopping Experience, Making It Easier for Fans to Find Merch from Their Favorite Artists,” news release, March 10, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-launches-new-shopping-experience-making-it-easier>. See also Chris Eggertson, “Amazon Music Launches In-App Merch Integration, Exclusive Artist Collections,” *Billboard*, March 10, 2021, <https://www.billboard.com/articles/business/9537487/amazon-music-merch-integration-streaming-selena-gomez/>.

<sup>95</sup> At the time of its launch, music video streaming was available only to Amazon Unlimited and Amazon HD members. I discuss these subscription plans in greater detail in Section IV. Chris Welch, “Amazon Music Unlimited Now Lets You Stream Music Videos,” *The Verge*, December 1, 2020, <https://www.theverge.com/2020/12/1/21776080/amazon-music-unlimited-videos-now-available>.

<sup>96</sup> Amazon, “Amazon Music Launches Podcasts for Customers Across the U.S., U.K., Germany and Japan,” news release, September 16, 2020, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-launches-podcasts-customers-across-us-uk-germany>.

or activity.<sup>97</sup> In May 2018, Amazon enhanced this feature—customers previously had tap-to-talk functionality but could now activate Alexa by voice alone.<sup>98</sup>

- **Song ID:** In March 2019, Amazon added a feature that allowed listeners to request that Alexa announce the title and artist of a song before it played on an Echo device.<sup>99</sup>
- **New release notifications:** In November 2018, Amazon added a feature that enabled Echo users to ask Alexa to notify them when their favorite artists release a new song or album.<sup>100</sup>

### III.C.2. Artist-facing innovations

~~(52)~~(53) Amazon has also added enhancement directed at artists, including:

- **Breakthrough:** In July 2020, Amazon added the Breakthrough program, aimed at supporting developing artists by working with them to create video and audio content and market their work.<sup>101</sup>
- **Amazon Music for Artists:** In March 2020, Amazon launched a mobile app to help artists analyze their streaming performance and audience.<sup>102</sup> The data go back to 2018 and are updated multiple times per day.<sup>103</sup>

<sup>97</sup> Amazon, “Amazon Music Brings Alexa to Mobile Music Streaming,” news release, September 26, 2017, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-brings-alexa-mobile-music-streaming>. See also Richard Trenholm, “Alexa Now Works in Amazon Music on iPhone and Android,” *CNET*, September 26, 2017, <https://www.cnet.com/news/alexa-now-works-in-amazon-music-on-iphone-and-android-ios-echo-siri/>.

<sup>98</sup> Sarah Perez, “Amazon Music’s App Adds Hands-Free Listening, Courtesy of Alexa,” *Tech Crunch*, May 24, 2018, <https://techcrunch.com/2018/05/24/amazon-musics-app-adds-hands-free-listening-courtesy-of-alexa/>. Alexa is Amazon’s voice artificial intelligence and virtual assistant. Anyone with internet access and a device that is connected to Alexa can pose questions or make requests. As Amazon puts it, “Alexa can play your favorite song, read the latest headlines, dim the lights in your living room, and more.” “Alexa Features,” Amazon, accessed October 3, 2021, <https://www.amazon.com/b?ie=UTF8&node=21576558011>.

<sup>99</sup> Angela Moscaritolo, “What’s That Song? Amazon Music Song ID Can Help,” *PC Mag*, March 6, 2019, <https://www.pcmag.com/news/whats-that-song-amazon-music-song-id-can-help>.

<sup>100</sup> Angela Moscaritolo, “Alexa Can Notify You about New Releases from Your Favorite Artists,” *PC Mag*, November 6, 2018, <https://www.pcmag.com/news/alexa-can-notify-you-about-new-releases-from-your-favorite-artists#:~:text=If%2C%20for%20instance%2C%20you',Player%20by%20pressing%20the%20%22Follow%22>.

<sup>101</sup> Amazon, “Amazon Music Announces Breakthrough, a New Global Developing Artist Program,” news release, July 15, 2020, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-announces-breakthrough-new-global-developing-artist>.

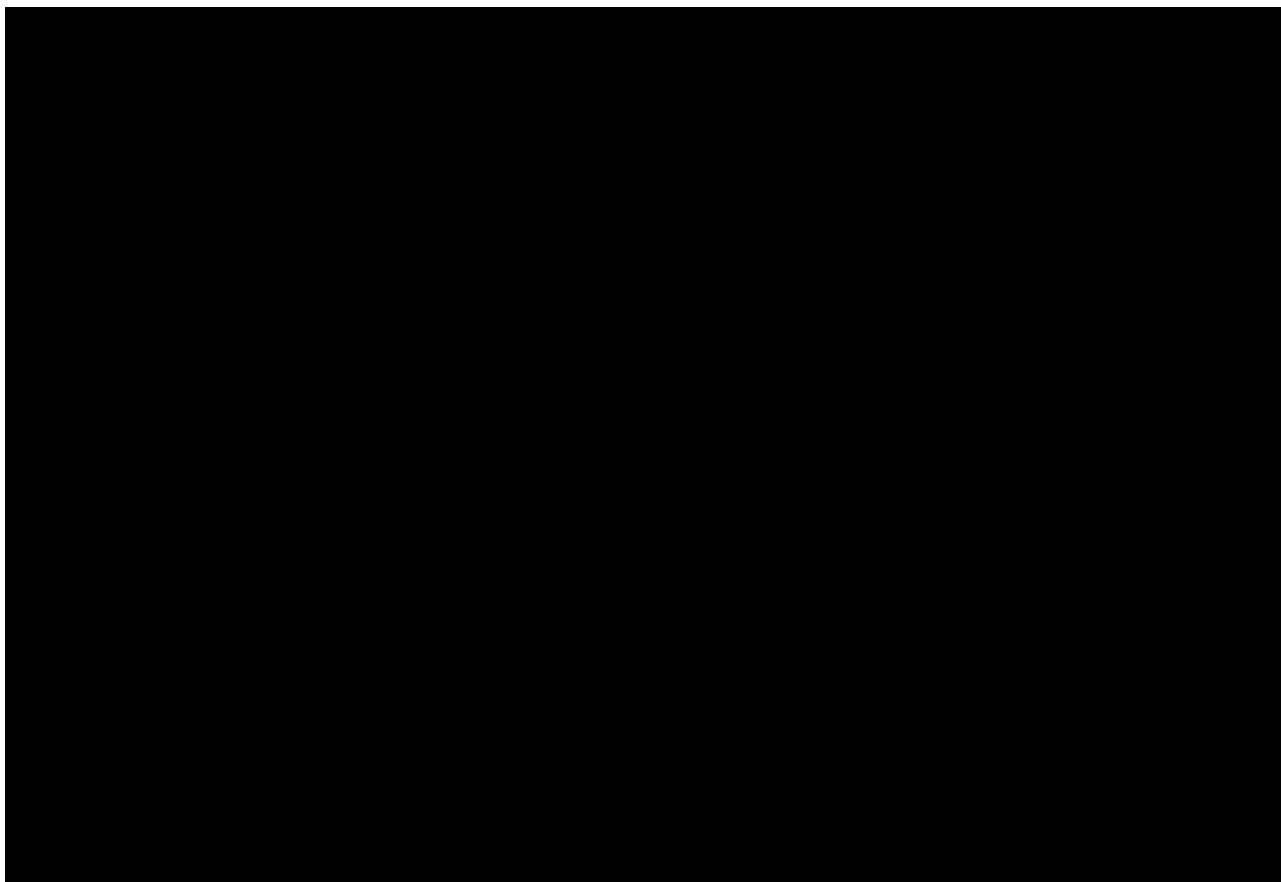
<sup>102</sup> Variety, “Amazon Music for Artists’ Mobile App Launches,” *Variety*, March 13, 2020, <https://variety.com/2020/music/news/amazon-music-for-artists-mobile-app-launches-1203533116/>.

<sup>103</sup> Variety, “Amazon Music for Artists’ Mobile App Launches,” *Variety*, March 13, 2020, <https://variety.com/2020/music/news/amazon-music-for-artists-mobile-app-launches-1203533116/>.

### III.C.3. R&D spending

~~(53)~~(54) In 2017, the year following the introduction of its Unlimited service, Amazon Music spent nearly [REDACTED] of its revenue on R&D.<sup>104</sup> Since then, Amazon Music [REDACTED] it invests in R&D.

Figure 9: R&D spending by Amazon on music services, worldwide



~~(54)~~(55) Other interactive streaming services also invest heavily in research and development. In 2019, Spotify reported spending €615 million (approximately \$713 million) on R&D globally, an amount that has grown every year since 2015.<sup>105</sup> In the same year, Pandora reported spending \$280 million on


<sup>104</sup> [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]


<sup>105</sup> Spotify, Annual Report (Form 20-F) (December 31, 2019), 8. *See also* “615 Million EUR to USD - Euro to US Dollar,” Converter X, accessed October 3, 2021, <https://www.currencyconverterx.com/EUR/USD/615000000>.

engineering, design, and development globally, twice as much as it spent the previous year and more than three times as much as it did in 2016.<sup>106</sup>

### III.D. Interactive streaming profits

~~(55)~~(56) While interactive streaming revenues have increased dramatically in recent years, the industry has struggled with profitability. Spotify, despite being the largest service globally, has not posted an annual profit in its 12 years since launch.<sup>107</sup> Spotify ended 2020 with an overall loss, despite an unprecedented growth in subscriptions attributed to the coronavirus pandemic.<sup>108</sup>

~~(56)~~(57) Figure 10 shows worldwide revenue and profit margin for Unlimited from 2018 to 2020. 



<sup>106</sup> This corresponds to the engineering, design, and development spending of the parent company, Sirius XM. Sirius XM, Annual Report (Form 10-K)(December 31, 2019), p. 33, <https://www.sec.gov/Archives/edgar/data/908937/000090893720000011/siri-20191231x10k.htm>. Sirius XM, Annual Report (Form 10-K) (December 31, 2018), p. 28, <https://www.sec.gov/Archives/edgar/data/908937/000090893719000008/siri-20181231x10k.htm>. “Engineering, design and development spending” was \$280 million, \$123 million, and \$82 million in 2019, 2018, and 2016, respectively.

<sup>107</sup> Tim Ingham, “Loss-making Spotify will continue to put growth ahead of profit for ‘next few years,’” *Music Business Worldwide*, May 6, 2020, <https://www.musicbusinessworldwide.com/loss-making-spotify-will-continue-to-focus-on-growth-over-profit-for-next-few-years/>.

<sup>108</sup> Anne Steele, “Spotify Adds Subscribers with Focus on Podcasts,” *Wall Street Journal*, February 3, 2021, <https://www.wsj.com/articles/spotify-adds-subscribers-with-focus-on-podcasts-11612350000>.

**Figure 10: Worldwide revenue and profit margin for Amazon Music Unlimited, 2018–2020**

### III.E. Rise of podcasting

~~(57)~~(58) Podcasts are one of the fastest growing areas in audio entertainment. In 2020, over 100 million Americans, or 37% of the population, were monthly podcast listeners.<sup>109</sup> This was up from 32% in 2019 and only 12% a decade prior.<sup>110</sup> In recent years, consumers have increasingly turned to interactive streaming services for podcast discovery and playback, as well as for podcasts that are exclusive to a particular service.<sup>111</sup> A survey in February 2020 found that Spotify, Apple Podcasts,

<sup>109</sup> Anna Washenko, “Infinite Dial 2020: For the First Time, More than 100 Million Americans Are Monthly Podcast Listeners,” *RAIN News*, March 19, 2020, <https://rainnews.com/infinite-dial-2020-for-the-first-time-more-than-100-million-americans-are-monthly-podcast-listeners/>.

<sup>110</sup> Anna Washenko, “Infinite Dial 2020: For the First Time, More than 100 Million Americans Are Monthly Podcast Listeners,” *RAIN News*, March 19, 2020, <https://rainnews.com/infinite-dial-2020-for-the-first-time-more-than-100-million-americans-are-monthly-podcast-listeners/>.

<sup>111</sup> Mark Sweney, “Spotify Credits Podcast Popularity for 24% Growth in Subscribers,” *The Guardian*, February 3, 2021, <https://www.theguardian.com/technology/2021/feb/03/spotify-podcast-popularity-24-percent-growth-subscribers>. Filipe Esposito, “Analyst Says Spotify Is Close to Overtaking Apple Podcasts in Number of Users,” *9TO5Mac*, September 21, 2021, <https://9to5mac.com/2021/09/21/analyst-says-spotify-is-close-to-overtaking-apple-podcasts-in-number-of-users/>.



Google Podcasts, and Pandora were the four most popular apps used to listen to podcasts in the United States.<sup>112</sup>

~~(58)~~(59) Spotify has been investing in its non-music content, acquiring three podcasting companies for nearly \$400 million in 2019 and purchasing *The Ringer* sports website and podcasting network for between €130 and €180 million in 2020.<sup>113</sup> Spotify also made headlines in 2020 after signing a deal reportedly valued at more than \$100 million to be the exclusive host of *The Joe Rogan Experience* podcast.<sup>114</sup> Amazon added podcasts to its streaming platform in 2020.<sup>115</sup>

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<sup>112</sup> “Spotify Listening Is Changing, Gen Z Brand Expectations and How Over-50s View Retail,” *eMarketer*, August 3, 2020, <https://www.emarketer.com/content/podcast-spotify-listening-changing-gen-z-brand-expectations-how-over-50s-view-retail>.

<sup>113</sup> Lauren Feiner, “Spotify Makes Another Podcast Acquisition, Buying Bill Simmons’ *The Ringer*,” *CNBC*, February 5, 2020, <https://www.cnbc.com/2020/02/05/spotify-spot-earnings-spotify-acquires-the-ringer-to-boost-podcasts.html>. *See also* Todd Spangler, “Spotify Is Paying Up to \$196 Million in Cash to Acquire Bill Simmons’ *The Ringer*,” *Variety*, February 12, 2020, <https://variety.com/2020/digital/news/spotify-acquires-the-ringer-196-million-cash-bill-simmons-1203502471/>.

<sup>114</sup> Anne Steele, “Spotify Strikes Podcast Deal with Joe Rogan Worth More than \$100 Million,” *Wall Street Journal*, May 19, 2020, <https://www.wsj.com/articles/spotify-strikes-exclusive-podcast-deal-with-joe-rogan-11589913814>.

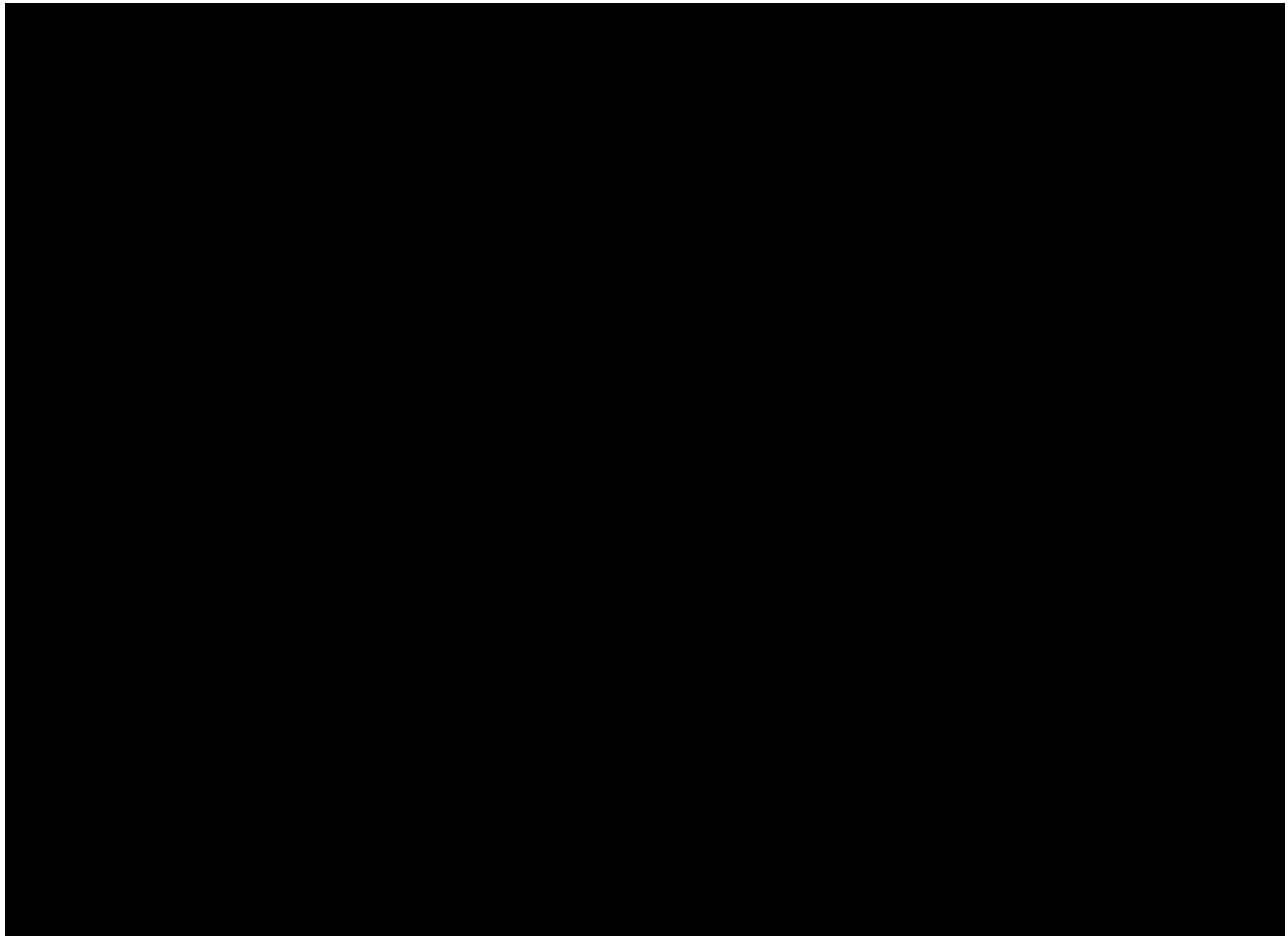
<sup>115</sup> Sarah Perez, “Amazon Music Adds Podcasts, Including Its Own Original Shows,” *TechCrunch*, September 16, 2020, <https://techcrunch.com/2020/09/16/amazon-music-adds-podcasts-including-its-own-original-shows/>.

## IV. Amazon's music offerings

~~(59)~~(60) Amazon operates [REDACTED] interactive streaming services in the United States [REDACTED],<sup>116</sup> as well as an online music store offering permanent digital downloads, physical CDs, and vinyl records. Amazon offers three music streaming services in the United States: Unlimited, Prime Music, and Free. In addition to these options for downloading and streaming music, Amazon also facilitates the listening and use of both its own and other streaming services through its Amazon Echo smart speakers.

~~(60)~~(61) Figure 11 below shows the number of US subscribers (or users, in the case of Prime and Free) by Amazon service from October 2016 through June 2021.

**Figure 11: Amazon Music US users, by service, October 2016–June 2021**



~~(61)~~(62) Figure 12 summarizes the features included with each Amazon streaming service. I discuss each service in more detail in the subsequent sections.

**Figure 12: Amazon streaming service features by service**

Feature	Free	Prime Music	Unlimited
Available titles	Limited catalog of pre-set playlists	2 million songs	75 million songs
Playlists	Top playlists	Thousands of playlists	Thousands of playlists
Stations	Thousands of stations	Thousands of stations, including personalized streaming stations	Thousands of stations, including personalized streaming stations
Podcasts	Yes	Yes	Yes
HD streaming	No	No	Yes
3D Echo playback	No	No	Yes. 3D audio is available on Amazon Echo Studio device only.
Ad-free unlimited plays	No	Yes	Yes
Streaming limits	One device at a time.	One device at a time.	One device at a time for those on the Individual or Single-device plan. Six devices at a time for those on the Family Plan.
Alexa interaction	Yes	Yes	Yes
Offline playback	No	Yes	Yes, except for Single-Device Plans and 3D audio.

Sources: Amazon, “What Are the Differences Between the Amazon Music Subscriptions?” accessed August 11, 2021, <https://www.amazon.com/gp/help/customer/display.html?nodeId=GW3PHAUCZM8L7W9L>, unless otherwise footnoted; Amazon, “Amazon Music Launches Podcasts for Customers Across the U.S., U.K., Germany and Japan,” news release, September 16, 2020, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-launches-podcasts-customers-across-us-uk-germany>; Amazon, “Amazon Music HD for All, Now at No Extra Cost,” May 17, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-hd-all-now-no-extra-cost>; Duffett-Smith WDT, ¶ 22 (“Free is a limited-catalog, lean-back service that offers a variety of pre-set playlists.”).

## IV.A. Amazon Music Unlimited

~~(62)~~(63) Unlimited is Amazon’s paid subscription service, offering unlimited, ad-free access to a catalog of over 70 million songs in HD and more than 7 million songs in ultra-HD.<sup>117</sup> The service offers online streaming and offline listening via limited downloads.<sup>118</sup> It also offers subscribers access to “lean back” listening via thousands of playlists and streaming stations, including personalized streaming stations and customized playlists.<sup>119</sup>

<sup>116</sup> Hurwitz WDT, ¶ 89.

<sup>117</sup> Amazon, “Amazon Music HD for All, Now at No Extra Cost,” news release, May 17, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-hd-all-now-no-extra-cost>.

<sup>118</sup> Amazon, “Downloading Music,” accessed October 9, 2021, [https://www.amazon.com/gp/help/customer/display.html?ref\\_=hp\\_bc\\_nav&nodeId=G4PKCR76YF6ALNQU](https://www.amazon.com/gp/help/customer/display.html?ref_=hp_bc_nav&nodeId=G4PKCR76YF6ALNQU).

<sup>119</sup> “Lean forward” or active listeners are those who actively seek out a track through search or playing it from their library of saved tracks. “Lean back” or passive listeners are those who play tracks through a radio station, algorithmic playlist, or platform editorial (i.e., programmed plays). See “What Are Active and Passive Streams?” Music Insights, accessed October 12, 2021, <https://help.musicinsights.com/hc/en-us/articles/360007993973-What-are-Active-and-Passive-streams->.

~~(63)~~(64) In September 2019, Amazon offered an upgraded version of Unlimited, Amazon Music HD, for an additional \$5 per month.<sup>120</sup> Amazon Music HD granted access to tens of millions of songs in HD quality (16-bit, 44.1kHz) and millions more in ultra-HD quality (24-bit, up to 192kHz).<sup>121</sup> Amazon has since discontinued Amazon Music HD as a separate tier and folded its offerings into the standard Unlimited service.<sup>122</sup> Amazon announced that all Unlimited subscribers would have access to its HD music library in May 2021, the same day that Apple announced that a similar high-quality audio experience would be available to its subscribers at no additional cost.<sup>123</sup>

~~(64)~~(65) Within its Unlimited service, Amazon offers a number of different pricing plans, shown in Figure 13.

**Figure 13: Amazon Music Unlimited pricing plans**

Plan	Standard price	Prime member price	Student price
Individual	\$9.99/month	\$7.99/month (\$79/year)	\$4.99/month \$0.99/month with Prime for first year
Family plan	\$14.99/month	\$14.99/month (\$149/year)	N/A
Single device	\$3.99/month	\$3.99/month	N/A

Sources: "Amazon Music Unlimited FAQ," Amazon, accessed July 8, 2021, <https://www.amazon.com/b?ie=UTF8&node=15730321011>; "Amazon Prime Student," Amazon, accessed October 2, 2021, <https://www.amazon.com/Amazon-Student/b?ie=UTF8&node=668781011>.

~~(65)~~(66) A family plan allows up to six people to share a single plan. Users retain separate accounts and music libraries, with only the primary subscriber paying.<sup>124</sup> A single device plan offers owners of Amazon Echo and Fire TV devices the ability to access the complete Unlimited library on a single device for

<sup>120</sup> Darrell Etherington, “Amazon Launches Amazon Music HD with Lossless Audio Streaming,” TechCrunch, September 17, 2019, <https://techcrunch.com/2019/09/17/amazon-launches-amazon-music-hd-with-lossless-audio-streaming/>.

<sup>121</sup> Darrell Etherington, “Amazon Launches Amazon Music HD with Lossless Audio Streaming,” TechCrunch, September 17, 2019, <https://techcrunch.com/2019/09/17/amazon-launches-amazon-music-hd-with-lossless-audio-streaming/>.

<sup>122</sup> Hurwitz WDT, ¶ 91 (“[I]n May 2021, Amazon folded its HD tier into the Unlimited offering after press coverage revealed that Apple would add HD to its offering at no extra cost. [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED].”). See also Amazon, “Amazon Music HD for All, Now at No Extra Cost,” news release, May 17, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-hd-all-now-no-extra-cost>.

<sup>123</sup> Amazon, “Amazon Music HD for All, Now at No Extra Cost,” news release, May 17, 2021, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-hd-all-now-no-extra-cost>; Apple, “Apple Music Announces Spatial Audio with Dolby Atmos; Will Bring Lossless Audio to Entire Catalog,” news release, May 17, 2021, <https://www.apple.com/newsroom/2021/05/apple-music-announces-spatial-audio-and-lossless-audio/>.

<sup>124</sup> “Amazon Music Unlimited FAQ,” Amazon, accessed July 8, 2021, <https://www.amazon.com/b?ie=UTF8&node=15730321011>.

\$3.99 per month. Prime member prices are available to members of Amazon’s Prime membership program.

## IV.B. Amazon Music Prime

~~(66)~~(67) Amazon first entered interactive streaming in 2014 with its Prime Music service.<sup>125</sup> Prime Music features ad-free playback along with curated playlists and radio-like stations, with limited downloads available for offline playback.<sup>126</sup> Unlike full catalog interactive streaming services like Apple Music and Spotify Premium, which offer more than 70 million songs, Prime Music offers a very limited catalog of songs—from 1 million at its start growing to approximately 2 million today.<sup>127</sup> Also, unlike Unlimited and Apple Music, Prime Music does not offer HD or ultra-HD playback.

~~(67)~~(68) Prime Music is not available as a standalone service but only as part of the broader Amazon Prime membership program, a \$12.99 per month (or \$119 annually) service that also includes free two-day shipping on Amazon purchases, free streaming video, free games, savings at Whole Foods stores, and a number of other free and reduced-price services.<sup>128</sup>

~~(68)~~(69) Prime Music is designed to appeal to consumers with a low WTP for an interactive streaming service. According to Amazon’s Global Head of Music Publishing and Director of Content Acquisition,

Amazon has designed Prime Music to introduce streaming music to customers who want access to music but may have a low willingness to pay (“WTP”). Amazon targets Prime Music at users whose listening habits are casual enough that they may not want to spend the money required to access a full catalog. [REDACTED]

[REDACTED]<sup>129</sup>

<sup>125</sup> Stuart Dredge, “Amazon Prime Music Streaming Service Launches in the US with 1m Songs,” *Guardian*, June 12, 2014, <https://www.theguardian.com/technology/2014/jun/12/amazon-prime-music-streaming-spotify>. Written Direct Testimony Of James Duffett-Smith, October 13, 2021 [hereinafter “Duffett-Smith WDT”], ¶ 11 (“Amazon Music Prime (“Prime Music”) marked Amazon’s first entry into the streaming music business. Launched in June 2014, Prime Music is a limited-catalog, advertisement-free, on-demand streaming music service.”).

<sup>126</sup> Duffett-Smith WDT, ¶ 11 (“Prime Music launched with a catalog of approximately 1 million songs and hundreds of playlists. Prime Music also allows limited downloads for offline playback.”).

<sup>127</sup> Duffett-Smith WDT, ¶ 14 (“Although the Prime Music catalog has doubled from the original to roughly 2 million songs, it is still far less than the roughly 75 million songs offered by Amazon Music Unlimited or other full-catalog services.”).

<sup>128</sup> Duffett-Smith WDT, ¶ 13, citing “About Amazon Prime Insider & Prime Membership Benefits,” Amazon, accessed October 2, 2021, <https://www.amazon.com/primeinsider/about> for the current list of services, (“Amazon has never offered Prime Music as a standalone service. Nor does Prime Music have any standalone price. Instead, it is available solely as part of a broader Amazon Prime membership, which also gives members access to free two-day shipping, video content, arcade games, savings at Whole Foods supermarkets, and a host of other benefits. Amazon Prime members pay \$12.99 per month, or \$119 per year, for access to all of these services, including Prime Music.”).

<sup>129</sup> Duffett-Smith WDT, ¶¶ 1, 12.

(69)(70) In addition to attracting low WTP listeners, Prime Music serves as a “funnel” to convert these low WTP listeners into Unlimited subscribers.<sup>130</sup> [REDACTED]

[REDACTED].<sup>131</sup>

## IV.C. Amazon Music Free

(70)(71) Amazon launched its ad-supported free streaming service, Free, in April 2019.<sup>132</sup> While initially available only through Alexa-enabled devices, Amazon expanded the service later in the year to allow access through other platforms.<sup>133</sup>

(71)(72) Free allows users to listen to music through playlists and thousands of stations, but without the ability to request specific songs.<sup>134</sup> Users only have the option to skip, dislike, or like the songs played within the playlists and stations they select.<sup>135</sup> Free has a limited library and no HD content. Unlike Unlimited and Prime Music users, Free users do not have access to personalized streaming stations or offline playback.<sup>136</sup>

(72)(73) Free serves customers with a low WTP for music streaming while also introducing customers to the Amazon Music interface and offerings, with the goal of inducing listeners to upgrade to the paid subscription service.<sup>137</sup> The Klein Survey found that nearly [REDACTED] of the surveyed Free subscribers list the fact that “[p]aid streaming services are too expensive” as among their “primary reasons for not paying for a music streaming service.”<sup>138</sup> The Klein Survey also found that over [REDACTED] of the surveyed Free subscribers “would probably not or definitely not upgrade to Amazon Music Unlimited,”

<sup>130</sup> Duffett-Smith WDT, ¶¶ 15–16 (“Due to Prime Music’s limited catalog, some of the songs that are visible on playlists are not available for streaming unless the customer upgrades to Amazon Music Unlimited...Amazon operates Prime Music as a ‘funnel’ to Amazon Music Unlimited, which is Amazon’s premium, full-catalog streaming service.”).

<sup>131</sup> [REDACTED]

<sup>132</sup> Duffett-Smith WDT, ¶ 21 (“Amazon launched Amazon Music Free (“Free”) in April 2019.”).

<sup>133</sup> Jem Aswad, “Amazon Music Launches Free Streaming Tier, Through Alexa Only (for Now),” *Variety*, April 18, 2019, <https://variety.com/2019/music/news/amazon-launches-free-streaming-tier-alexa-only-for-now-1203192744/>.

<sup>134</sup> Amazon, “Amazon Music offers free streaming,” news release, May 6, 2020, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-music-offers-free-streaming>.

<sup>135</sup> [REDACTED]

<sup>136</sup> Hurwitz WDT, ¶ 23 (“Compared to Amazon Music’s other services, the functionality of Free is limited. For example, off-line playback and on-demand functionality are not available.”). *See also* Figure 12.

<sup>137</sup> Duffett-Smith WDT, ¶¶ 21,23 (“Free also fills the void for individuals who both have low WTP and who lack access to Prime Music. Free users, who listen to advertisements rather than paying for access to the service, tend to have the lowest WTP among Amazon Music customers.”) (“Amazon designed Free as a funnel to upsell customers to Unlimited, in a similar way to the Prime Music funnel.”).

<sup>138</sup> Klein WDT, Table 39.

whereas [REDACTED] of respondents “indicated that they would probably or definitely upgrade to Amazon Music Unlimited.”<sup>139</sup>

## IV.D. Amazon’s music sales

~~(73)~~(74) After books, music was the first category that Amazon added to its online offerings, launching its music store in 1998.<sup>140</sup> Amazon began offering PDDs through an online music store in 2007.<sup>141</sup> In addition, their online music store offers vinyl and CDs. Amazon also offers a service, AutoRip, which gives customers an MP3 version of eligible physical albums when purchased from Amazon, at no additional charge.<sup>142</sup>

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<sup>139</sup> Klein WDT, Table 40 and ¶ 108.

<sup>140</sup> Hurwitz WDT, ¶8.

<sup>141</sup> Yinka Adegoke, “Amazon Launches Early Version of Web Music Service,” Reuters, September 25, 2007, <https://www.reuters.com/article/us-amazon-music/amazon-launches-early-version-of-web-music-service-idUSWNAS474420070925>.

<sup>142</sup> “What Is AutoRip?” Amazon, accessed July 8, 2021, <https://www.amazon.com/gp/help/customer/display.html?nodeId=G6N9QAN4WDBKAKPF>.

## V. Music copyrights

~~(74)~~(75) A single musical product encompasses two basic rights: the right to the musical work—the collection of notes and lyrics either written or recorded—and the right to the sound recording—the fixation of the sound of these notes and lyrics in a recording medium or digital file.<sup>143</sup> Under copyright law, the musical work and sound recording are separately protected and can be separately owned.<sup>144</sup>

~~(75)~~(76) Within these two types of ownership, there are three categories of rights: public performance rights, reproduction and distribution (“mechanical”) rights, and synchronization rights.<sup>145</sup> Although distribution channels usually pay royalties for both musical work and sound recording rights, it is common for a particular type of distribution service to only have to pay for public performance, mechanical, or synchronization rights, depending on the service.<sup>146</sup> For instance, non-interactive streaming services pay only performance royalties, whereas distributors of PDDs pay only mechanical royalties. Interactive streaming services, in contrast, pay both public performance and mechanical royalties.<sup>147</sup>

~~(76)~~(77) In this section, I review some details of each of these types of rights that are relevant to my analysis.

### V.A. Musical work rights

#### V.A.1. Public performance rights

~~(77)~~(78) Public performance rights must be obtained for music transmitted to the public via a public performance or through a transmission by a radio, television, or streaming service.<sup>148</sup> The large

<sup>143</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, pp. 16-18.

<sup>144</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 18.

<sup>145</sup> So-called “ephemeral rights” for sound recordings—the rights to make server reproductions of sound recordings to facilitate digital transmissions—were created by Congress in 1998. In practice, the Board in its determination of sound recording royalty rates for non-interactive services bundles ephemeral rights with public performance rights and defines the ephemeral right portion of the bundled rate as 5% of the total. *See* Web V Determination, at 4, 290–292.

Synchronization rights refer to the right to “use music in ‘timed relation’ to visual content.” Synchronization rights are negotiated in the free market for both musical works and sound recording. US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, pp. 55–56, Appendix D.

<sup>146</sup> One exception to this is terrestrial radio, which does not pay royalties for sound recordings. US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 87.

<sup>147</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, Appendix D.

<sup>148</sup> “What Is a Public Performance of Music and What Is the ‘Performing Right’?” BMI.com, FAQs, accessed September 28, 2021, [https://www.bmi.com/faq/entry/what\\_is\\_a\\_public\\_performance\\_of\\_music\\_and\\_what\\_is\\_the\\_performing\\_right1](https://www.bmi.com/faq/entry/what_is_a_public_performance_of_music_and_what_is_the_performing_right1).



number of public music performances makes it difficult for individual composers to negotiate and collect royalties from each party seeking to use their music. Performing rights organizations (PROs) aggregate the interests of the composers whom they represent and negotiate and collect rates on their behalf from businesses including terrestrial and satellite radio, interactive and non-interactive streaming services, television networks and cable systems, and other businesses.<sup>149</sup> PROs acquire rights from owners of musical works and in turn grant “blanket licenses” that allow music users to play any of the musical works in the PRO’s repertoire.<sup>150</sup> The license rates charged by ASCAP and Broadcast Music, Inc. (BMI), the two largest PROs, are overseen by a court established by a 1941 consent decree with the Department of Justice designed to “contain the market power each organization acquired through the aggregation of public performance rights held by their member songwriters and music publishers.”<sup>151</sup>

### V.A.2. Mechanical rights

~~(78)~~(79) Mechanical rights allow parties to make and distribute copies of a musical work. They apply only to certain distribution channels.<sup>152</sup> The Board sets statutory mechanical royalty rates for musical works, which vary by distribution channel and by business model within the channel.<sup>153</sup> Rates are set for five-year periods.<sup>154</sup>

### V.A.3. Synchronization rights

~~(79)~~(80) Synchronization rights allow music to be used in timed-relation with an audiovisual work such as a film, video, television show, or commercial.<sup>155</sup> Royalties are set through negotiation with the musical

<sup>149</sup> See, e.g., “Who Does ASCAP Collect From?” ASCAP, accessed October 2, 2021, <https://www.ascap.com/help/royalties-and-payment/payment/whocollect>.

<sup>150</sup> Such blanket licenses “reduce the costs of licensing copyrighted musical compositions. They eliminate costly, multiple negotiations of the various rights and provide an efficient means of monitoring the use of musical compositions. They also allow users of copyrighted music to avoid exposure to liability for copyright infringement,” *Buffalo Broadcasting v. American Soc. of Composers*, 744 F.2d 917 (Court of Appeals, 2d Cir. 1984), at 15.

<sup>151</sup> “Antitrust Division Review of ASCAP and BMI Consent Decrees 2014,” US Department of Justice, updated December 16, 2015, <https://www.justice.gov/atr/ascap-bmi-decree-review> (“The Consent Decrees, originally entered in 1941, are the products of lawsuits brought by the United States against ASCAP and BMI under Section 1 of the Sherman Act, 15 U.S.C. § 1, to address competitive concerns arising from the market power each organization acquired through the aggregation of public performance rights held by their member songwriters and music publishers.”). The 2018 Music Modernization Act made some changes to the operation of the rate court, partially removing a prohibition on the rate court considering sound recording license fees in its rate setting proceedings, and assigning judges from the Southern District of New York on a rotating basis rather than having a single judge for all rate disputes. See “Frequently Asked Questions,” US Copyright Office, accessed October 12, 2021, <https://www.copyright.gov/music-modernization/faq.html>.

<sup>152</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, pp. 26-32.

<sup>153</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 29.

<sup>154</sup> 17 U.S.C § 114(f)(2)(B).

<sup>155</sup> See *Steele v. Turner Broad. Sys., Inc.*, 646 F. Supp. 2d 185, 193 (D. Mass. 2009), at 11. See also *Boosey & Hawkes*

work rights owner (and, separately, with the sound recording right owner), without any regulatory oversight.<sup>156</sup>

## V.B. Sound recording rights

~~(80)~~(81) Music distribution services including satellite radio, non-interactive streaming, interactive streaming, and sellers of PDDs and CDs are required to pay royalties to holders of sound recording rights.<sup>157</sup> Terrestrial radio, however, is not required to pay sound recording royalties.<sup>158</sup>

~~(81)~~(82) Sound recording royalty rates paid by interactive streaming services are established through direct negotiations with the copyright holder without any regulatory oversight.<sup>159</sup> As is true of musical works rights, interactive streaming services must acquire both mechanical and performance rights from sound recording rightsholders, although as a practical matter those rights are not separately negotiated.<sup>160</sup> Synchronization rights for sound recordings are also privately negotiated. In contrast, sound recording royalties for public performance rights paid by non-interactive streaming services, satellite radio, and “preexisting subscription services,” such as Music Choice, are set by the Board for five-year terms.<sup>161</sup>

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*Music Publishing LTD. v. the Walt Disney Co.*, 145 F.3d 481 (2d Cir. 1998) at 451 (“limited to the use of the composition in synchronism or timed-relation with the motion picture.”).

<sup>156</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, at 56 (“The licensing of music for audiovisual works, unlike that for other uses, occurs in the free market for both musical works and sound recordings.”).

<sup>157</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, Appendix D.

<sup>158</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, pp. 43-44, 87.

<sup>159</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 43.

<sup>160</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, Appendix D.

<sup>161</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, pp. 46, 50.

## VI. Publishers, record labels, and PROs

~~(82)~~(83) Musical works copyrights are generally administered by music publishers, while sound recording copyrights are usually administered by record labels.<sup>162</sup> In addition, PROs such as ASCAP and BMI serve as intermediaries that help publishers and artists collect public performance musical works royalties.<sup>163</sup> The publishing and record label space in the United States is dominated by three firms—Universal Music Group, Sony Music Holdings, and Warner Music Group—each of which controls a major music publisher and a major record label. In this section I describe the role of publishers, record labels, and PROs in music distribution.

### VI.A. Publishers

~~(83)~~(84) Music publishers generally make deals with songwriters to administer and promote their songs in return for a share of the copyright.<sup>164</sup> Agreements between songwriters and publishers traditionally have assigned 50% of the copyright to the publisher during the deal term, though terms vary, and sometimes include advances paid by publishers to songwriters recouped by future royalty collections.<sup>165</sup> Some publishers also offer other services, including input into the creative process, but this varies across publishing companies and artists.<sup>166</sup>

~~(84)~~(85) Publisher revenue comes mainly from four sources: selling print music, mechanical royalties, performance royalties, and synchronization royalties.<sup>167</sup> Because a publisher generally receives a fraction of the song's copyright, the publisher generally keeps a portion of licensing revenue in each of these four areas.<sup>168</sup> The exact portion depends on the specific contract between a publisher and

<sup>162</sup> US Copyright Office, "Copyright and the Music Marketplace," Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, pp. 18–23.

<sup>163</sup> US Copyright Office, "Copyright and the Music Marketplace," Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 20.

<sup>164</sup> US Copyright Office, "Copyright and the Music Marketplace," Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 19. Todd Brabec, "Music Publishers and What They Do," *ASCAP Corner*, accessed July 19, 2021, <https://www.ascap.com/help/career-development/corner1>.

<sup>165</sup> US Copyright Office, "Copyright and the Music Marketplace," Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 19. "What Does a Music Publisher Do?" *Career Explorer* (blog), accessed July 7, 2021, <https://www.careerexplorer.com/careers/music-publisher/>.

<sup>166</sup> Heather McDonald, "What a Music Publishing Company Does," *The Balance Careers*, October 28, 2019, <https://www.thebalancecareers.com/what-does-a-music-publishing-company-do-2460915>. Dana A. Scherer, "Money for Something: Music Licensing in the 21<sup>st</sup> Century," Library of Congress, February 23, 2021, *available at* <https://crsreports.congress.gov/product/pdf/R/R43984>, p. 7.

<sup>167</sup> Not in order of importance necessarily. Mark Tavern, "4 Music Publishing Revenue Streams, Explained," *DJ Booth* (blog), June 9, 2021, <https://djbooth.net/features/2021-04-27-four-music-publishing-revenue-streams-amuse>.

<sup>168</sup> Chris Robley, "Publishing Rights: How Do They Get Split?" *DIY Musician* (blog), July 10, 2018, <https://diymusician.cdbaby.com/music-rights/how-do-publishing-rights-get-split/> ("If so, the writer will be asked to sign an agreement, usually called a songwriter-publisher agreement. What is unusual in this kind of agreement is that the

songwriter.<sup>169</sup> The increasing sales of publishing catalogs to third parties such as Hipgnosis Songs Fund mean that the entity collecting musical works royalties may be neither the original composer nor original publisher of the song.<sup>170</sup>

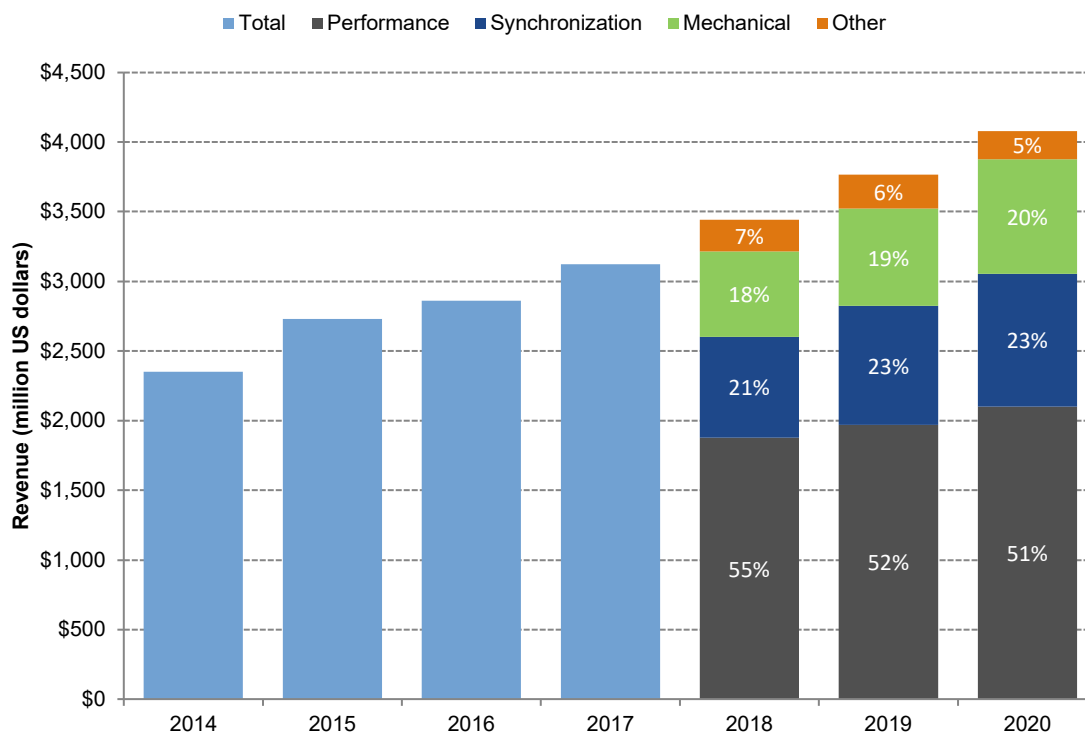
~~(85)~~(86) After a drop in the 2000s attributable to increased piracy and decreased sales of physical media, music publishing industry revenue has revived in recent years, as shown in Figure 14, coinciding with the rise of interactive streaming.

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writer will be asked to transfer his ownership of the copyright to the publisher. That has the effect of leaving the writer with no future ownership interest in his creation. What the writer gets in return is a royalty sharing arrangement, spelled out in the contract, which states what percentage of the money the publisher receives for things such as record sales, derivative work uses, soundtrack licensing, etc. will be split with the writer. Many times this is 50%, but some publishers are willing to give the writer more.”); *See also* Gary Roth, “© C in a Circle—Signing Away Your Copyright: Joining Forces with a Publisher Songwriter 101,” *BMI.com*, July 5, 2004, [https://www.bmi.com/news/entry/C\\_in\\_a\\_Circle\\_\\_Signing\\_Away\\_Your\\_Copyright\\_Joining\\_Forces\\_With\\_A\\_Publisher](https://www.bmi.com/news/entry/C_in_a_Circle__Signing_Away_Your_Copyright_Joining_Forces_With_A_Publisher).

<sup>169</sup> Henry Schoonmaker, “Songwriting Royalties Explained: Writers vs Publishers Share,” *Songtrust* (blog), updated April 22, 2021, <https://blog.songtrust.com/songwriting-royalties-explained-writers-vs-publishers-share>.

<sup>170</sup> See Section II.B.2 for a discussion of music catalog acquisitions.

**Figure 14: Estimated US music publishing revenue by source, 2014–2020, in constant 2020 dollars**

Sources: Tim Ingham, “US Publishers Pulled in \$3.7bn During 2019—Just Over Half What Record Labels Made,” *Music Business Worldwide*, June 11, 2020, <https://www.musicbusinessworldwide.com/us-publishers-pulled-in-3-7bn-during-2019-just-over-half-what-record-labels-made/>; Ed Christman, “Music Publishing Revenue Topped \$4B in 2020, Says NMPA,” *Billboard*, June 9, 2021, <https://www.billboard.com/articles/business/publishing/9585238/music-publishing-revenue-2020-nmpa/>.

Note: Revenue shown in 2020 dollars adjusted using the Consumer Price Index.

~~(86)~~(87) The three largest music publishers in the United States are Sony Music Publishing, Warner Chappell Music, and Universal Music Publishing Group.<sup>171</sup> Each of these is also affiliated with a major record label.

## VI.B. Record labels

~~(87)~~(88) Record labels are companies that finance, promote, and distribute sound recordings.<sup>172</sup> Each of the three largest record labels has common corporate ownership with one of the three largest

<sup>171</sup> “Sony Music Publishing,” accessed October 3, 2021, <https://www.musicbusinessworldwide.com/companies/sony/sony-music-group/sony-music-publishing/>; “Warner Chappell Music,” accessed October 3, 2021, <https://www.musicbusinessworldwide.com/companies/access-industries/warner-music-group/warner-chappell-music/>; Tim Ingham, “The Three Major Publishers Generated More than \$3.2 Billion in 2019—That’s \$369,000 per Hour,” March 2, 2020, <https://www.rollingstone.com/pro/features/the-three-major-publishers-generated-more-than-3-2-billion-in-2019-thats-369000-per-hour-959699/>.

<sup>172</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 22.

publishers.<sup>173</sup> The three largest record labels in the United States are Universal Music Group, owner of Universal Music Publishing Group; Sony Music Entertainment, a subsidiary of Sony Music Group, which also owns Sony Music Publishing; and Warner Music Group, which owns the publishing company Warner Chappell Music.<sup>174</sup> There are hundreds of independent labels not affiliated with the big three, collectively making up roughly one-third of the market.<sup>175</sup>

~~(88)~~(89) Record labels often own all or part of the sound recording copyrights for associated artists. They earn revenue from digital streaming and download services, physical recorded music sales, touring and concert promotion, and audio-visual licensing to TV and film.<sup>176</sup> Revenues of record labels have increased substantially since 2015, driven mainly by streaming revenue.<sup>177</sup>

~~(89)~~(90) The operating income of the “Big 3” music companies has increased substantially in recent years alongside the rise of music streaming, before a drop in 2020 likely attributable to the pandemic.<sup>178</sup>

<sup>173</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 23.

<sup>174</sup> “Our Labels & Brands,” Universal Music Group, accessed October 3, 2021, <https://www.universalmusic.com/labels/>. Jem Aswad and Patrick Frater, “Universal Music Approaches \$53 Billion Valuation Following IPO,” *Variety*, September 21, 2021, <https://variety.com/2021/music/news/universal-music-ipo-shares-1235069336/> (“As the world’s largest label group, not to mention the second largest music publisher (according to Music & Copyright), UMG’s assets are more than impressive.”). “Labels,” Sony Music, accessed October 3, 2021, <https://www.sonymusic.com/labels/>. Amy Wang, “Sony’s Music Recording and Music Publishing Companies Are Now One,” *Rolling Stone*, July 17, 2019, <https://www.rollingstone.com/pro/news/sonys-music-recording-and-music-publishing-companies-are-now-one-860134/>. “Publishing,” Warner, accessed October 3, 2021, <https://www.wmg.com/services>. “Warner Music Group and Twitch Announce First-of-Its-Kind Partnership,” *PR Newswire*, September 27, 2021, <https://www.prnewswire.com/news-releases/warner-music-group-and-twitch-announce-first-of-its-kind-partnership-301385629.html> (“WGM’s music publishing arm, Warner Chappell Music, has a catalog of over 1 million copyrights.”). Tim Ingham, “Welcome to the New Record Business: Warner Music Group Is Now Generating Over \$270m from TikTok, Peloton, Facebook and Other ‘Alternative’ Platforms Annually,” *Music Business Worldwide*, September 23, 2021, <https://www.musicbusinessworldwide.com/welcome-to-the-new-record-business-warner-music-group-is-now-generating-over-270m-from-tiktok-peloton-facebook-and-other-alternative-platforms-annually2/>.

<sup>175</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 23. *See also* Figure 31 *infra*.

<sup>176</sup> Warner Music Group Corp., Quarterly Report (Form 10-Q) (June 30, 2021), 12.

<sup>177</sup> Worldwide revenue from music streaming was 23% of total recording revenue in 2015 for Universal, climbing to 59% in 2019. This was calculated by dividing “Subscriptions and streaming” revenue by total “Recorded music” revenue. *See* Vivendi Financial Report and Audited Consolidated Financial Statements (February 13, 2020), p. 12; Vivendi Financial Report and Audited Consolidated Financial Statements (February 19, 2016), p. 14). In the case of Sony, this percentage was 44% in 2018 and 59% in 2020. This was calculated by dividing “Recorded Music – Streaming” revenue by the sum of “Recorded Music – Others” revenue and “Recorded Music – Streaming” revenue. Sony Corporation, Annual Report (Form 20-F) (March 31, 2020), 208. For the global recording industry, the contribution of streaming, calculated by dividing global recording streaming revenue by total global recording revenue, was 19% in 2015 and 56% in 2019 according to IFPI. *See* Warner Music group, Annual Report (Form 10-K) (September 30, 2020), p.6.

<sup>178</sup> Sony and Warner saw declines in 2020 operating income likely due to the impact of the pandemic. Sony Corporation, Annual Report (Form 20-F) (March 31, 2020), p. 7 (“In the Music segment, CDs and other packaged media sales are decreasing due to restrictions on going outside, and ticket, merchandising and video revenues are decreasing as concerts and other events are being postponed and cancelled in Japan and other areas.”); Warner Music Group, Annual Report (Form 10-K) (September 30, 2020), p. 23 (“It has ended live concert tours, adversely impacting our concert promotion

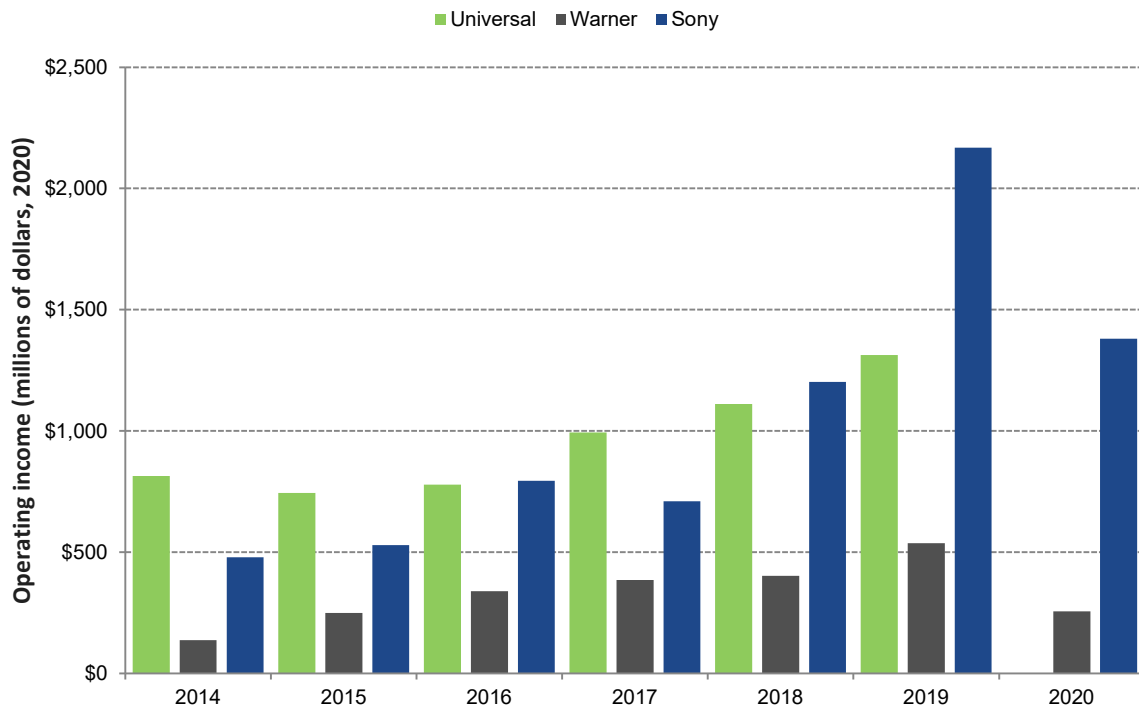
Figure 15 shows the evolution of worldwide operating income of the three major players in the industry from 2014 to 2020.<sup>179</sup>

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business and our sale of tour merchandise. It has made it more difficult for artists to engage in marketing efforts around the release of their new recordings which, in some cases, has led to our decisions to delay the release of those recordings. It has delayed the release of new recordings by impeding the types of collaboration among artists, songwriters, producers, musicians, engineers and studios which are necessary for the delivery of those recordings. The cessation or significant delay in the production of motion pictures and television programs has negatively affected licensing revenue in our Recorded Music business and synchronization revenue in our Music Publishing business.”). See Figure 4 and Figure 5 *supra* for data on the rise of music streaming.

<sup>179</sup> Operating income includes music publishing and sound recording business. Operating income is revenue minus production and administrative cost as well as depreciation and amortization. Sony Kabushiki Kaisha, SEC Form 20-F, 2015-2019. Vivendi Financial Report and Audited Consolidated Financial Statements, 2014-2019. Warner Music Group Corp., SEC Form 10K, 2016-2020.

**Figure 15: Music industry worldwide operating income of the three majors, 2014–2020, in constant 2020 dollars<sup>180</sup>**



Sources: Sony Corporation, Annual Report (Form 20-F) (March 31, 2016), F-88; Sony Corporation, Annual Report (Form 20-F) (March 31, 2017), F-79; Sony Corporation, Annual Report (Form 20-F) (March 31, 2018), 35; Sony Corporation, Annual Report (Form 20-F) (March 31, 2020), 35; Vivendi Financial Report and Audited Consolidated Financial Statements (February 27, 2015), 24; Vivendi Financial Report and Audited Consolidated Financial Statements (February 19, 2016), 14; Vivendi Financial Report and Audited Consolidated Financial Statements (February 15, 2018), 15; Vivendi Financial Report and Audited Consolidated Financial Statements (February 13, 2020), 11; Warner Music Group, Annual Report (Form 10-K) (September 30, 2016), 49; Warner Music Group, Annual Report (Form 10-K) (September 30, 2017), 43; Warner Music Group, Annual Report (Form 10-K) (September 30, 2020), 57.

Notes:

1. Operating income includes music publishing and sound recording business.
2. Operating income shown in 2020 dollars adjusted using the Consumer Price Index.
3. Operating income is revenue minus production and administrative cost as well as depreciation and amortization.
4. The fiscal year ends in March 31 for Sony, September 30 for Warner and December 31 for Universal.
5. Universal data for 2020 were not available.

## VI.C. Performing rights organizations

~~(90)~~(91) Performing rights organizations (PROs) often collect and distribute musical works public performance royalties. They typically issue blanket licenses for their entire catalog of songs to users

<sup>180</sup> Sony acquired EMI in November of 2018 which contributed to a sharp increase in operating income in 2019. Sony Corporation, Annual Report (Form 20-F) (March 31, 2019), p. 33 (“This significant increase was primarily due to the above-mentioned recording of a 116.9 billion yen remeasurement gain resulting from the consolidation of EMI, partially offset by the above-mentioned recording of an 11.6 billion yen deterioration of equity in net income (loss) in connection with Sony’s acquisition of the remaining approximately 60% interest in EMI.”).



of public performance rights such as streaming services, radio and television stations, and venues that play music such as bars and restaurants.<sup>181</sup> [REDACTED]

[REDACTED].<sup>182</sup>

(91)(92) There are four major PROs in the United States: ASCAP, BMI, the Society of European Stage Authors and Composers (SESAC), and Global Music Rights (GMR). Although uncertainty exists over PRO market shares, ASCAP and BMI are generally assumed to represent over [REDACTED] of songs available for licensing in the United States.<sup>183</sup> They both operate under Department of Justice (DOJ) consent decrees that established that ASCAP and BMI are required to grant a license to any user that applies, and must accept any music composer who wishes to be represented by the PRO.<sup>184</sup> These consent decrees were designed to contain “the market power each organization acquired through the aggregation of public performance rights held by their member songwriters and music publishers.”<sup>185</sup> ASCAP and BMI operate as non-profits, while SESAC and GMR are for-profit organizations that do not accept all composers, just those they invite to join.<sup>186</sup> SESAC and GMR do not operate under a consent decree.

<sup>181</sup> US Department of Justice, “Statement of the Department of Justice on the Closing of the Antitrust Division’s Review of the ASCAP and BMI Consent Decrees,” news release, January 15, 2021, <https://www.justice.gov/atr/page/file/1355391/download>, p. 1.

<sup>182</sup> Written Direct Testimony of Amy Watson Braun, October 13, 2021 [hereinafter “Braun WDT”], ¶ 18 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

<sup>183</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 20. See also Braun WDT, ¶¶ 14, 32, 64.

US Department of Justice, “Statement of the Department of Justice on the Closing of the Antitrust Division’s Review of the ASCAP and BMI Consent Decrees,” news release, January 15, 2021, <https://www.justice.gov/atr/page/file/1355391/download>, p. 1.

May Woodcock, “ASCAP vs BMI vs SESAC—How To Get Your Royalties,” *Music Gateway* (blog), August 1, 2020, <https://www.musicgateway.com/blog/how-to/ascap-vs-bmi-vs-sesac>.

Paul Resnikoff, “A Comprehensive Comparison of Performing Rights Organizations (PROs) in the US,” *Digital Music News*, February 20, 2018, <https://www.digitalmusicnews.com/2018/02/20/performance-rights-pro-ascap-bmi-sesac-soundexchange/>.

<sup>184</sup> US Department of Justice, “Statement of the Department of Justice on the Closing of the Antitrust Division’s Review of the ASCAP and BMI Consent Decrees,” news release, January 15, 2021, <https://www.justice.gov/atr/page/file/1355391/download>, p. 2.

<sup>185</sup> US Department of Justice, “Antitrust Consent Decree Review—ASCAP and BMI 2014,” updated December 16, 2015, <https://www.justice.gov/atr/ascap-bmi-decree-review> (“The Consent Decrees, originally entered in 1941, are the products of lawsuits brought by the United States against ASCAP and BMI under Section 1 of the Sherman Act, 15 U.S.C. § 1, to address competitive concerns arising from the market power each organization acquired through the aggregation of public performance rights held by their member songwriters and music publishers.”).

<sup>186</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 20.

## VII. Music royalty payments by interactive streaming services

~~(92)~~(93) In 2013, as part of the Phonorecords II (“Phono II”) proceeding, the Board adopted a settlement between copyright owners and services that carried forward previously existing rates and terms and added new rates and terms for newly regulated “subpart C” service offerings such as mixed bundles and locker services.<sup>187</sup> These rates were to govern for the period 2013 through 2017. They were used on an interim basis after 2017 until the resolution of the Phonorecords III (“Phono III”) proceeding. New rates under Phono III became effective February 5, 2019, applying retroactively to January 1, 2018.<sup>188</sup> Phono III rates were then vacated by the US Court of Appeals for the DC Circuit effective October 26, 2020, [REDACTED].<sup>189</sup> These interim rates are subject to a retroactive true-up once the Phono III remand proceedings are concluded.

~~(93)~~(94) In this section I describe the methodologies for determining mechanical royalty payments under the Phono II and Phono III statutory formulas that apply to Amazon’s services, calculate Amazon’s royalty rate under those structures for each of their services, and also calculate the overall musical works and sound recording royalty rates for each of their services.

### VII.A. Phono II statutory formula for determining musical works royalties

~~(94)~~(95) Under Phono II, mechanical royalties for interactive streaming services were calculated based on different formulas, depending on the type of interactive streaming service offered. For example, a paid standalone portable subscription service had a different formula than a free, ad-supported service. The formulas generally take an “all-in” approach to calculating musical works royalties that defines a total musical works royalty pool (inclusive of both mechanical and performance royalties) and then deducts performance royalties to determine the mechanical license royalty pool. The exception is a mechanical-specific per-subscriber royalty floor that in some cases exceeds the mechanical royalties resulting from the “all-in” royalty pool and can thus result in total musical works royalties that are greater than the “all-in” musical works headline rate.

<sup>187</sup> Phono III Final Determination, at 1919.

<sup>188</sup> Phono III Final Determination, at 1918.

<sup>189</sup> *George Johnson v. Copyright Royalty Board* (D.C. Cir. August 7, 2020) [hereinafter, “Phono III Appellate Decision”]. The Court issued its mandate on October 26, 2020; see *George Johnson v. Copyright Royalty Board and Librarian of Congress*, No.19-1028 (Cir., October 26, 2020). [REDACTED]

~~(95)~~(96) The Phono II structure contains separate formulas for eight types of interactive streaming.<sup>190</sup> Below I describe in more detail the formulas that have applied to Amazon services.

### **VII.A.1. Phono II royalty calculation for Amazon Music Unlimited**

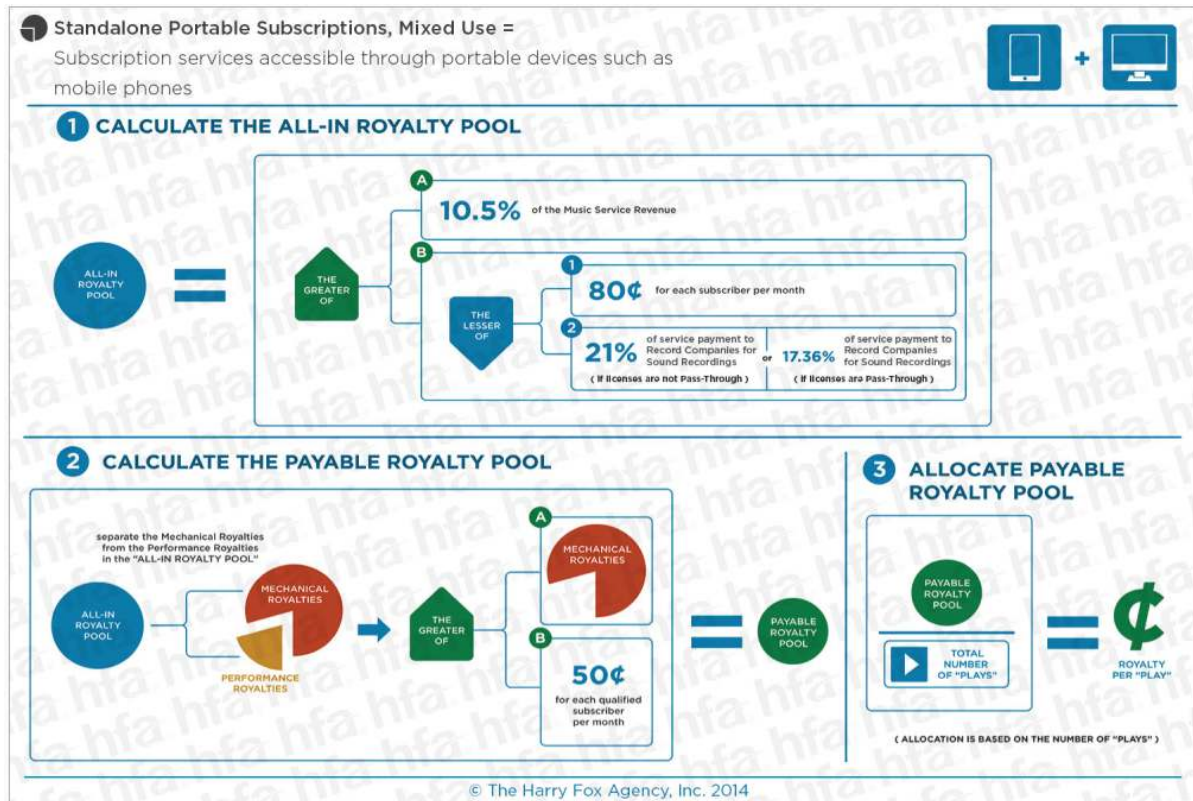
~~(96)~~(97) Amazon's Unlimited service contains several different pricing tiers and falls under multiple Phono II categorizations. The primary Unlimited plan falls under the "Standalone Portable Subscriptions, Mixed Use" category in Phono II. The single-device plan falls under the "Standalone Non-portable Subscriptions, Streaming Only" category. Although both services have the same headline rate of 10.5% of revenue, other aspects of the formula differ.<sup>191</sup> In this section, I focus on Amazon's Unlimited plan that falls under the "Standalone Portable Subscriptions, Mixed Use" categorization. The flowchart in Figure 16 describes the formula as it applies to this service type.

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<sup>190</sup> "Archived Rate Charts," Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

<sup>191</sup> The "Standalone Non-portable Subscriptions, Streaming Only" formula follows the same methodology as the "Standalone Portable Subscriptions, Mixed Use" formula. The differences are as follows: (1) in Step 1B, the per-subscriber per-month cap is 50 cents (in contrast to 80 cents for standalone portable subscriptions) and the percentage of sound recording payments is 22% (in contrast to 21% for standalone portable subscriptions); (2) in Step 2, the per-subscriber minimum is 15 cents (in contrast to 50 cents for standalone portable subscriptions). "Archived Rate Charts," Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

**Figure 16: Mechanical royalty formula for “Standalone Portable Subscriptions, Mixed Use” under Phono II**



Source: "Archived Rate Charts," The Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

(97)(98) Under this formula, there are four possible determinants of mechanical royalty rates: the 10.5% headline rate (Step 1A), the lesser of 21% of sound recording payments rate and the 80 cent per-subscriber per-month cap (Step 1B), or the 50 cent per-subscriber minimum rate (Step 2). In all cases except the 50 cent per-subscriber mechanical floor, performance royalty payments are deducted from the total royalty pool to determine mechanical royalty payments.

(98)(99) To illustrate the calculation in the case of Unlimited, I apply inputs from June 2017 to the Phono II formula. In that month, Amazon's mechanical royalty rate under Phono II [REDACTED]. Figure 17 contains the inputs for the calculation.

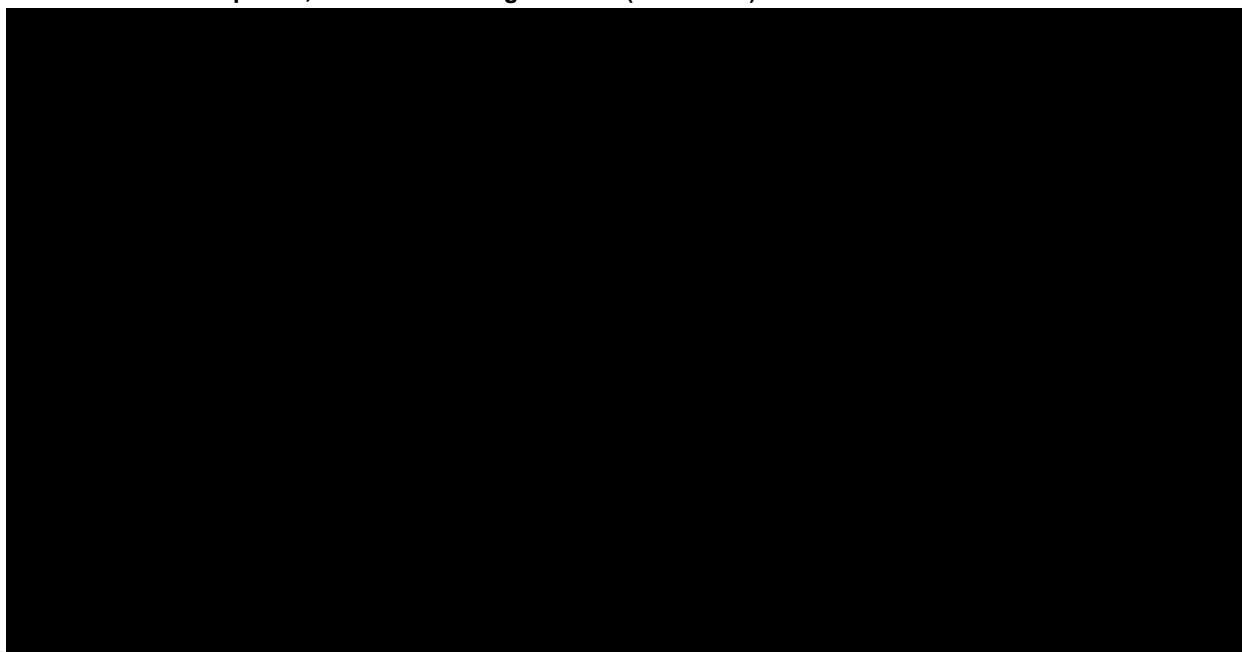
**Figure 17: Inputs to Unlimited mechanical royalty rate under “Standalone Portable Subscriptions, Mixed Use” categorization (June 2017)**

Month	Service revenue	Subscribers	Performance royalty payments	Sound recording payments
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: Amazon royalty rate data.

(99)(100) [REDACTED] I illustrate the step-by step calculations to determine mechanical royalties under Phono II in Figure 18. As shown in Figure 18 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

**Figure 18: Amazon Music Unlimited’s mechanical royalty rate calculations under Phono II, “Standalone Portable Subscriptions, Mixed Use” categorization (June 2017)**



(100) [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

Figure 19: Amazon musical works royalty rates under Phono II—Amazon Music Unlimited, “Standalone Portable Subscriptions, Mixed Use” categorization (June 2017)

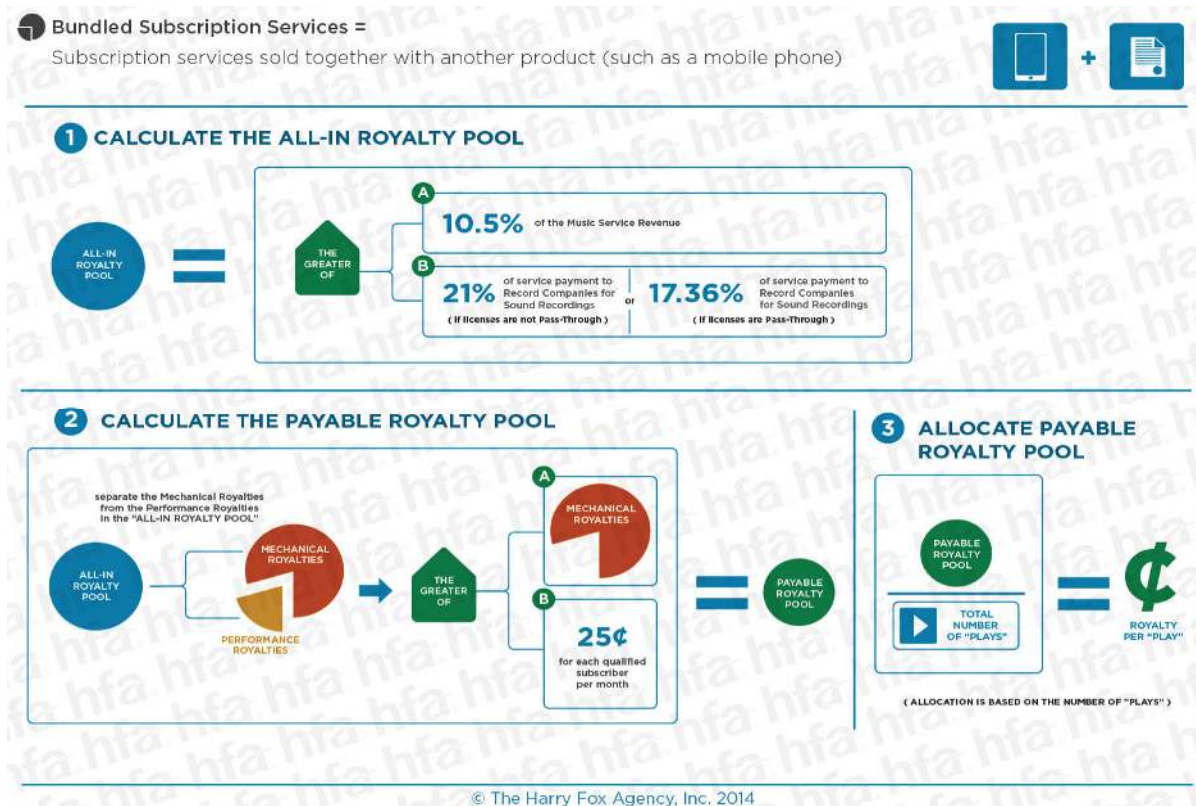
Performance royalty (% revenue)	Mechanical royalty under Phono II (% revenue)	Total music works royalty (% revenue)

Source: Amazon royalty rate data.

## VII.A.2. Phono II royalty calculation for Amazon Music Prime

(101)(102) Prime Music falls under the “Bundled Subscription Services” categorization under Phono II. Figure 20 shows the flowchart for calculating mechanical royalties for this category.

Figure 20: Mechanical royalty formula for “Bundled Subscription Services” under Phono II



Source: “Archived Rate Charts,” The Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

(102)(103) [REDACTED]

<sup>192</sup> Library of Congress, CFR § 385.11 (Copyright Royalty Board, July 1, 2016) (“Where the licensed activity is provided to



[REDACTED]

(103)(104)

[REDACTED]

### VII.A.3. Phono II royalty calculation for Amazon Music Free

(104)(105) Free falls under the Phono II categorization of “Free Non-Subscription/Ad-Supported Services” because there is no charge to the end user and the service is funded using advertising revenue. The flowchart in Figure 21 shows the Phono II formula for free, ad-supported services.

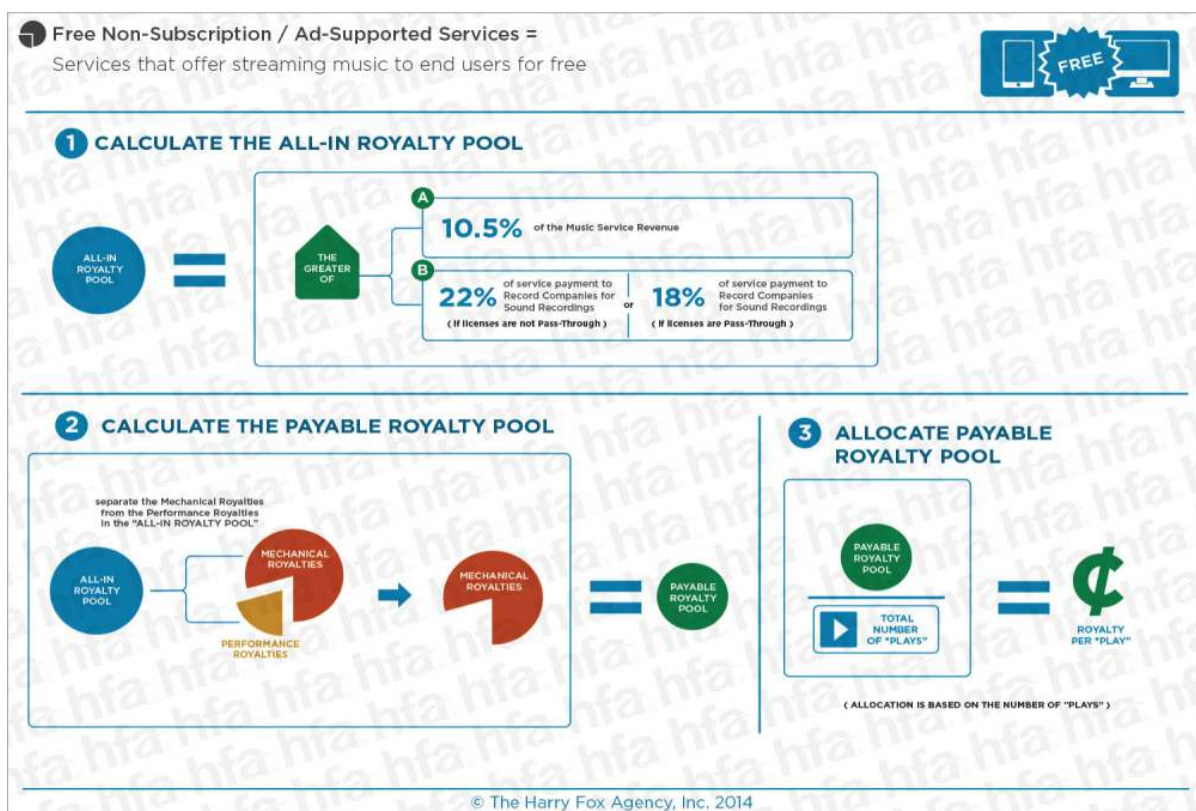
end users as part of the same transaction with one or more other products or services that are not a music service engaged in licensed activity, then the revenue deemed to be recognized from end users for the service for the purpose of the definition in paragraph (1) of the definition of “Service revenue” shall be the revenue recognized from end users for the bundle less the standalone published price for end users for each of the other component( s) of the bundle; provided that, if there is no such standalone published price for a component of the bundle, then the average standalone published price for end users for the most closely comparable product or service in the U.S. shall be used or, if more than on such comparable exists, the average of such standalone prices for such comparables shall be used.”).

<sup>193</sup> Phono III Final Determination, at 2036 (“for each End User who has made at least one Play of a licensed work during that month (each such End User to be considered an ‘active subscriber’).”); *See also* Duffett-Smith WDT, ¶ 17 (“In 2020, Prime Music has averaged [REDACTED] monthly active users, defined as a Prime member who listens to at least one song via Prime Music in a given month.”).

<sup>194</sup> Braun WDT, ¶ 18 [REDACTED]; Duffett-Smith WDT, ¶ 70 (“[REDACTED]”); *See also* Section XI.B.3 *infra*.

<sup>195</sup> Duffett-Smith WDT, ¶ 8, 222 [REDACTED] (“[REDACTED]”).

**Figure 21: Mechanical royalty formula for “Free Non-Subscription/Ad-Supported Services” under Phono II**



Source: "Archived Rate Charts," Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

(105)(106) The formula for Free is similar to that used for Unlimited and Prime Music, with the major difference being that the number of subscribers does not factor into the calculation. Thus, there is no per-subscriber maximum or minimum and there are just two possible determinants of mechanical royalty rates: the 10.5% headline rate (Step 1A), or the 22% of sound recording payments rate (Step 1B). In both of these cases, payments for performance royalties are deducted from the total royalty pool to determine mechanical royalty payments.

(106)(107) Free was first released in 2019, when Amazon was paying under Phono III rates. [REDACTED]

<sup>196</sup> Amazon calculation of royalty rates, Ad-Supported Tier Stations (AMZN\_Phono IV\_00003114).



## VII.A.4. Summary of Amazon’s musical works royalty rates under Phono II

(107)(108) Figure 22 summarizes Amazon’s musical works royalty accruals in the first two quarters of 2021. [REDACTED]

Figure 22: Amazon’s musical works royalty rates under Phono II by service, 2021Q1–Q2<sup>197</sup>

Service	Mechanical royalty rate (Phono II)	Performance royalty rate	Total musical works royalty rate
Amazon Music Unlimited	[REDACTED]	[REDACTED]	[REDACTED]
Amazon Music Prime	[REDACTED]	[REDACTED]	[REDACTED]
Amazon Music Free	[REDACTED]	[REDACTED]	[REDACTED]

Source: Amazon royalty rate data.

## VII.B. Phono III statutory formula for determining musical works royalties

(108)(109) The Board released its final determination in the Phono III proceeding on November 5, 2018, with Judge Strickler issuing a dissenting opinion from the Majority opinion.<sup>198</sup> On February 5, 2019, the Phono III rates became effective retroactive to January 1, 2018.<sup>199</sup> The services and copyright owners both appealed the Board’s Final Determination to the US Court of Appeals for the DC Circuit. The Appellate Court decided the case on August 7, 2020.<sup>200</sup> The Court vacated the Phono III determination and remanded “the Board’s adopted rate structure and percentages for further proceedings consistent with [its] opinion.”<sup>201</sup> As of the time of this report, the Board is still evaluating the Phono III decision per the instruction of the Court.

(109)(110) The Phono III rate structure hews generally to the structure of Phono II. Figure 23 shows the changes in Phono III relative to Phono II for what became the “Standalone Portable Subscriptions” category.<sup>202</sup> The changes for other categorizations are similar in spirit. The Phono III determination

<sup>197</sup> [REDACTED]

<sup>198</sup> Phono III Final Determination, at 1963.

<sup>199</sup> Phono III Final Determination, at 1918.

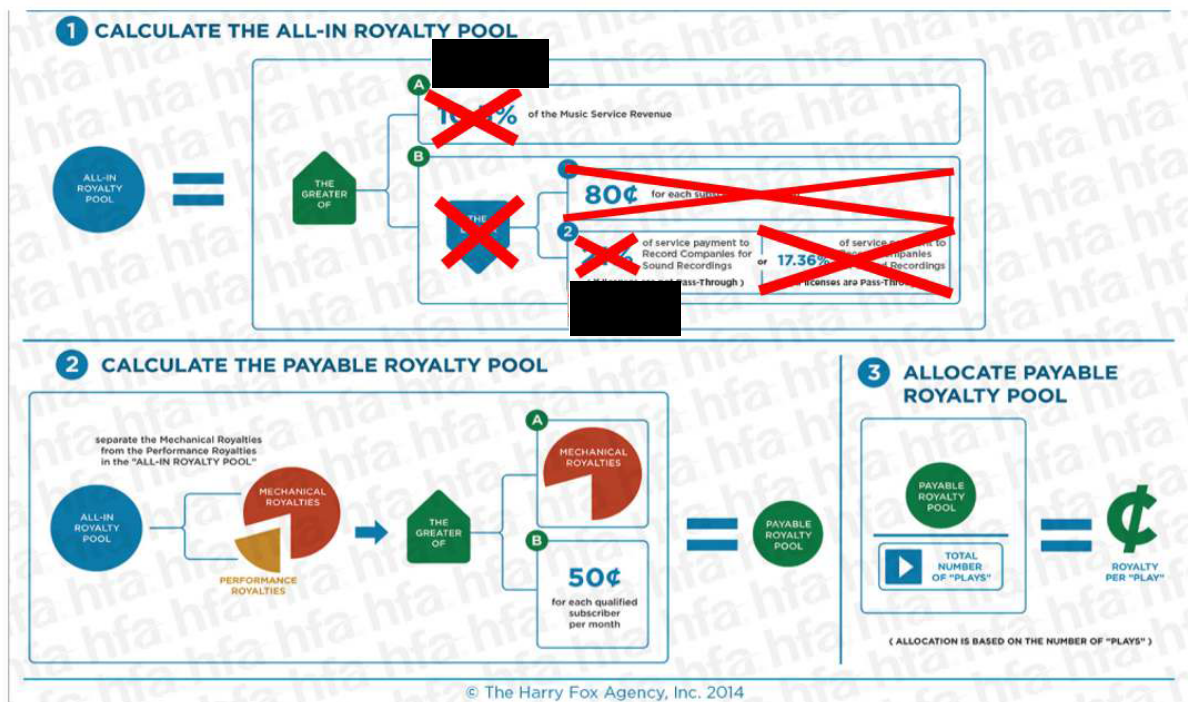
<sup>200</sup> Phono III Appellate Decision.

<sup>201</sup> Phono III Appellate Decision, at 33.

<sup>202</sup> This was one subcategory from among the service categorizations defined in Phono II. The Majority’s decision in Phono III contained the same rate structure for all service categorizations apart from physical phonorecord deliveries, permanent digital downloads, ringtones, and music bundles, except that the “mechanical-only” floor is present for some and not others and is set at a different level, depending on the service type. *See* Mechanical and Digital Phonorecord Delivery Rate Determination Proceeding, Case No. 2006-3 CRB DPRA (Copyright Royalty Board, January 26, 2009); Adjustment of Determination of Compulsory License Rates for Mechanical and Digital Phonorecords, Case No. 2011-3

removed the 80 cent per-subscriber cap on the TCC rate prong and the pass-through version of that rate, and it significantly increased both the headline percent-of-revenue rate and the TCC rate prong, with the increase in rate levels phased in over five years.<sup>203</sup>

**Figure 23: Phono III adjustments to Phono II mechanical royalty formula for “Standalone Portable Subscriptions, Mixed Use”**



Source: "Archived Rate Charts," The Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).  
 "Standalone Portable Subscriptions," The Harry Fox Agency, updated 2019, [http://harryfox.com/content/2019\\_s\\_p\\_s\\_mu.pdf](http://harryfox.com/content/2019_s_p_s_mu.pdf).  
 Note: Figures reflects rates as of 2022.

~~(110)~~(111) The Phono III decision eliminated the “cap” on the TCC prong of 80 cent per subscriber and adjusted upward the percent-of-revenue rate and the percentage-of-TCC rate, although not in the same proportion. In addition to these adjustments to the rates, the Judges modified how “service revenue” would be defined for bundled services.<sup>204</sup> The Majority also made a number of other changes to the regulatory terms.<sup>205</sup>

CRB Phonorecords II (Copyright Royalty Board, November 13, 2013); Phono III Final Determination.

<sup>203</sup> TCC is defined as “the amount paid by a service to a record company for the section 114 right to perform digitally a sound recording.” Phono III Final Determination, at p. 1923, fn. 38. The TCC rate prong defines the all-in musical works royalty as a percentage of the TCC.

<sup>204</sup> Phono III Final Determination at 2031-2035.

<sup>205</sup> For example, the Majority removed royalty payments for “fraudulent streams” and, for purposes of dividing mechanical revenue among Copyright Owners, defined a play as a greater than a 30-second stream. Phono III Final Determination, at 1961.

~~(111)~~(112) I illustrate the calculation of mechanical royalties for Unlimited using the Unlimited plan in June 2018 that falls under the “Standalone Portable Subscriptions” categorization. The inputs for the rate calculation are shown in Figure 24.

Month	Service revenue	Subscribers	Performance royalty payments	Sound recording payments
██████	██████████	██████████	██████████	██████████

~~(112)(113)~~ [REDACTED] I illustrate the step-by step calculation of the mechanical royalties under Phono III in Figure 25.

[illegible]

(113)(114) [REDACTED] Figure 25 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

**Figure 26: Amazon musical works royalty rates under Phono III—Amazon Music Unlimited, “Standalone Portable Subscriptions” categorization (June 2018)**

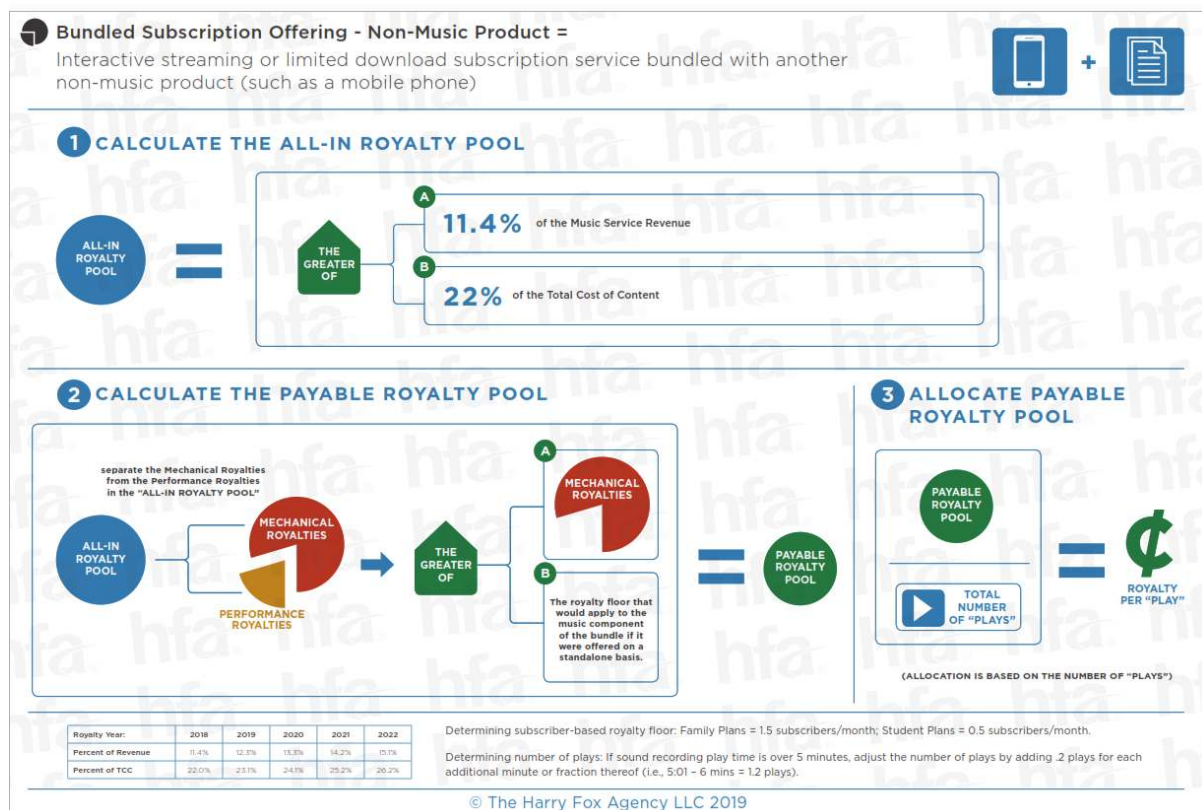
Performance royalty (% revenue)	Mechanical royalty under Phono III (% revenue)	Total music works royalty (% revenue)

Source: Amazon royalty rate data.

## VII.B.2. Phono III royalty calculation for Amazon Music Prime

~~(114)~~(115) The Prime Music service falls under the “Bundled Subscription Offering-Non-Music Product” categorization under Phono III. Figure 27 shows the flowchart for this category.

**Figure 27: Mechanical royalty formula for “Bundled Subscription Offering—Non-Music Product” under Phono III**



Source: “Bundled Subscription Offering – Non-Music Product,” The Harry Fox Agency, updated 2019, [https://www.harryfox.com/content/2019\\_f\\_ns\\_ad\\_s.pdf](https://www.harryfox.com/content/2019_f_ns_ad_s.pdf).

~~(115)~~(116) This formula requires a determination of the standalone price of the music component of the Prime Music bundle.<sup>206</sup> [REDACTED]

~~(116)~~(117) [REDACTED]

### VII.B.3. Phono III royalty calculation for Amazon Music Free

~~(117)~~(118) The flowchart in Figure 28 shows the Phono III formula for ad-supported services, such as Free. Similar to the “Standalone Portable Subscriptions, Mixed Use” category, the headline rate increased from 10.5% in Phono II to up to 15.1% in 2022 in Phono III.

<sup>206</sup> Phono III Final Determination, at 1981-1982,

<sup>207</sup> Duffett-Smith WDT, ¶ 199 [REDACTED]

<sup>208</sup> Duffett-Smith WDT, ¶ 68.

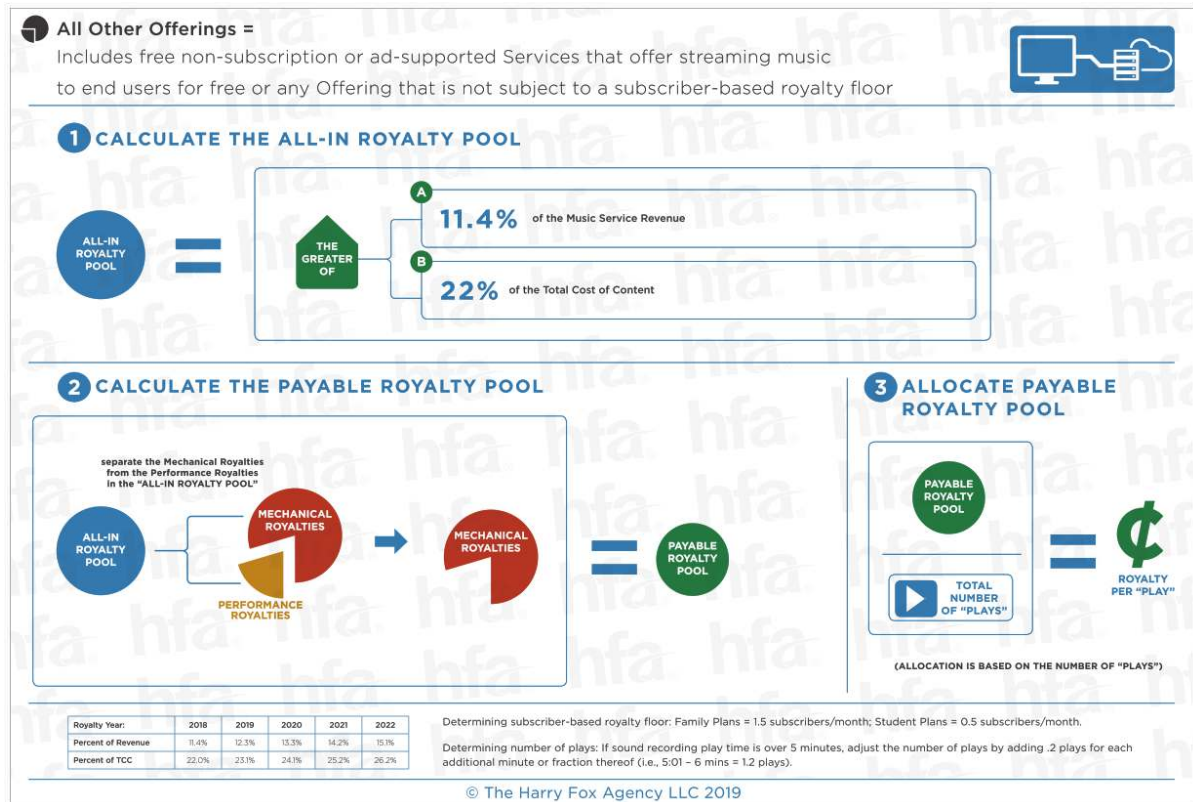
<sup>209</sup> Duffett-Smith WDT, ¶ 200 [REDACTED]

<sup>210</sup> Duffett-Smith WDT, ¶ 70 [REDACTED]

*See also* Section XI.B.3 *infra*.

<sup>211</sup> Duffett-Smith WDT, ¶ 68 [REDACTED]

**Figure 28: Mechanical royalty formula for “All Other Offerings,” including ad-supported services, under Phono III**



Source: “All other offerings,” The Harry Fox Agency, updated 2019, [https://www.harryfox.com/content/2019\\_f\\_ns\\_ad\\_s.pdf](https://www.harryfox.com/content/2019_f_ns_ad_s.pdf).

(118)(119) As with Phono II, there are just two possible determinants of mechanical royalty rates: the headline rate that varies between 11.4% and 15.1% (Step 1A) or the TCC prong, which varies between 22% and 26.2% (Step 1B). In both of these cases, payments to PROs are deducted from the total royalty pool to determine mechanical royalty payments.

#### VII.B.4. Summary of Amazon musical works royalty rates under Phono III

(119)(120) Figure 29 summarizes Amazon’s musical works royalty payments in 2019. [REDACTED]

[REDACTED]

[REDACTED]



**Figure 29: Amazon’s musical works royalty rate under Phono III by service, 2019<sup>212</sup>**

Service	Mechanical royalty rate (Phono III)	Performance royalty rate	Total musical works royalty rate
Amazon Music Unlimited			
Amazon Music Prime			
Amazon Music Free			

Source: Amazon royalty rate data.

## VII.C. Sound recording payments

(120)(121) Sound recording royalty rates for operating an interactive streaming service are determined through negotiations with the copyright holder (generally a record label) without regulatory oversight.<sup>213</sup> For Amazon, sound recording rates vary based on the individual contracts reached with each label. Figure 30 below shows Amazon’s effective sound recording royalty rates for each of its services ~~in~~from June 2020- through May 2021.<sup>214</sup>

**Figure 30: Amazon’s effective sound recording royalty rate by service, June 2020–May 2021**

Service	Effective sound recording rate
Amazon Music Unlimited	
Amazon Music Prime	
Amazon Music Free	

Source: Amazon royalty rate data.

<sup>212</sup> [REDACTED]

<sup>213</sup> US Copyright Office, “Copyright and the Music Marketplace,” Library of Congress, updated February 2015, <http://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf>, p. 52.

<sup>214</sup> In my WDT from October 13, 2021, my benchmark analysis relied on Amazon, Google, Spotify, and Pandora MLC rate calculation files for January 2020–December 2020. I now updated my benchmark analyses to rely on the most recent 12 months of data from Dr. Eisenach’s processed dataset that contains MLC rate calculations for all interactive streaming services through May 2021. More detail on these data is available in Section XI.E XI.E.

## VIII. Statutory standard for determining mechanical royalty rates

~~(121)~~(122) Prior to the passage of the MMA, “reasonable rates and terms” for the compulsory mechanical royalty license for interactive streaming services were set to conform to four statutory objectives known as the “801(b) factors,” after Section 801(b)(1) of the Copyright Act.<sup>215</sup> In 2018, the MMA changed the criteria for determining reasonable rates and terms for mechanical royalties to what is known as the “willing buyer/willing seller” standard, affecting rate determination proceedings that commence on or after October 11, 2018.<sup>216</sup> This section discusses the application of the WBWS standard in this matter.

### VIII.A. WBWS standard

~~(122)~~(123) The MMA explains that reasonable rates and terms for the compulsory mechanical license should represent the rates and terms that “would have been negotiated in the marketplace between a willing buyer and a willing seller.”<sup>217</sup>

~~(123)~~(124) In the past, the Board has consistently found that the “marketplace” within which a willing buyer and a willing seller negotiate under the WBWS standard should be not be marred by undue market power.<sup>218</sup> Thus, application of the WBWS standard necessitates evaluating the competitiveness of a reference market. Consistent with its earlier decisions, in its Web V determination, the Board determined that applying the WBWS standard requires adjusting actual market rates to reflect rates that would be established in a hypothetical “effectively competitive” market.<sup>219</sup> In that decision, the

<sup>215</sup> The four 801(b) factors are: (1) to maximize the availability of creative works to the public; (2) to afford the copyright owner a fair return for his or her creative work and the copyright user a fair income under existing economic conditions; (3) to reflect the relative roles of the copyright owner and the copyright user in the product made available to the public with respect to relative creative contribution, technological contribution, capital investment, cost, risk, and contribution to the opening of new markets for creative expression and media for their communication; and (4) to minimize any disruptive impact on the structure of the industries involved and on generally prevailing industry practices. Phono III Final Determination.

<sup>216</sup> “Frequently Asked Questions,” U.S. Copyright Office, accessed October 11, 2021, <https://www.copyright.gov/music-modernization/faq.html> (“The new legislation does not change the rates for the compulsory license under section 115. However, the legislation does establish a new rate setting standard to be applied by the Copyright Royalty Judges. The new market-based willing buyer / willing seller rate setting replaces the policy-oriented 801(b)(1) rate-setting standard. The Copyright Royalty Judges will apply the new standard to rate determination proceedings that commence on or after October 11, 2018.”).

<sup>217</sup> “This determination is to be made based on “economic, competitive, and programming information presented by the parties, including—(i) whether use of the compulsory licensee’s service may substitute for or may promote the sales of phonorecords or otherwise may interfere with or may enhance the musical work copyright holder’s other streams of revenue from its musical works; and (ii) the relative roles of the copyright owner and the compulsory licensee in the copyrighted work and the service made available to the public with respect to the relative creative contribution, technological contribution, capital investment, cost, and risk.” Orrin G. Hatch-Bob Goodlatte Music Modernization Act, Pub. L. No. 115-264, 132 Stat. 3680 (2018).

<sup>218</sup> Web IV Determination, at 26347 (“The need to adjust for undue market power dates back to Web I.”).

<sup>219</sup> Web V Determination, at 7 (“Consistent with the D.C. Circuit’s decision affirming Web IV, the Judges in this Web V proceeding again apply the standard that royalty rates for noninteractive services should be set at levels that reflect those



Board found that the complementary oligopoly power of the major record labels prevents effective competition in the market for sound recording rights sold to interactive streaming companies, and therefore rates derived from that benchmark should be adjusted to reflect what they would be in a hypothetical effectively competitive market.<sup>220</sup> The Board has also found that similar complementary oligopoly power is exercised over non-interactive services and in the markets for musical works rights.<sup>221</sup>

## VIII.B. The concept of effective competition

~~(124)~~(125) The term “effective competition” has been equated to the concept of “workable competition,” which was introduced by the economist J.M. Clark in 1940 as a close “working approximation” to the ideal of perfect competition, but which, unlike perfect competition, can occur under real-world market conditions.<sup>222</sup> There is no single definition of workable competition, but it generally refers to a market in which no firm has substantial market power and in which firms directly compete for customers by improving their offerings, for example by offering a better price.<sup>223</sup> Although an effectively or workably competitive market is not affected by substantial market power, it does not achieve the “metaphysical perfection and competitiveness” of a *perfectly* competitive market.<sup>224</sup>

~~(125)~~(126) Antitrust enforcers implicitly incorporate an effective or workable competition standard in evaluating potentially anticompetitive actions.<sup>225</sup> For example, mergers are not condemned for causing a market

that would be set in an effectively competitive market.”).

<sup>220</sup> Web V Determination, at 72 (“In sum, the Judges find it appropriate—for the reasons discussed above—to apply a 12% steering adjustment (prior to the offsets discussed below) in order to generate a competitive rate.”).

<sup>221</sup> Web V Determination, at 7 (“In Web IV, the Judges applied the concept of ‘effective competition’ as a counterweight to the ‘complementary oligopoly’ power of the Majors. Web IV, 81 Fed. Reg. at 26368 (identifying the ‘complementary oligopoly that exists among the Majors,’ allowing them to ‘utilize their combined market power to prevent price competition among them ....’). Simply put, the Judges found that each Major is a ‘Must Have’ licensor for noninteractive services (in the hypothetical unregulated market), meaning that each noninteractive service ‘must have’ a license for the entire repertoires of Sony, Universal and Warner, in order to remain in business.”); Web V Determination, at 10 (“And, in the next rate-setting case, Phonorecords III, the Judges (in the majority and in the dissent) found that the licensors—owners of the copyrights for musical works—possessed complementary oligopoly power.”).

<sup>222</sup> J. M. Clark, “Toward a Concept of Workable Competition.” *American Economic Review* 30 (June 1940): 241–56, <https://search.ebscohost.com/login.aspx?direct=true&db=eoh&AN=1185426&site=ehost-live>.

<sup>223</sup> J.S. Bain, “Workable Competition in Oligopoly: Theoretical Considerations and Some Empirical Evidence.” *American Economic Review* 40 (May 1950): 35–47, <https://search.ebscohost.com/login.aspx?direct=true&db=eoh&AN=1194470&site=ehost-live>.

<sup>224</sup> Web IV Determination, at 26332-26333 (“First, the D.C. Circuit, the Librarian, the Judges, and the CARP have all acknowledged that the Judges can and should determine whether the proffered rates reflect a sufficiently competitive market, *i.e.*, an “effectively competitive market. The Judges made this point clearly in their decision in the Web III remand, which included a summary of the past decisional language regarding the §114 standard: The DC Circuit has held that this statutory section does not oblige the Judges to set rates by assuming a market that achieves “metaphysical perfection and competitiveness.” *Intercollegiate Broad. Sys., Inc. v. Copyright Royalty Board*, 574 F.3d 748, 757 (D.C. Cir. 2009). Rather, as the Librarian of Congress held in Web I, the WBWS standard calls for rates that would have been set in a “competitive marketplace.” 67 FR at 45244-45 (emphasis added).”).

<sup>225</sup> R.S. Khemani, “Glossary of Industrial Organisation Economics and Competition Law,” Organisation for Economic Co-

to depart from perfect competition, but rather for causing a “substantial lessening of competition,” in the words of the Clayton Act.<sup>226</sup> The Department of Justice and the Federal Trade Commission, in their merger guidelines, interpret a “substantial lessening of competition” as an enhancement of market power.<sup>227</sup>

~~(126)~~(127) Economists define “market power” as the ability to price above a competitive level.<sup>228</sup> “Monopoly power” has been equated to substantial market power or the ability to price substantially above a competitive level.<sup>229</sup> While a market with only one producer—a literal “monopoly”—is rare, in most industries, most firms have some market power.<sup>230</sup> On the other end of the spectrum from monopoly, a market with sustained “perfect” competition, with prices consistently at marginal cost, likely does not exist outside of textbooks.

~~(127)~~(128) In addition to pricing above cost, in assessing market power, economists also pay attention to low price elasticity of demand for the product—which allows the product to be priced high with relatively little loss in sales—a durable market position,<sup>231</sup> and barriers to entry.<sup>232</sup> Market shares are sometimes used as a proxy for some of these indicia of market power.<sup>233</sup>

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Operation and Development, July 16, 1993, available at <https://www.oecd.org/competition/publicationsdocuments/glossary/>, at 86 (“No consensus has arisen over what might constitute workable competition but all bodies which administer competition policy in effect employ some version of it.”).

<sup>226</sup> “15 U.S. Code § 18 – Acquisition by One Corporation of Stock of Another,” Legal Information Institute, Cornell Law School, accessed October 2, 2021, <https://www.law.cornell.edu/uscode/text/15/18>.

Clayton Act, 15 U.S.C. § 7, <https://www.law.cornell.edu/uscode/text/15/18> (“[Section 7 of the Clayton Act prohibits mergers if] in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.”).

<sup>227</sup> US Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, August 19, 2010, <https://www.justice.gov/atr/horizontal-merger-guidelines-08192010>, p. 2 (“The unifying theme of these Guidelines is that mergers should not be permitted to create, enhance, or entrench market power or to facilitate its exercise. For simplicity of exposition, these Guidelines generally refer to all of these effects as enhancing market power. A merger enhances market power if it is likely to encourage one or more firms to raise price, reduce output, diminish innovation, or otherwise harm customers as a result of diminished competitive constraints or incentives.”).

<sup>228</sup> Massimo Motta, *Competition Policy: Theory and Practice* (Cambridge: Cambridge University Press, 2004), p. 115.

<sup>229</sup> Avishalom Tor, “Unilateral, Anticompetitive Acquisitions of Dominance or Monopoly Power,” *Antitrust L.J.* 76, no. 847 (2010): 1, [https://scholarship.law.nd.edu/law\\_faculty\\_scholarship/40](https://scholarship.law.nd.edu/law_faculty_scholarship/40) (“The prohibition of certain types of anticompetitive unilateral conduct by firms possessing a substantial degree of market power—variously called “monopolists” or “dominant firms”—is a cornerstone of competition law regimes worldwide.”).

<sup>230</sup> Massimo Motta, *Competition Policy: Theory and Practice* (Cambridge: Cambridge University Press, 2004), pp. 115-116.

<sup>231</sup> “Monopolization Defined,” Federal Trade Commission, accessed October 8, 2021, <https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/single-firm-conduct/monopolization-defined>.

<sup>232</sup> US Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, August 19, 2010, <https://www.justice.gov/atr/horizontal-merger-guidelines-08192010>, section 9.

<sup>233</sup> US Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, August 19, 2010, <https://www.justice.gov/atr/horizontal-merger-guidelines-08192010>, sections 2.1.3, 4, 5.

~~(128)~~(129) In the case of music copyrights, streaming services negotiate with entities that control large agglomerations of music rights. Three companies—Sony, Universal, and Warner—own particularly large portfolios of sound recording and musical works copyrights.<sup>234</sup>

~~(129)~~(130) Importantly, the portfolios of the record labels and publishing companies are complements rather than substitutes for streaming services. They do not directly compete with one another on price to displace other labels and publishers on that interactive streaming service.<sup>235</sup> This ownership of complementary must-have portfolios creates the “complementary oligopoly” or “Cournot complements” problem that the Board has identified in previous proceedings.<sup>236</sup> Under complementary oligopoly, the so-called “double marginalization” problem can lead to even higher prices than under monopoly.<sup>237</sup>

~~(130)~~(131) In the next sections, I discuss evidence of the substantial market power of record labels and music publishers with respect to licensing their works to interactive streaming services.

<sup>234</sup> See Section X.

<sup>235</sup> Web V Determination, at 7,8 (“[T]he ‘Must Have’ status of the three Majors rendered each a ‘complementary oligopolist.’”) (“The Majors possess ‘complementary oligopoly power’ in the actual (unregulated) interactive market and in the hypothetical (unregulated) noninteractive market that ‘thwart[s] price competition and [is] inconsistent with an ‘effectively competitive market’....”); Phono III Final Determination, at 1941 (“[I]n the interactive streaming market, services must build a catalog of sound recordings and their included musical works, so that many works can be streamed to listeners.... That is, in the interactive streaming market, the sound recordings are ‘must have’ complements, not in competition with each other.”); Duffett-Smith WDT, ¶¶ 29,30 (“[REDACTED]”).

<sup>236</sup> Originally coined by Cournot as a *composite commodity*. Cournot, Antoine Augustin. *Researches into the Mathematical Principles of the Theory of Wealth*. Macmillan, 1897 (original 1838), chapter IX, p. 99, ¶55 (“we will imagine two commodities, (a) and (b), which have no other use beyond that of being jointly consumed in the production of the composite commodity (ab).”).

Giuseppe Dari-Mattiacci and Francesco Parisi, “Substituting Complements,” *Journal of Competition Law and Economics* 2, no. 3 (2006): 333 (“The presence of multiple sellers in the provision of nonsubstitutable complementary goods [...]. This problem is known in the economics literature as complementary oligopoly.”).

<sup>237</sup> Giuseppe Dari-Mattiacci and Francesco Parisi, “Substituting Complements,” *Journal of Competition Law and Economics* 2, no. 3 (2006): 333 (“The presence of multiple sellers in the provision of nonsubstitutable complementary goods leads to outcomes that are worse than those generated by a monopoly with a vertically integrated production of complements. This problem is known in the economics literature as complementary oligopoly.”).

Cournot, Antoine Augustin. *Researches into the Mathematical Principles of the Theory of Wealth*. Macmillan, 1897 (original 1838), chapter IX, p. 103, ¶57 (“But there is this essential and very remarkable difference, that the root of equation (c) is always greater than that of equation (c’), so that the composite commodity will always be made more expensive, by reason of separation of interests than by reason of the fusion of monopolies. An association of monopolists, working for their own interest, in this instance will also work for the interest of consumers, which is exactly the opposite of what happens with competing producers.”).

## VIII.C. Market power of labels and publishers

### VIII.C.1. Market power of labels

(131)(132) The three largest music labels—Universal Music Group, Sony Music Entertainment, and Warner Music Group—collectively earn approximately 65% of all US label revenue. The dominance of the industry by three major labels has resulted from ongoing consolidation since the birth of the industry in the 1940s and 1950s. By 1988, there were six major labels.<sup>238</sup> Those “Big 6” became the “Big 3” after the 1998 merger of Universal and Polygram, the 2003 merger of Sony and BMG, and the 2012 merger of Universal and EMI.<sup>239</sup> The estimated market shares of the three major labels in the United States and worldwide are shown in Figure 31 below.

**Figure 31: Market shares of Record Labels, US and worldwide, by revenue, 2019**

Record label	US	Worldwide
Universal Music Group	32%	32%
Sony Music Entertainment	20%	20%
Warner Music Group	16%	16%
Other	32%	32%

Sources: US: “Market Share of Record Companies in the United States from 2011 to 2019, by Label Ownership,” *Statista*, January 8, 2021, accessed October 2, 2021, <https://www.statista.com/statistics/317632/market-share-record-companies-label-ownership-usa/>. Worldwide: “UMG Increases Recorded-Music Market Share Lead, Indies Enhance Publishing Dominance,” *Music & Copyright* (blog), May 20, 2020, <https://musicandcopyright.wordpress.com/2020/05/20/umg-increases-recorded-music-market-share-lead-indies-enhance-publishing-dominance/>.

(132)(133) [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED].<sup>240</sup> The Federal Trade Commission concluded in its evaluation of the 2012 Universal-EMI

<sup>238</sup> Sebastian Watzinger, “Music Labels: What Are They and a Review of the Top Record Labels,” *Music Gateway* (blog), May 20, 2020, <https://www.musicgateway.com/blog/how-to/music-labels-top-record-labels>.

<sup>239</sup> Mark Cooper and Jodie C. Griffin, “The Role of Antitrust in Protecting Competition, Innovation and Consumers as the Digital Revolution Matures: The Case Against the Universal-EMI merger and E-Book Price Fixing” (SSRN paper, June 2012), <http://dx.doi.org/10.2139/ssrn.2460992>.

<sup>240</sup> See Amended Written Direct Testimony of Kajal Gayadien ~~October 13, 2021~~ March 8, 2022 [hereinafter “Gayadien WDT/ADWT”], ¶ 9 (“[REDACTED]”).

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] See also Dmitry Pastukhov, “How Music Streaming Works and the Popular Music Streaming Trends of Today,” *Soundcharts* (blog), updated June 13, 2019, <https://soundcharts.com/blog/how-music-streaming-works-trends/> (“The core product of the streaming market is unlimited, seamless access to all music in the world. Sure, none of the streaming catalogues are actually complete—but the point is that 99% of the users won’t ever have to look for music outside of their streaming service of choice.”). See also Duffett-Smith WDT, ¶ 28 (“[REDACTED]”).

Commission staff found considerable evidence that each leading interactive streaming service must carry the music of each Major to be competitive. Because each Major currently controls recorded music necessary for these streaming services, the music is more complementary than substitutable in this context, leading to limited direct competition between Universal and EMI.<sup>241</sup>





### VIII.C.2. Market power of publishers

\_\_\_\_\_”).

242 Klein WDT, ¶ 14 and Table 36. [REDACTED]  
[REDACTED]  
[REDACTED]

<sup>245</sup> Klein WDT, Table 29.

**Figure 32: Estimated shares of Major Publishers, US and worldwide**

Publisher	US Q2-2021 top 100 play share	Worldwide 2019 revenue share
Sony Music Publishing	33%	
Universal Music Publishing Group	18%	
Warner/Chappell Music	17%	
Other	32%	

Sources: For the US, shares are based on shares of plays of the 100 most-played radio songs in the second quarter of 2021, Ed Christman, “Publishers Quarterly: Sony ‘Levitating’ Atop Rankings, Silk Sonic Makes Smooth Entry,” *Billboard*, August 11, 2021, Factiva, <https://assets.billboard.com/articles/business/publishing/9613100/publishers-quarterly-sony-silk-sonic-q2-2021>. For Worldwide numbers, shares are based on revenue from physical and digital sales, “Revenue Market Share of the Largest Music Publishers Worldwide from 2007 to 2019,” *Statista*, accessed July 13, 2021, <https://www.statista.com/statistics/272520/market-share-of-the-largest-music-publishers-worldwide/>.

~~(135)~~(136) Importantly from the perspective of market power, ownership of musical works is often diffuse—several different entities may own fractional shares of musical works rights for a given song. This creates a potential “holdout” problem whereby an owner of a fractional share of a song could potentially appropriate a disproportionate share of the returns.<sup>246</sup> This problem is compounded by the fact that musical works ownership information is difficult to obtain and constantly changing, making

<sup>246</sup> Calabresi and Melamed defined the holdout problem in terms of the ability of individual land holders to prevent an efficient transfer of a tract of land by holding out for more than the value of their individual parcel. *See* Guido Calabresi and A. Douglas Melamed, “Property Rules, Liability Rules, and Inalienability: One View of the Cathedral,” *Harvard Law Review* 85, no.6 (April 1972): 1106-07. Holdout (or “hold-up”) problems have manifested in the IT sector, where new innovations often touch on a number of patents, each of which can exert a potential veto over the innovation and thus extract more than the incremental value of the patent to the final good. *See* Mark A. Lemley, “Ten Things to Do About Patent Hold Up of Standards (and One Not To),” *Boston College Law Review* 48(2007): 150-151 (“...the one central fact about the information technology (“IT”) sector—including the Internet, semiconductors, telecommunications, computer hardware, and computer software—is the multiplicity of patents that developers must deal with...This creates a problem because various features of the patent system facilitate holdup. Patent owners in these component technology industries like IT can capture not just the value of the incentive contribution that they have made—something they ought to be entitled to—but also some greater amount of money than their invention is worth.”).

it difficult for a service to know precisely which songs a particular publisher owns.<sup>247</sup> [REDACTED]

[REDACTED]<sup>248</sup>

(136)(137)

[REDACTED]<sup>249</sup>

<sup>247</sup> Duffett-Smith WDT, ¶¶ 38, 39 (“Additional features of musical-works rights magnify publishers’ [REDACTED] Musical-works ownership structures are often complicated, as demonstrated by the “Rain on Me” example above. Amazon typically lacks ex ante (and often even ex post) visibility into those structures. For many newly released songs, Amazon receives songwriting ownership data only after the fact – often many months after the song is released and placed onto Amazon’s services. When “Rain on Me” was released, for example, even the record label was unaware of the entire songwriting ownership structure; [REDACTED]

[REDACTED]. And for many older songs, we never gain visibility into the entire ownership chain. We rely on Music Reports Incorporated (“MRI”) to match individual tracks to publishers, but the rights holders often do not provide MRI with the information necessary to perform that task in a timely manner. Due to this lack of visibility, [REDACTED]

Ownership changes also amplify the problem. Even if Amazon manages to verify a song’s entire ownership structure at a given point in time, the ownership shares can change without notice. And we often will not know about those changes until well after the fact – if ever. For example, Bruno Mars and Mark Ronson’s “Uptown Funk” had six songwriters at the time of release, but months later five songwriters were added apparently as a result of a litigation settlement. The prospect of such fluctuating ownership shares further complicates Amazon’s ability to verify which publishers own which songs. [REDACTED]

See also Braun WDT, ¶ 63 (“[REDACTED]”).

<sup>248</sup> Duffett-Smith WDT, ¶ 40 (“[REDACTED]”). Economists have long identified information asymmetries as a potential source of market inefficiencies. See, e.g., George A. Akerlof, “The Market for ‘Lemons’: Quality Uncertainty and the Market Mechanism,” *Quarterly Journal of Economics* 84, no. 3 (1970): 488–500, <https://doi.org/10.2307/1879431>; Michael Rothschild and Joseph Stiglitz, “Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information,” *Quarterly Journal of Economics* 90, no. 4 (1971): 629, <https://doi.org/10.2307/1885326>.

<sup>249</sup> See, e.g., Braun WDT, ¶ 59 (“[REDACTED]”).

<sup>250</sup> Duffett-Smith WDT, ¶¶ 33–37.

<sup>251</sup> Duffett-Smith WDT, ¶¶ 33–35.

#### VIII.D. Implications of market power for rate-setting

252 Duffett-Smith WDT, ¶ 35 (“[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]”).



## IX. Maintaining a particular level of mechanical royalties is not critical to making songwriting a viable profession

~~(138)~~(139) While acknowledging that it “was largely anecdotal and unsupported by sophisticated survey, studies, or economic theories,” the Board in its Phono III final determination found that “the evidence points strongly to the need to increase royalty rates to ensure the continued viability of songwriting as a profession.”<sup>253</sup> They also found that it was important to maintain mechanical royalties specifically, through a mechanical floor in the rate structure, to ensure continuation of “an important source of liquidity for songwriters.”<sup>254</sup>

~~(139)~~(140) The share of mechanical royalties within all musical works royalties is a function of changes in technology and distribution platforms. As distribution of recorded music moves from CDs and PDDs to interactive streaming, the share of mechanical royalties relative to performance royalties within musical works royalties decreases. When evaluating payments to musical works rightsholders, however, the particular split is less important than trends in musical works royalties as a whole. As shown in Figure 4, streaming services have driven increases in recorded music revenue in recent years. Given that musical works royalties have been tied to that revenue, songwriters and publishers have seen increasing royalty payments from the streaming services.

~~(140)~~(141) If, despite this, there is an underpayment of musical works rightsholders leading to a market undersupply ~~of songs~~ of musical works, then, as discussed in this section, that deficiency is more naturally and effectively remedied by direct transfers between sound recording and musical works rightsholders—especially given the supra-competitive profits of record labels and the co-ownership of major labels and publishers—rather than by further increasing total interactive streaming royalties.

### IX.A. Trends in relative size of mechanical and performance royalties are driven by changes in technology

~~(141)~~(142) Compensation to musical works copyright holders is ultimately determined by total musical works royalties: that is, the sum of performance and mechanical royalties. The particular division of royalties between performance and mechanical royalties is a function of the regulatory environment—which determines which distribution channels pay which musical works royalties—and of changes in technology, which move revenue between distribution channels. For instance, the replacement of physical and digital sales of CDs and PDDs—which pay only mechanical and not performance royalties—by interactive streaming—which pays both mechanical and performance

<sup>253</sup> Phono III Final Determination, at 1958.

<sup>254</sup> Phono III Final Determination, at 1934.

royalties—will tend to make mechanical royalties a smaller share of total musical works royalties, even if total musical works royalties increase.

~~(142)~~(143) The replacement of CD/PDD revenue by interactive streaming revenue has had two beneficial effects for songwriters: first, musical works rightsholders earn more as a share of revenues from interactive streaming subscription sales than they do from sales of PDDs.<sup>255</sup> Second, because all musical works revenues from PDDs are in the form of mechanical royalties while those from interactive streaming are split between mechanical and performance royalties, in the short run, songwriters benefit because they generally retain a larger share of performance royalties than they do of mechanical royalties.<sup>256</sup> In the longer run, the perfect complementarity of mechanical and performance royalties means that musical works rights holder payments should not depend on the particular split.

~~(143)~~(144) More importantly, as I discussed in Section VI.A, publishing revenue, which captures *all* sources of musical works revenue including both performance and mechanical royalties, has been increasing steadily since 2014.

## IX.B. The structure of copyright payments does not mandate particular final payment streams

~~(144)~~(145) A musical work (a “song”) is an input into a sound recording. At a high level, it is unusual that streaming services have to pay for use of not just a final product—an album or song released by a recording artist—but also, separately, an input into that final product, namely the musical work underlying it. Typically, final goods producers pay for their own inputs and do not charge the final consumer separately for the input costs.

~~(145)~~(146) In the case of streaming services, the legal structure surrounding copyrights leads to this outcome, but it does not necessarily mandate it. For example, to sell a music PDD, Amazon pays a share of the PDD’s retail price to the record label, which owns the sound recording right and itself pays a publisher for the musical works rights.<sup>257</sup> That structure is more straightforward than the one that

<sup>255</sup> See Figure 35, which shows that Amazon pays an estimated 7.997% of PDD revenue as musical works royalties, compared to Figure 29, which shows that Amazon paid 15.2% of revenue as musical works royalties in 2019.

<sup>256</sup> See Written Direct Testimony of Wayne C. Coleman, CPA, October 13, 2021, ¶ 18 (“Mechanical royalties that flow through the major music publishers are slow to be paid, hard to match to songwriters, and disproportionately used to pay publishers themselves. They are far less efficient in providing revenue to songwriters than, for example, public-performance royalties.”); See also Donald S. Passman, *All You Need to Know About the Music Business*, 10<sup>th</sup> ed. (New York: Simon & Schuster, 2019), 227 (“It isn’t just publishers who affiliate with these societies. The writers also sign on, and even more important, *the writers are paid 50% of the money (the writer’s share) directly by the society*. In other words, the writers’ performance earnings are not paid to the publisher; they’re sent to the writer. This is designed to protect the writer (which it does nicely) from flaky publishers who might steal their money.”) [emphasis in original].

<sup>257</sup>

currently prevails for interactive streaming, in which the streaming services (rather than the labels) pay for the upstream composition input into any sound recording to which they purchase access.

~~(146)~~(147) More generally, if there were a law in a particular industry that said that a final consumer had to pay for an upstream input at a set rate, and if that set rate were “too low” from the perspective of economic efficiency, leading to an underproduction of the final good, the final good producer would have an incentive to make side payments to the input producer to remedy that problem. In the case of musical works, if there were an undersupply of musical works by songwriters, recording artists and record labels would have the incentive and ability, via their supracompetitive profits, to remedy this deficiency.

### **IX.C. Record labels are best positioned to correct any undersupply of songwriting**

~~(147)~~(148) If there were a substantial undersupply of musical works affecting the production of sound recordings, then it would be in the interest of record labels and recording artists to increase payments to songwriters to remedy the problem. Music distributors would also have this general interest, but a record label is likely better placed to efficiently remedy an undersupply of musical works than a distributor for at least two reasons. First, record labels are directly involved in the creation of sound recordings and thus have more information on the supply of musical works than distributors have. Second, each of the major record labels has its own publishing affiliate, so that identifying appropriate recipients and transferring funds to support musical works creation would likely have lower transaction costs for them relative to distributors.

~~(148)~~(149) In addition, the generally unregulated complementary oligopoly power of the record labels supports the conclusion that they are overcompensated for their sound recording rights relative to what an effectively competitive market would deliver.<sup>258</sup> In contrast, as I discussed in Section III.D above, interactive streaming services struggle with profitability.

~~(149)~~(150) If songwriters were undercompensated such that there was underprovision of musical works, then, a market solution would be for record labels to incentivize musical works production on their own.

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~~\_\_\_\_\_~~ See also Dana A. Scherer, “Money for Something: Music Licensing in the 21st Century,” Library of Congress, February 23, 2021, available at <https://crsreports.congress.gov/product/pdf/R/R43984>, p. 6 (“Rights owners of sound recordings (e.g., record labels) pay music publishers for the right to record and distribute the publishers’ musical works in a physical format.”).

<sup>258</sup> Phono III Final Determination, at 1964 (“However, it is undisputed that the record companies, by statutory design, have the unfettered legal ability to set their sound recording royalty rates, allowing them to exercise their economic power to demand rates that embody their ‘complementary oligopoly’ status, as previously described by the Judges.”).

## X. Appropriate mechanical royalty structure

~~(150)~~(151) Both the level of royalties and their structure—that is, whether they are determined as a percentage of service revenue, on a per-subscriber or per-play basis, or by reference to other royalty rates—potentially impact the development of interactive streaming services and the industry more broadly. The Phono II and the initial Phono III royalty rate structures, as well as those of some private contracts, feature a headline all-in percent-of-revenue rate, with alternative rate calculations based on a per-subscriber royalty rate or on a percentage of sound recording royalties.

~~(151)~~(152) In this section, I provide a discussion of economic foundations and tradeoffs related to rate structures.

### X.A. Overview of economic tradeoffs related to rate structures

~~(152)~~(153) There are sound economic reasons for a percent-of-revenue rate structure. To understand this, let us focus on royalties that are applied to a subscription service, where subscribers pay a fixed monthly fee and then can play as many songs as they like at no incremental cost. To begin, the subscription model itself promotes economic efficiency because it aligns the incremental cost to the listener of playing an additional song with the approximately zero marginal cost to the service of streaming an additional song to the listener, where here I am talking about costs other than royalties.

~~(153)~~(154) Now consider different royalty structures that could be applied to a subscription streaming service.

~~(154)~~(155) A percent-of-revenue rate structure aligns interactive streaming services' incentives to maximize revenue with copyright owners' interest in profiting from their musical works because, under such a rate structure, both the services and the copyright owners benefit from any increase in revenue. In addition, all revenue is weighted the same, in the sense that revenue from one subscriber is given equal weight with revenue from another subscriber. The percent-of-revenue rate structure does not introduce inefficient distortions into a service's preferences over which songs it streams or to which subscribers it streams those songs.

~~(155)~~(156) For contrast, it is useful to consider the alternatives of per-subscriber and per-play fees. Under a per-subscriber fee, a change in a service's monthly subscription fee affects the profits of the service but not the revenue received by the copyright owners, implying that the incentives of services and copyright owners are not aligned. For example, at least in the short run, copyright owners would benefit from having very low (or even zero) monthly subscription fees that attract more subscribers and so generate more per-subscriber fees. Further, under per-subscriber fees, a service may not have the incentive to incur acquisition costs for listeners who are unlikely to continue to subscribe to its service for an extended period of time because per-subscriber fees would have to be paid during the acquisition period in which the service's revenue is relatively low or zero, even if those listeners

would be surplus-enhancing. In contrast, under a percentage of revenue structure, the services' and the copyright owners' interests in acquiring subscribers who will generate a future revenue stream are aligned. In particular, a percent-of-revenue rate structure provides services with appropriate incentives to attract even low WTP consumers, including working to acquire new subscribers through special offers and discounts.<sup>259</sup>

~~(156)~~(157) Under a per-play fee, a different set of economic inefficiencies arise. Services would have incentives to engage in wasteful efforts to more actively monitor whether subscribers are actively listening to avoid paying per-play fees on streams that are not generating a threshold level of value for the listener. Services would also have incentives to skew listening toward longer songs within the class of songs that require the same per-play fee (and potentially even to allow for additional dead time to slow the rate at which songs play if that can be done without disrupting the listener experience) so as to minimize the number of plays subject to retaining a subscriber. Once again, the economic incentives of the services and the copyright owners are not aligned.

~~(157)~~(158) In addition to per-subscriber and per-play fees, past royalty structures have also involved prongs based on a percentage of sound recording royalties. This can be inefficient for multiple reasons. First, record labels have substantial market power, so basing musical works royalties on sound recording royalties can import the distortions associated with market power into the musical works royalties. Second, the record labels involved in negotiating sound recording royalties are not independent entities from the publishers that receive musical works royalties. Thus, record labels may have an incentive to distort their negotiations over sound recording royalties in recognition of the effects on their associated publishers' revenue. Third, the dependence of musical works royalties on negotiated outcomes outside the control of the Board introduces an additional level of uncertainty into the determination of musical works royalties.

~~(158)~~(159) Despite the disadvantages of musical works royalties based on per-play fees, per-subscriber fees, and a percentage of sound recording royalties, they appear in a number of statutorily set and privately negotiated rates. Such rate structures can be useful when difficulties arise with the application of a percent of revenue royalty structure, such as if there are difficulties in defining the appropriate revenue. For example, it may be difficult to determine the revenue attributable to an interactive streaming service when the service is sold in conjunction with a bundle of unrelated services, or more

<sup>259</sup> Phono III Final Determination, at 1956-57 ("Professor Marx marshals these microeconomic principles to explain why the 2012 Settlement rate structure tends to incentivize and support the maximization of musical works available to the public under Factor A. Marx WDT ¶¶ 119-122, 123-133. As she testified at the hearing: '[H]aving different means of price discrimination is going to allow greater efficiency to be achieved [i]f we have a way for low willingness to pay consumers to access music, for example, student discounts, family discounts or ad-supported streaming, where low-willingness-to-pay consumers can still access music in a way that still allows some monetization of that provision of that service'....With regard to the downstream market, the Judges find that Professor Marx's analysis of how a price discriminatory model maximizes availability is correct. Price discrimination not only serves low WTP listeners, but it also indirectly serves copyright owners, by incentivizing interactive streaming services to increase the total revenue that price discrimination enables.") [emphasis original].

generally when revenue is difficult to attribute to a music service.<sup>260</sup> In that case, implementation constraints may cause a rate structure other than percentage of revenue to be the best option for that service. The inefficiencies associated with non-percent-of-revenue rate structures can be ameliorated by targeting them to a particular service or service type.

## **X.B. Economic efficiency and flexibility favor a percent-of-revenue structure for most interactive streaming services**

~~(159)~~(160) Economic theory indicates that a royalty rate structure based on a percentage of revenue helps maximize the efficiency of music distribution. This is because a percent-of-revenue structure aligns the marginal price to streaming services for music usage with the marginal cost to copyright owners of providing that usage, while transferring to copyright owners a lump sum scaled to the willingness to pay of consumers for the service. This encourages a variety of business models geared toward different consumers with different WTP.

~~(160)~~(161) Economic efficiency normally requires that the price be equal to the marginal cost.<sup>261</sup> However, for products with essentially zero marginal cost, such as digital music, setting the efficient marginal price does not allow a producer to generate revenue sufficient to cover its fixed costs. One way proper production incentives can be maintained, while retaining economic efficiency on the margin, is by charging a “two-part tariff”—a fixed amount, such as a subscription fee, for the right to purchase multiple units of a product, while pricing individual units at or close to marginal cost.<sup>262</sup>

~~(161)~~(162) A percent-of-revenue structure applies this two-part tariff structure upstream: services pay a lump sum based on revenue collected while paying a zero usage fee aligned with the zero true marginal cost of providing music. This upstream structure supports a similar downstream structure that is universal among popular paid subscription streaming services: a single monthly subscription fee that allows for unlimited streaming.<sup>263</sup>

~~(162)~~(163) A royalty structure that incentivizes efficient downstream usage, and thereby increases the available surplus, aligns with what willing buyers and willing sellers would negotiate in a market in the absence

<sup>260</sup> Such royalties may also be used as a way of allocating risk for new, unproven business models.

<sup>261</sup> Schramm, Gunter. “Marginal cost pricing revisited.” *Energy Economics* 13, no. 4 (1991), p. 245, <https://www.sciencedirect.com/science/article/pii/0140988391900031> (“Marginal cost pricing is the appropriate approach for achieving economic efficiency.”).

<sup>262</sup> Examples of services that use this type of “two-part tariff” with a fixed, low, or zero marginal fee include video streaming services such as Netflix, health clubs, mobile telephone services that provide unlimited talk and text for a fixed fee, and, to a lesser extent, warehouse clubs (in the last, price is not literally marginal cost but is generally lower than that available outside the club).

<sup>263</sup> Charging a subscription price above zero induces some static inefficiency as it excludes users whose total value from the product is less than the subscription fee but greater than the true marginal cost, but users who purchase the subscription have an incentive to access the economically efficient amount of the product that maximizes their value for the service.

of regulation. Both parties in a free negotiation have the same incentive to set terms that maximize the total surplus available from reaching agreement. They have opposing incentives regarding how that surplus should be divided between them. But to the extent that transfers of surplus between parties can be implemented without reducing total surplus, a solution that maximizes surplus is in both parties' interests.

~~(163)~~(164) Calculating royalties as a percentage of revenue is common in the interactive streaming industry, both in statutory rates set by the Board for mechanical royalties and in private rates negotiated between interactive streaming services and record labels for sound recording royalties.

~~(164)~~(165) The Phono II settlement featured a percent-of-revenue rate structure, with a headline rate of 10.5% for the most popular services.<sup>264</sup> In addition to the headline rate, the Phono II rate structure for interactive streaming contained alternative prongs, depending on the particular service, based on a percentage of sound recording royalties paid (the "TCC" prong), or various per-subscriber minima.<sup>265</sup> The Phono III final determination retained the headline percent-of-revenue rate structure of Phono II, increasing the level somewhat, while simplifying the structure in other respects.<sup>266</sup>

~~(165)~~(166)

## X.C. "Backstops" for percentage of revenue can be appropriate in certain circumstances

~~(166)~~(167) Both the Phono II and Phono III rate structures and many private contracts contain alternatives to percent-of-revenue rates that can supersede percent-of-revenue rates if those rates fall below a certain level. These "backstops" can be seen as ways to allocate risk, as protection against difficulties in

<sup>264</sup> Specifically, the headline rate of 10.5% applied to "Bundled Subscription Services," "Free Non-Subscription / Ad-Supported Services," "Limited Offering," "Standalone Non-portable Subscriptions" (both "Mixed Use" and "Streaming Only"), and "Standalone Portable Subscriptions, Mixed Use" services.

"Music Bundles" and "Mixed Service Bundle," had a headline rate of 13.35. "Purchased Content Locker" and "Paid Locker Service" had a headline rate of 12% under Phono II. See "Archived Rate Charts," Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

<sup>265</sup> See Section VII.A for further description of the Phonorecords II rate structure.

<sup>266</sup> See Section VII.B for further description of the Phonorecords III rate structure.

<sup>267</sup> Phono III Final Determination, at 1925.

<sup>268</sup> Gayadien ~~WDT~~AWDT, ¶ 11 ("Amazon's deals with record labels for Unlimited [REDACTED]



measuring revenue attributable to music, or as a way to maintain royalties in the face of pricing strategies that defer or displace revenue from music streaming.<sup>269</sup>

~~(167)~~(168) One way this “backstop” was implemented in the Phono II settlement is through a “capped TCC” prong. Under the capped TCC calculation, using the “standalone portable subscription services, mixed use” rates to illustrate, if the royalty amount calculated by the headline percentage of revenue fell below 21% of sound recording royalties paid (the TCC percentage), then rates were set according to the TCC prong.<sup>270</sup> If, however, the TCC calculation implied an amount that was above an 80 cent per-subscriber “cap,” the cap would be triggered, and royalties would be set at 80 cents per subscriber. [REDACTED]

~~(168)~~(169) The Phono II structure also included a “mechanical only” floor that activated if mechanical royalty rates, as opposed to all musical works royalty rates, fell below a certain minimum amount. As I discussed in Section IX, defining and protecting a certain level of mechanical royalties, independently of musical works royalties as a whole, is economically unjustified.

~~(169)~~(170) The Phono III determination reduced the number of service definitions and rate prongs but retained the TCC prong and a mechanical-only per-subscriber floor for certain services.<sup>271</sup> It removed the cap on the TCC prong, however, which resulted in a large, immediate 55% jump in musical works royalties for Amazon’s standalone portable services from December 2017 to January 2018, as shown

<sup>269</sup> Amazon’s Global Head of Record Label Licensing for its digital music business has testified [REDACTED]  
[REDACTED]  
[REDACTED]. See Gayadien ~~WDTAWDT~~ ¶ 11 (“Amazon’s deals with record labels for Unlimited [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] See also Phono III Final Determination, at 1928 (“When the Services pay royalties as a percent of their current revenue, the input suppliers, i.e., Copyright Owners, are likewise deferring some revenue to a later time period and assuming some risk as to the ultimate existence of that future revenue. One way the Copyright Owners could avoid this impact would be to refuse to accept a percent-of-revenue form of payment and move to a fixed per-unit price. Another way would be to establish a pricing structure that provides minima and floors, below which the revenue could not fall. The bargain struck between Copyright Owners and Services in 2012 is an example of the latter structure.”).

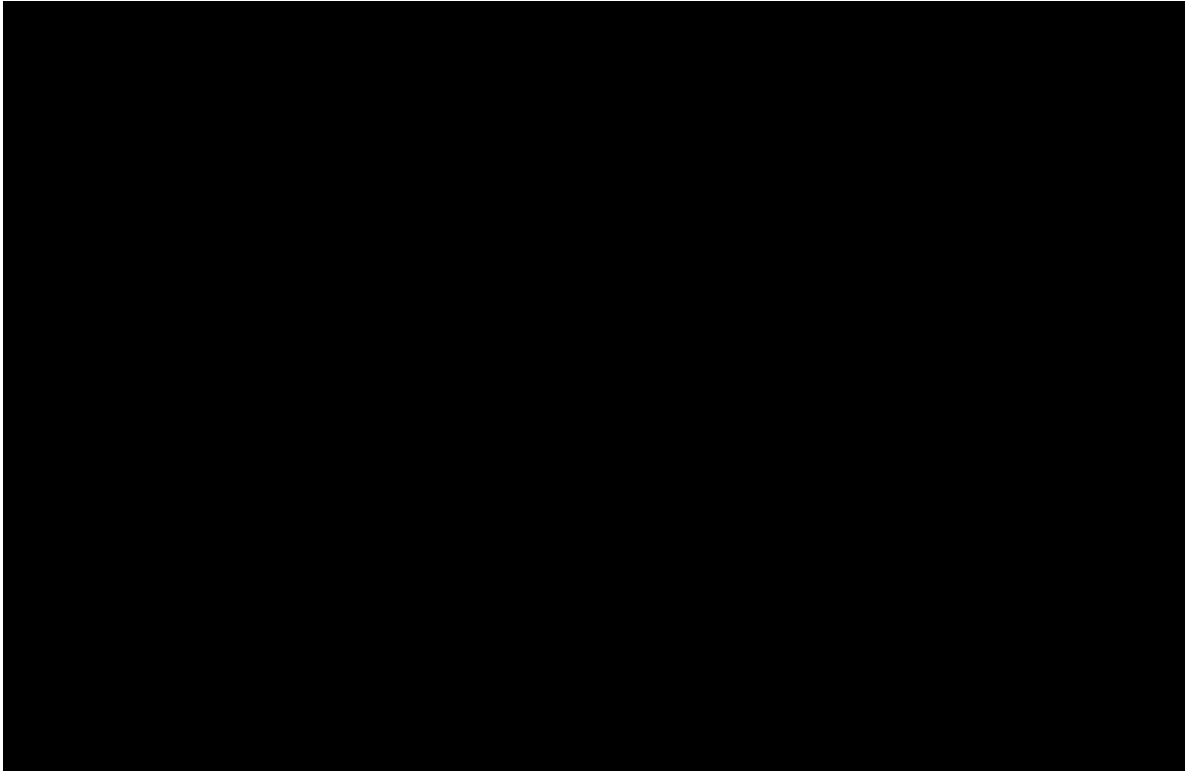
<sup>270</sup> The 21% TCC prong applies to non-pass-through rates. “Archived Rate Charts,” The Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

<sup>271</sup> The following service offerings pay a mechanical-only per-subscriber floor under Phono III: Standalone Portable Subscriptions (50 cents); Standalone Non-portable Subscriptions, Streaming Only (15 cents); Standalone Non-portable Subscriptions, Mixed Use (30 cents). Bundles services pay the “royalty floor that would apply to the music component of the bundle if it were offered on a standalone basis.” Phono III Final Determination, at 2036.



in Figure 33 below. The period during which Amazon was paying under Phono III is shaded in blue in the figure.

**Figure 33: Musical works as a percent of revenue before and after Phono III (Unlimited)**



Source: Amazon royalty rate data.

## X.D. Per-subscriber and per-play rates can induce inefficiencies

~~(170)~~(171) Although flat per-play and per-subscriber rates may be useful in certain situations in which revenue attributable to a streaming service is difficult to calculate, they have the downside of promoting inefficiencies in interactive streaming relative to percent-of-revenue rates. This is especially true of industry-wide per-play or per-subscriber rates, such as those proposed by the Copyright Owners in the Phono III proceeding.<sup>272</sup>

~~(171)~~(172) Per-play rates raise the marginal cost to the service of a play above its true marginal cost. This can discourage efficient, surplus maximizing behaviors that encourage listening. High per-play and per-

<sup>272</sup> Phono III Final Determination, at 1924 (“The Copyright Owners structured the proposal as the greater-of a usage charge and a per-user charge. Specifically, under the Copyright Owners’ proposal, each month the licensee would pay the greater of (a) a per-play fee (\$0.0015) multiplied by the number of interactive streams or limited downloads during the month and (b) a per-end user fee (\$1.06) multiplied by the number of end users during the month.”).

subscriber rates also discourage efficient discounting, which can hinder interactive streaming services’ marketing toward consumer groups, such as students, with a low WTP for streaming.<sup>273</sup>

~~(172)~~(173) With high per-subscriber rates, services would have a disincentive to promote services through trial periods that have traditionally served as an important on-ramp for paid subscriptions.<sup>274</sup> The Klein Survey found that, among respondents who took advantage of a free trial for Unlimited, over [REDACTED] found the trial “very important” or “somewhat important” in their decision to subscribe.<sup>275</sup> High per-subscriber fees may make some offerings, such as ad-supported services, unprofitable, even though, in the absence of the fees, such services would have offered a way to monetize low WTP listeners not willing to pay for a subscription service. High per-play rates can distort decision making toward recommending longer songs and generally reducing incentives to increase listening by individual subscribers. This can encourage strategies such as aggressively checking to ensure that someone is actively listening at all times or induce reducing or discontinuing practices such as automatically playing related songs after a requested song is finished.<sup>276</sup>

~~(173)~~(174) In situations in which the correct level of revenue attributable to the interactive streaming service is difficult to calculate, a *targeted* alternative rate structure may serve a useful purpose. If such an alternative rate structure is tailored to the specifics of a particular service or service type, the potential inefficiencies of non-percent-of-revenue rates can be reduced.

## X.E. An appropriate statutory rate structure for interactive streaming services

~~(174)~~(175) The efficiency of percent-of-revenue rates, their use in the Phono II settlement, and their ubiquity in private contracts argue for a headline percent-of-revenue rate in this proceeding.

<sup>273</sup> Gayadien ~~WDT~~AWDT, ¶ 14 [REDACTED]

<sup>274</sup> *Id.*

<sup>275</sup> Klein WDT, Table 24.

<sup>276</sup> See Hurwitz WDT, ¶ 77 [REDACTED]

~~(175)~~(176) The Phono II settlement and the Phono III proceeding each added a “TCC” prong alongside the headline percent-of-revenue rate in part to protect against “revenue deferral.”<sup>277</sup> Such an alternative rate can protect against problems of revenue displacement or attribution in certain circumstances.<sup>278</sup>

~~(176)~~(177) The Phono II settlement capped this TCC rate with a per-subscriber rate. If set at an appropriate level, such a cap can prevent mechanical royalty rates from swinging dramatically with the vagaries of record labels’ market power. Uncapping the TCC exposes the services to potentially large increases in mechanical royalties tied not to relative contributions of publishers and streaming services, but rather to market developments on the sound recording side of the market. As the US Court of Appeals for the DC Circuit noted in its review of the Phono III determination, uncapping the TCC across the board was a “dramatic step.”<sup>279</sup> The Court found that

[u]ncapping the total content cost prong across all categories leaves the Streaming Services exposed to potentially large hikes in the mechanical license royalties they must pay... By eliminating any cap on the total content cost prongs, the Final Determination yokes the mechanical license royalties to the sound recording rightsholders’ unchecked market power.<sup>280</sup>

~~(177)~~(178) Indeed, as I discussed earlier, removal of the TCC cap [REDACTED]

.<sup>281</sup>

~~(178)~~(179) If the Board determines that an alternative prong is necessary in this proceeding to protect against revenue deferral or revenue misattribution, then a more straightforward protection for paid subscription services that avoids the problems of the uncapped TCC is a simple per-subscriber musical works backstop akin to the per-subscriber cap implemented in the TCC prong in Phono II. In

<sup>277</sup> Phono III Final Determination, p. 1934. Note that a TCC prong only protects against revenue displacement and deferral if there are alternatives to percent-of-revenue prongs such as per-subscriber minima in the services’ contracts with record labels.

<sup>278</sup> Phono III Final Determination, pp. 1934–1935 (“...an uncapped TCC prong effectively imports into the rate structure the protections that record companies have negotiated with services to avoid the undue diminution of revenue through the practice of revenue deferral.”).

<sup>279</sup> Phono III Appellate Decision, at 33.

<sup>280</sup> Phono III Appellate Decision, at 36.

<sup>281</sup> Phono III Final Determination, pp. 1959–1960 (“While the reasonable rate determined by the Judges does not present the same risk of disruption as the rates sought by the Copyright Owners, it does represent a not insubstantial increase of approximately 44% over the current headline rate. In order to mitigate the risk of short-term market disruption, and to afford the services sufficient opportunity ‘to adequately adapt to the changed circumstance produced by the rate change,’ the Judges will phase in the new rate in equal annual increments over the rate period.”). Between those two months, Amazon paid [REDACTED] of revenue, respectively, to musical works royalties for Unlimited’s standalone portable subscription service. See Figure 33.

~~(179)~~(180) A targeted per-subscriber fee can provide a useful backstop for paid subscription services that offer similar catalog size and features. Due to their different features and thus different revenue bases, the appropriate per-subscriber minimum depends on the service category. I calculate appropriate per-subscriber minima for standalone portable and non-portable subscriptions in Section XI.E below. For a bundled service, the appropriate per-subscriber minimum is that one that would apply if it were sold as a standalone service.

~~(181)~~(182) In Section XI.E below I calculate the appropriate backstop level for both paid subscription and free ad-supported services.

283 “Archived Rate Charts,” Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf); “All other offerings,” The Harry Fox Agency, updated 2019, [https://www.harryfox.com/content/2019\\_fns\\_ad\\_s.pdf](https://www.harryfox.com/content/2019_fns_ad_s.pdf).

## X.F. An appropriate statutory rate structure for Amazon Music Prime

~~(182)~~(183) While a percent-of-revenue rate alongside an appropriate backstop has many advantages and is flexible enough to accommodate most interactive streaming business models, the Prime Music service presents particular problems in calculating service revenue and subscribers.<sup>284</sup>

~~(183)~~(184) Prime Music is offered for free as part of a large bundle of unrelated services, and thus it is difficult to attribute revenue to it. [REDACTED]

~~(184)~~(185) A per-subscriber fee is problematic for Prime Music because the notion of “subscriber” is very different for a free service that is used to widely varying degrees by a large set of people who have access to the service than the notion of a “subscriber” of a paid interactive streaming service. The value that Amazon Prime subscribers place on Prime Music seems to vary widely. For example, the Klein Survey shows that [REDACTED]

~~(185)~~(186) This means that an appropriate rate structure for Prime Music will not be the same as the appropriate rate structure that I described above for other services considered in this proceeding. Instead, I view a per-play for Prime Music as the most reasonable rate structure for this service. Such a structure solves problems that were created for Prime Music by the rate structures of Phono II and III and is in line [REDACTED]

<sup>284</sup> See Section X.

<sup>285</sup> Duffett-Smith WDT, ¶ 199 (“[REDACTED]”); Phono III Final Determination, at 2034 (“...if there is no standalone published price for a component of the bundle, then the Service shall use the average standalone published price for End Users for the most closely comparable product or service in the U.S., or, if more than one comparable exists, the average of standalone prices for comparables.”).

<sup>286</sup> Klein WDT, Table 16.

<sup>287</sup> Klein WDT, Table 16 and ¶ 87.

<sup>288</sup> Klein WDT, Table 16.

<sup>289</sup> Klein WDT, Table 16.

<sup>290</sup> Gayadien ~~WDT~~AWDT, ¶ 16 (“Since 2019, all of Amazon’s deals with record labels have used [REDACTED] for Prime

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]<sup>291</sup>

### X.F.1. Past treatment of Amazon Music Prime in statutory rates

~~(186)~~(187) Under the Phono II rate structure, Prime Music was treated as a “bundled subscription service.” The rates for such an offering were similar to the rates for “standalone portable subscriptions, mixed use,” with a 10.5% headline percentage of revenue alongside a 21% TCC prong.<sup>292</sup> Unlike the standalone portable subscription, mixed use category, however, TCC for bundled subscription services was uncapped, and the per-subscriber mechanical-only minimum was set at 25 cents instead of 50 cents.<sup>293</sup>

~~(187)~~(188) Service revenue for a bundled subscription service in this framework was defined as total revenue for the bundle less the published price of the non-music components of the bundle.<sup>294</sup> [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]<sup>295</sup>

Music. [REDACTED] the unique nature of Prime Music, which has no standalone retail price because it is offered exclusively to Amazon-Prime members as part of a large bundle of services, including free two-day shipping and video content, ~~including movies and TV shows,~~ among other things.”)

<sup>291</sup> Duffett-Smith WDT, ¶ 193 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].

<sup>292</sup> The 21% TCC prong applies to non-pass-through licenses. The TCC prong for pass-through licenses under Phono II is 17.36%. “Archived Rate Charts,” The Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

<sup>293</sup> Library of Congress, CFR § 385.13 (Copyright Royalty Board, July 1, 2016), at 873. A subscriber is defined here as “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”).” “Archived Rate Charts,” The Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

<sup>294</sup> Library of Congress, CFR § 385.11 (Copyright Royalty Board, July 1, 2016) (“Where the licensed activity is provided to end users as part of the same transaction with one or more other products or services that are not a music service engaged in licensed activity, then the revenue deemed to be recognized from end users for the service for the purpose of the definition in paragraph (1) of the definition of “Service revenue” shall be the revenue recognized from end users for the bundle less the standalone published price for end users for each of the other component( s) of the bundle; provided that, if there is no such standalone published price for a component of the bundle, then the average standalone published price for end users for the most closely comparable product or service in the U.S. shall be used or, if more than on such comparable exists, the average of such standalone prices for such comparables shall be used.”).

<sup>295</sup> Duffett-Smith WDT, ¶ 113 [REDACTED]

[REDACTED]

~~(188)~~(189) The Phono III final determination retained the basic structure for this type of service, though it increased the percentage of revenue and TCC percentage for all services to 15.1% and 26.2%, respectively, with those increases phased in over five years, and removed the per-subscriber cap on the TCC.<sup>296</sup> Importantly, however, the Phono III determination also changed the definition of service revenue for bundled services to be the sum of the standalone prices for the components of the bundle that involve music licenses, not to exceed the bundled price.<sup>297</sup> If there is no standalone published price for a component of the bundle, “then the Service shall use the average standalone published price for End Users for the most closely comparable product or service in the U.S. or, if more than one comparable exists, the average of the standalone prices for comparables.”<sup>298</sup>

~~(189)~~(190) The Phono II and Phono III definitions of bundled service revenue appear to represent two extreme methods of determining music service revenue when it is part of a bundle. An approach that lies between these two extremes would be more balanced. To understand why the Phono II and Phono III methodologies are extreme, it is useful to consider an example.

~~(190)~~(191) Define the *discounted bundle price* as the price that a bundle sells for and the *undiscounted bundle price* as the sum of the prices of the component parts of the bundle when sold separately. The difference between the discounted bundle price and the undiscounted bundle price is the *bundle discount*. The Phono II methodology effectively attributes *all* of the bundle discount to the music service component of the bundle. So, for example, if a bundle combined a music service with a standalone price of \$10/month, a video streaming subscription with a standalone price of \$10/month, and a newspaper subscription with a standalone price of \$10/month, then if the bundle was sold at the discounted price of \$20/month, the Phono II methodology would calculate the music service price as \$0 (\$20 for the bundle minus \$10 for each of the two standalone components). Thus, all of the \$10 bundle discount is effectively applied to the music service price.

~~(191)~~(192) The Phono III methodology appears to take the opposite approach, seemingly applying *none* of the bundled discount to the music part of the bundle. That approach would simply take the standalone music service price of \$10/month to be the music service revenue, even though it was sold as part of a bundle with a substantial bundle discount. A more balanced way of calculating music service revenue when part of a bundle would be to distribute the bundle discount over all components of the bundle. In this example, that would mean assigning to each service one-third of the \$10 bundle discount, yielding an effective music service price of \$6.66/month. More generally, for a bundle with  $n$  components with standalone prices of  $p_1, p_2, \dots, p_n$  and a bundle discount of  $\$x$ , a more balanced way of

<sup>296</sup> The Majority also adopted the Services’ proposal to count family plans as having 1.5 subscribers and student plans as having 0.5 subscribers for purposes of calculating the mechanical floor rate. Phono III Final Determination, at 2036.

<sup>297</sup> Phono III Final Determination, at 2034.

<sup>298</sup> Phono III Final Determination, at 2034.

assigning a price to the first component of the bundle would be to use  $p_1 - x \cdot p_1 / (p_1 + \dots + p_n)$  rather than the extremes of either  $p_1$  as in Phono III or  $p_1 - x$  as in Phono II.

~~(192)~~(193) Whichever of these algorithms one uses, however, this bundled revenue methodology requires the ability to find a standalone price of the music service. That is difficult to implement in practice when, as in the case of Prime Music, [REDACTED]

## X.F.2. Amazon Music Prime private contractual rate structures

~~(193)~~(194) [REDACTED] For example, since 2019, all direct label contracts for Prime Music [REDACTED].<sup>302</sup>

[REDACTED]<sup>303</sup>

<sup>299</sup> Duffett-Smith WDT, ¶¶ 199.

<sup>300</sup> Duffett-Smith WDT, ¶¶ 200–201 (“[REDACTED]

<sup>301</sup> Duffett-Smith WDT, ¶¶ 161, 162, 204 [REDACTED]

[REDACTED] (“On August 27, 2019, the NMPA sent Amazon a letter asserting that a “number of [the NMPA’s] music publisher members have expressed concern regarding the manner in which Amazon appears to be calculating royalties under the Section 115 statutory mechanical license for its Prime Music offering.”).

<sup>302</sup> Gayadien ~~WDT~~AWDT, ¶¶ 16, 20 (“Since 2019, all of Amazon’s deals with record labels have used [REDACTED] for Prime Music.”) (“[REDACTED]”).

<sup>303</sup> Duffett-Smith WDT, ¶¶ 68, 69 [REDACTED]



### X.F.3. Appropriate rate structure for Amazon Music Prime

(194)(195)

Because per-play rates are not subject to revenue misallocation issues, no alternative rate structure (such as a TCC percentage) is required as a backstop. Despite the inefficiencies of per-play royalties in general, in this context they provide a workable alternative to percent-of-revenue or per-subscriber rates that are challenging to define for Prime Music. I describe in Section XI.F below how to calculate reasonable per-play royalty rates for Prime Music.

## XI. Appropriate musical works royalty rates for interactive streaming

~~(195)~~(196) As discussed in Section VIII above, this proceeding is governed by the WBWS standard rather than the 801(b) standard used in past Section 115 proceedings. Historically, a variety of approaches have been used to determine appropriate rates under a WBWS standard. They generally fall into two categories: benchmarking to rates paid in other markets, or application of an economic model meant to mimic a market setting.<sup>304</sup> The benchmarking approach involves looking to actual market outcomes in comparable markets, adjusted as necessary to achieve comparability, to infer a reasonable rate in the target market. It generally does not start from economic theory, but rather uses economic principles to examine the comparability of the markets and make proper adjustments. In contrast, a theory-based approach uses theoretical economic model to derive market outcomes, typically using real-world inputs to the extent possible. In either case, the objective is the same: to determine the rates that would be set by willing buyers and willing sellers in an effectively competitive market. The benchmark approach has the advantage of basing rates on actual market outcomes. The modeling approach has the advantage of potentially yielding insights into the factors determining rates. The appropriate approach depends on the setting, goals of the analysis, and the available data.

~~(196)~~(197) In this setting, where we are focused on WBWS rates, given the difficulties modeling a market outcome with many players, imperfect information, and institutional rigidities such as overlapping long-term contracts, the clearest path forward is to determine interactive streaming musical works rates by benchmarking to rates observed in a comparable market that, when properly adjusted, represent WBWS rates. In this section I describe my benchmarking approach and the WBWS-based royalty rates that result.

### XI.A. The benchmarking approach

~~(197)~~(198) Benchmarks are more useful the more analogous they are to the target market. Past determinations by the Board have articulated a number of desirable properties for benchmarks. These include whether the benchmark market includes the same buyers and sellers as the target market, whether they cover the same rights, and, in the case of a rate determined under the WBWS standard, whether they represent rates that would have been negotiated between willing buyers and willing sellers.<sup>305</sup>

~~(198)~~(199) Benchmarks are not expected to be perfect and likely depart in some ways from the target market. For instance, in the recent Web V proceeding, the Board looked to ratios of *interactive* rates and prices to

<sup>304</sup> See, e.g., Web V Determination, at 94, 203 (“Mr. Orszag engages in a benchmark analysis to estimate an appropriate statutory royalty to be paid to record companies by noninteractive services for subscription services.”) (“Professor Shapiro proffers two game theoretic bargaining theories to support proposed benchmark rates.”).

<sup>305</sup> See, e.g., Web IV Determination, at 26383.

determine royalty rates in the *non-interactive* market. In some cases, benchmarks can be adjusted to make them more comparable to the target market. For instance, in the Web V proceeding, the Board applied a market power adjustment to the interactive streaming market to remove the complementary oligopoly power of record labels when using that market as a benchmark.<sup>306</sup>

~~(199)~~(200) My benchmark approach utilizes ratios of sound recording to musical works royalty rates, with market power adjustments as appropriate, to derive WBWS all-in musical works rates for interactive streaming services. I describe my basic methodology here.

**Figure 34: Basic benchmark ratio approach**

	Sound recording rate	Musical works rate
Benchmark market	$A$	$C$
Interactive streaming	$B$	$D?$

~~(200)~~(201) Figure 34 above helps to illustrate the basic approach. I calculate WBWS musical works rates for interactive streaming by equating the ratio of sound recording to musical works rates in the benchmark market with that in the interactive streaming market. Given the ratio  $\frac{A}{C}$  in an appropriate benchmark market, and appropriately adjusted interactive streaming sound recording rates  $B$ , the WBWS musical works royalty rate can be calculated by equating the ratios and solving for  $D$ . That is:

$$\frac{A}{C} = \frac{B}{D}$$

$$\text{Musical works royalty rate for interactive streaming } (D) = \frac{B \times C}{A}$$

~~(201)~~(202) The use of this approach requires that the benchmark market values the sound recording and musical works rights in similar proportions as in interactive streaming, under effectively competitive conditions on both sides of the market. In addition, the use of the approach requires adjustments for market power in some cases. The  $\frac{A}{C}$  ratio must reflect WBWS rates on both sides of the benchmark market to provide a good benchmark for WBWS rates in the interactive streaming market. And, given the complementary oligopoly power of the record labels, the effective sound recording royalty rate for interactive streaming services  $B$  must be adjusted to remove excess market power before applying the appropriate ratio to derive the WBWS musical works rate for interactive streaming.

~~(202)~~(203) I discuss my approach to these issues below.

<sup>306</sup> Web V Determination, at 66–72.

## XI.B. Benchmark ratios

~~(203)~~(204) In this section, I discuss three benchmark ratios that I find useful for determining the appropriate WBWS interactive streaming musical works rates.

### XI.B.1. Non-interactive streaming

~~(204)~~(205) Non-interactive streaming and interactive streaming exist along a continuum of possible ways of delivering streamed music. Despite the statutory division into non-interactive and interactive categories for the purposes of royalty frameworks, from a user’s perspective, there is substantial overlap.<sup>307</sup> Non-interactive services allow the user to enter a “seed” or select a predefined “channel” and allow limited use of “skips” and “likes,” giving the user a degree of control over the songs streamed. Interactive services offer “seeded” and predefined “channels” and recommend playlists to users, allowing them to have a non-interactive listening experience. Indeed, Free, which is classified as a Section 115 interactive service, is barely distinguishable from a Section 114 non-interactive service.<sup>308</sup>

~~(205)~~(206) The level of royalties paid by non-interactive streaming is typically lower than the level paid by interactive streaming. This can be understood as related to a number of factors. There is a *promotional effect* provided by non-interactive streaming, which makes plays on a non-interactive streaming service more valuable to both the sound recording rights holder and the musical works rights holder—a play on a non-interactive streaming service may induce a listener to pursue other ways of listening to the song, such as purchasing the PDD or streaming the song on an interactive service, with benefits to both the sound recording and musical works rightsholders. In contrast, a play on an interactive streaming service is more likely to provide a substitute for the purchase of a PDD, so there can be a *cannibalization effect* associated with interactive streaming. In addition, interactive and non-interactive services may differ in their need for particular songs, with the absence of a particular song being more noticeable on an interactive than a non-interactive service. This *full catalog effect* is consistent with higher royalties for an interactive service. Despite the differences in the levels of royalties, the promotional, cannibalization, and full catalog effects likely apply similarly to the sound recording and musical work. As a result, the ratio of musical works to sound recording royalties for non-interactive streaming can inform the ratio for interactive streaming. By focusing on the ratio, one can control for effects that apply both to sound recordings and musical works.

~~(206)~~(207) Indeed, in its Phono III determination, the Board explicitly endorsed the idea that the sound recording to musical works ratio for non-interactive services can provide a good benchmark for the sound recording to musical works ratio for interactive streaming services. Speaking of the “Opt-Out”

<sup>307</sup> See Section II.A.4.

<sup>308</sup> See Section IV.C.

agreements between major publishers and Pandora for Pandora’s non-interactive streaming service, the Board wrote:<sup>309</sup>

The Judges agree with Dr. Eisenach that the Pandora “Opt-Out” agreements are useful benchmarks. These agreements have the level of comparability necessary for a benchmark to be useful. However, the Judges do not agree with Dr. Eisenach’s attempt to extrapolate from the actual rates in those Opt-Out Agreements. Rather, the judges find that the 4.65:1 ratio Dr. Eisenach identified for the year 2018 in existing agreements is the most useful derived from the “Opt-Out” data.<sup>310</sup>

~~(207)~~(208) As I noted earlier, a difference between interactive and non-interactive streaming services is that musical works royalties for interactive streaming are broken out into two components, performance and mechanical, whereas musical works royalties for non-interactive streaming are all categorized as performance.<sup>311</sup> This is a distinction that is functionally without a difference. All musical works royalties are paid to the musical works rightsholders, although publishers and songwriters are, of course, free to agree to divisions of the royalties that make reference to the categories. In the case of interactive streaming, musical works royalties are, with one caveat,<sup>312</sup> defined as an all-in royalty, and then a component is separated and labeled as mechanical. Economic decisions by an actor depend on the actor’s total compensation, not the particular division of money received in one pocket versus money received in another pocket.<sup>313</sup> In light of this, it is appropriate to focus, as I do, on all-in musical works royalties and to view all-in musical works royalties for non-interactive streaming as

<sup>309</sup> Phono III Final Determination, at 2003 (“Pandora had negotiated these direct agreements with major publishers for musical works rights after certain publishers had decided to “opt-out,” i.e., to withdraw their digital music performance rights from PROs, and asserted the right to negotiate directly with a digital streaming service. As Dr. Eisenach acknowledges, the music publishers’ legal right to withdraw these rights remained uncertain during an extended period. Pandora thus negotiated several such “Opt-Out” Agreements with an understanding that the rates contained in those direct agreements might not be subject to rate court review. Given this unique circumstance, and given that the markets and parties involved in the Pandora Opt-Out agreements are somewhat comparable to the markets and parties at issue in this proceeding, Dr. Eisenach concluded that these agreements provided “significant insight into the relative value of the sound recording and musical works rights in this proceeding.”).

<sup>310</sup> Phono III Final Determination, at 1942. The Judges also note (footnote 101) that “Pandora’s status as a purely noninteractive service prior to 2018 does not decrease the relevancy of this benchmark.” This, despite the fact that non-interactive services do not pay mechanical royalties, because “(1) noninteractive and interactive services both pay performance royalties; (2) noninteractive services historically have not paid mechanical royalties; and (3) the performance license and the mechanical license are perfect complements.”

<sup>311</sup> See Section X above.

<sup>312</sup> For some service categories, the Phono II formulas included a mechanical only per-subscriber minimum. “Archived Rate Charts,” The Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

<sup>313</sup> See Braun WDT, ¶13 (“Amazon views the mechanical and performance royalties that it pays for its interactive music streaming services as payments for functionally the same musical-works right. For interactive streaming, neither has any standalone value to Amazon. Both payments are to the same ultimate rights holder (a songwriter, or if the songwriter has assigned the right, a publisher or administrator) for the right to use the same intellectual property (a musical work). Amazon will not pay anything for the mechanical license to stream a song online unless accompanied by the performance license, and vice versa. These licenses are complementary, and while Amazon often pays for the licenses separately, Amazon values them collectively – not individually.”).

Braun WDT, ¶ 74 (“Amazon is agnostic about the split between mechanical and performance royalties and does not assign any standalone economic value to either component of the musical-works right in isolation.”).

the counterpart to all-in musical works royalties for interactive streaming, despite the musical works royalties for non-interactive streaming being directed to one of the rightsholder’s pockets, while the musical works royalties for interactive streaming are directed into two of the rightsholder’s pockets.<sup>314</sup>

~~(208)~~(209) Both the sound recording and musical works rates for non-interactive streaming are set under the WBWS standard, the former under the supervision of the Board and the latter, with respect to royalties paid to ASCAP and BMI, under the supervision of the rate court that has historically enforced the Department of Justice consent decree under a WBWS standard.<sup>315</sup> Thus, the ratio of sound recording royalties to musical works royalties, at least as paid to ASCAP and BMI, represents a WBWS ratio of sound recording to musical works royalty rates. [REDACTED]

[REDACTED]<sup>316</sup>

## XI.B.2. PDD

~~(209)~~(210) I also consider the sound recording to musical works ratio for PDDs as a potential benchmark for interactive streaming services. Like interactive streaming services, licensees of PDD rights pay a musical works rate regulated under Section 115, while negotiating unregulated sound recording rates directly with record labels. Musical works royalty rates for PDDs for the 2023–2027 rate period were recently set via a settlement negotiated under the WBWS standard.<sup>317</sup> The ratio between the freely negotiated PDD sound recording rate and the PDD musical works rate settlement in the shadow of the WBWS standard can provide a benchmark for the comparable interactive streaming ratio.<sup>318</sup>

<sup>314</sup> Although non-interactive streaming services do not pay mechanical royalties, they pay “statutory license to make phonorecords to facilitate the transmission of sound recordings.” In Web V, the Board determined that “royalty for ephemeral recordings is part of the total royalty for webcasting and constitutes 5% of that amount.” Web V Determination, at 290.

<sup>315</sup> Web V Determination, at 2 (“The Act requires that the Judges ‘establish rates and terms that most clearly represent the rates and terms that would have been negotiated in the marketplace between a willing buyer and a willing seller.’”). *United States v. Am. Soc’y of Composers, Authors, & Publishers (In re Pandora Media, Inc.)*, 12 Civ. 8035 (DLC) (S.D.N.Y. Mar. 14, 2014), at 90 (“Helpfully, both ASCAP and Pandora have endorsed the same definition of ‘fair market value,’ drawn from a recent textbook: ‘A widely used description of fair market value is the cash equivalent value at which a willing and unrelated buyer would agree to buy and a willing and unrelated seller would agree to sell.’”).

<sup>316</sup> [REDACTED]

<sup>317</sup> Determination of Rates and Terms for Making and Distributing Phonorecords (Phonorecords IV), No.21-CRB-0001-PR (Copyright Royalty Board, June 25, 2021), at 33601–33603.

<sup>318</sup> The Board in its Phonorecords III Final Determination similarly cited sound recording to musical works ratios based on Section 115 rates—both the statutory rates directly and those negotiated under the shadow of Section 115—as useful benchmarks for determining interactive streaming rates. *See, e.g.*, Phono III Final Determination, at 1944 (“For the foregoing reasons, the Judges do not adopt Dr. Eisenach’s proposed benchmark rates as the mechanical rates for the upcoming rate period. However, the Judges do find several of the benchmark rates implied by his sound recording to

~~(210)~~(211) Related to the discussion in Section XI.B.1 about the division of musical works royalties into components labelled as performance and mechanical, the musical works royalties for PDDs are all labelled as mechanical. As discussed above, economic decisions regarding musical works royalties depend on the decisionmaker's total compensation, not the particular division of money received in one pocket versus another. In light of this, it is appropriate to focus, as I do, on all-in musical works royalties and to view all-in musical works royalties for PDDs as the counterpart to all-in musical works royalties for interactive streaming, despite the musical works royalties for PDDs being directed into the rightsholder's mechanical pocket, while the musical works royalties for interactive streaming are divided into rightsholder's mechanical and performance pockets.

~~(211)~~(212) To implement my PDD benchmark, I use the effective royalty rates from June 2020 to May 2021 that Amazon paid to labels for PDDs, which covers both sound recording and musical works rights, and the recent musical works settlement rate of either 9.1 cents per song or 1.75 cents per minute of playing time, whichever amount is larger.<sup>319</sup> [REDACTED], as shown in Figure 35 below.

**Figure 35: Calculation of PDD benchmark ratio**

Weighted average revenue per PDD	[REDACTED]
Weighted average musical works royalty <del>for</del> per PDD	[REDACTED]
Weighted average cost per PDD	[REDACTED]
PDD musical works royalty as % revenue (MW)	[REDACTED]
Sound recording royalty (SR)	[REDACTED]
Benchmark ratio (SR : MW)	[REDACTED]

Source: Amazon data.

Note: Weighted average musical works royalty per PDD is estimated using the average song length from Unlimited streaming data ~~in~~from January 2020 through June 2021.

~~(212)~~(213) This benchmark ratio does not take into account the potential market power exercised by labels in negotiating royalty rates for PDDs. As I discuss in Section 0 below, applying market power adjustments will reduce this benchmark ratio.

musical works ratios to be useful guideposts for identifying the headline percent-of-revenue rate to be incorporated into the rate structure in the forthcoming rate period.”).

<sup>319</sup> Determination of Rates and Terms for Making and Distributing Phonorecords (Phonorecords IV), No.21-CRB-0001-PR (Copyright Royalty Board, June 25, 2021), at 33602–03.

### XI.B.3. Amazon Music Prime's [REDACTED]

~~(213)~~(214) [REDACTED]  
[REDACTED] As an interactive streaming service, Prime Music should have a similar WBWS sound recording to musical works ratio as other interactive streaming services. [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED].<sup>321</sup>

~~(214)~~(215) In Phono II, Prime Music was defined as a “bundled subscription service” with zero revenue, implicating either the TCC prong or the 25 cent per subscriber mechanical floor defined for that category of service.<sup>322</sup> With the change in definition of bundled revenue under Phono III, Amazon was required to define its Prime Music revenue as the revenue that an equivalent standalone service would charge.<sup>323</sup> Although there is no comparable limited catalog standalone subscription service,  
[REDACTED]  
[REDACTED]  
[REDACTED]<sup>324</sup>

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

<sup>320</sup> [REDACTED]  
[REDACTED]  
<sup>321</sup> See Section X.F for a further discussion of the features of Amazon Prime and its ill-fit with the Phonorecords II and III statutory formulas.

<sup>322</sup> “Archived Rate Charts,” The Harry Fox Agency, updated 2014, [https://www.harryfox.com/content/archived\\_rates.pdf](https://www.harryfox.com/content/archived_rates.pdf).

<sup>323</sup> Phono III Final Determination, at 1981–1982.

<sup>324</sup> Duffett-Smith WDT, ¶¶202,203 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

<sup>325</sup> Duffett-Smith WDT, ¶ 99 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]



[REDACTED]

(216)(217)

[REDACTED]

#### XI.B.4. Synchronization rights are not an appropriate benchmark

(217)(218)

One economic expert in the Phono III proceeding proposed the sound recording to musical works synchronization rights ratio as a benchmark sound recording to musical works ratio for interactive streaming.<sup>329</sup> As I discussed in Section V.A.3, synchronization rights must be obtained to include music in timed-relation with images in an audiovisual project such as a film or commercial.<sup>330</sup> License fees for synchronization rights are not regulated and generally reflect a one-to-one ratio between fees for sound recording and musical works rights.<sup>331</sup>

See also Duffett-Smith WDT, ¶ 99 ([REDACTED]).

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327 Duffett-Smith WDT, ¶ 163.

328 Duffett-Smith WDT, ¶ 208 (“[REDACTED]”).

329 Phono III Final Determination, at 1937 (“Eisenach notes, from his review of other testimony and an industry treatise, that these freely negotiated market agreements grant the musical composition royalty payments equal to the corresponding royalty paid for the sound recording,” which is the equivalent of a 1:1 sound recording to musical works ratio.”).

330 See *Steele v. Turner Broad. Sys., Inc.*, 646 F. Supp. 2d 185, 193 (D. Mass. 2009). Also *Boosey & Hawkes Music Publishing LTD. v. the Walt Disney Co.* 145 F.3d 481 (2d Cir. 1998): “limited to the use of the composition in synchronism or timed-relation with the motion picture,” p. 451.

331 “Guide to Sync Royalties,” *Royalty Exchange* (blog), November 17, 2016, <https://www.royaltyexchange.com/blog/guide-to-sync-royalties> (“Sync royalties are one of the few music revenue streams that reward the songwriter and recording artist equally. Streaming services pay recording artists and labels six times or more what they pay songwriters and publishers. But the payouts for sync license is split 50/50 between the two

~~(218)~~(219) This one-to-one ratio is far out of line with my benchmark sound recording to musical works ratios that I described in earlier. The economics of sync rights relative to music streaming explains why. Unlike streaming services, licensors of sync rights generally just need one or a small set of songs to capture the genre or mood to match with a particular image or scene. Rather than requiring a large catalog of audiovisual content, music supervisors need to choose a small set of musical works and can thus shop around for good fits at reasonable cost.<sup>332</sup> This implies a different bargaining position with rightsholders generally. In addition, the relative leverage licensors have over musical works and sound recording rightsholders differs from interactive streaming. Synchronization rights licensors have particularly strong leverage over sound recording rightsholders, since they have the option of using cover versions of songs to bypass sound recording rights.<sup>333</sup> Even motion pictures *about* recording artists sometimes use cover versions of musical works, thereby avoiding sound recording royalties. For example, the movies *Rocketman* and *Walk the Line* depicting the lives of Elton John and Johnny Cash, respectively, used cover versions of the original songs that were performed by the actors.<sup>334</sup> Users of streaming services, on the other hand, generally do not consider cover versions of songs to be good substitutes for the “original” version, which gives streaming services less relative leverage over sound recording rightsholders than sync licensees.<sup>335</sup>

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camps.”).

<sup>332</sup> See Dmitry Pastukhov, “How Music Synchronization Licenses Work: Inside Movie, Advertisement, and Video Game Sync Licensing,” *Soundcharts* (blog), September 9, 2019, <https://soundcharts.com/blog/how-music-synclicensing-works> (“[...] in most cases, the music supervisor will look for up-and-coming artists to save money while maintaining the overall emotional impact.”). See also “Pricing Your Songs, Negotiating Sync Fees,” *Creative and Productive* (blog), July 4, 2019, <https://www.creativeandproductive.com/pricing-negotiating-sync-fees/> (“If your track can fairly easily be replaced by another without making the project worse for wear, then your bargaining position isn’t super strong.”). See also Chris Robley, “Sync Placements and Licensing,” *DIY Musician* (blog), April 26, 2021, <https://diymusician.cdbaby.com/music-career/sync-licensing/> (“The size of your audience has nothing to do with how ‘right’ a song is for sync. It might mean you’re more likely to enter the ears of music supervisors, yes—but as we discussed above, your indie status also means you’re more likely to meet the budget and speed requirements for the placement. There’s your consolation for not being famous!”).

<sup>333</sup> See Dmitry Pastukhov, “How Music Synchronization Licenses Work: Inside Movie, Advertisement, and Video Game Sync Licensing,” *Soundcharts* (blog), updated September 9, 2019, <https://soundcharts.com/blog/how-music-sync-licensing-works> (“The duplicity of music rights also opens up a way for music supervisors to alleviate some of the sync costs by using cover songs instead of the original sound recordings.”). See also “How to Get Permission to Use a Song,” Copyright Alliance, <https://copyrightalliance.org/faqs/how-to-get-permission-to-use-a-song/> (“[W]hile a sync license would allow you to, for example, record a cover-version of the song and use it in your audio-visual creation, it doesn’t give you the right to use the sound recording made popular by the recording artists. In order to use that recording, you’ll need a master use license. Together, a master use license and a sync license will allow you to add your favorite songs to the films and video games you create.”).

<sup>334</sup> “Walk the Line (2005) Soundtrack,” Internet Movie Database, <https://www.imdb.com/title/tt0358273/soundtrack>. “Rocketman (I) (2019) Soundtracks,” Internet Movie Database, <https://www.imdb.com/title/tt2066051/soundtrack>.

<sup>335</sup> See Lizzie Plaugic, “Sounds Like a Hit: The Numbers Game behind Spotify Cover Songs,” *The Verge* (blog), updated September 8, 2015, <https://www.theverge.com/2015/9/8/9260675/spotify-cover-songs-taylor-swift-adele>. (“It’s a cover song. If you look through Spotify’s community forums, you’ll see a lot of users complaining about these tracks.”). See also Ryan Nakashima, “When Did Cover Songs Become Annoying Marketing Ploys?” *Salon* (blog), May 30, 2013, [https://www.salon.com/2013/05/30/are\\_cover\\_songs\\_shameless\\_marketing\\_ploys\\_ap/](https://www.salon.com/2013/05/30/are_cover_songs_shameless_marketing_ploys_ap/) (“Bonde found a version of ‘Skyfall’ and mistakenly clicked on a ‘follow’ button to become a fan of GMPresents and Jocelyn Scofield, the name for a cover-song specialist with some 4,600 Spotify followers. [...] When I found out ... that I couldn’t find the original ‘Skyfall’ (and some other hits) I decided to quit Spotify,” Nissen says.”).

~~(219)~~(220) The implication of these factors is that the ratio of sound recording to musical works fees for synchronization rights is likely to be quite different from a WBWS ratio of sound recording to musical works fees for interactive streaming services. Indeed, the Board has consistently rejected the idea that sync rights provide a useful benchmark for interactive streaming, citing the lack of comparability between the two markets.<sup>336</sup>

## **XI.C. Market power adjustments**

~~(220)~~(221) As I discussed in Section VIII, rates negotiated in an unregulated setting between interactive streaming services and large publishers and record labels do not reflect “effectively competitive” rates that conform to the WBWS standard because of the complementary oligopoly power of large record labels and publishers. This means that the application of my benchmark ratios requires market power adjustments to yield rates that conform to the WBWS standard. For example, even if one possessed the perfect sound recording to musical works ratio for interactive streaming services, simply applying that ratio to existing, supracompetitive sound recording rates would translate excessive market power from the sound recording market to the musical works market and yield supracompetitive musical works rates, which would not conform to the WBWS standard. In that example, supracompetitive sound recording rates would first need to be adjusted to remove the excessive market power, before applying the benchmark ratio. I need to make such market power adjustments to calculate WBWS musical works rates for interactive streaming.

~~(221)~~(222) In this section I describe the market power adjustments that I use to calculate WBWS musical works rates. In Section XI.D, I show how I apply these market power adjustments to specific benchmark ratios.

### **XI.C.1. Label market power adjustments**

#### **XI.C.1.a. Web V adjustment**

~~(222)~~(223) The Board has long recognized that the complementary oligopoly power of record labels and publishers yields unregulated royalty rates that are above the WBWS level.<sup>337</sup> Most recently, in its

<sup>336</sup> Phono III Final Determination, at 1941 (“In a prior proceeding, the Judges rejected the synch license benchmark as useful “[b]ecause of the large degree of its incomparability.” See Phonorecords I, 74 Fed. Reg. at 4519. The Judges find that nothing in the present record supports a departure from that prior finding.”).

<sup>337</sup> See SDARS III Determination, 37 CFR Part 382, Fed. Reg., 83, no. 243 at 65230 (“The evidence in this proceeding strongly demonstrates the ‘must have’ status of each Major.... Indeed, Sirius XM implicitly acknowledged the ‘must have’ status of a Major, citing a steering adjustment as a method by which to mitigate the ‘must have’ status and complementary oligopoly power of a Major to allow for an effectively competitive market.”); See also Web V Determination, at 10 (“And, in the next rate-setting case, Phonorecords III, the Judges (in the majority and in the dissent) found that the licensors — owners of the copyrights for musical works — possessed complementary oligopoly power.”) Web IV Determination at 26333 (“The Judges agree that the legislative history supports the conclusion that section 114 directs the Judges to set rates that reflect the workings of a hypothetical effectively competitive market. The

Web V final determination, the Board found that copyright owners have complementary oligopoly power in both the musical works and sound recording markets, against both interactive and non-interactive streaming services.<sup>338</sup> In that determination, the Board applied a 12% “effective competition” downward adjustment to interactive streaming sound recording rates to achieve WBWS rates, based on a figure it had calculated in Web IV.<sup>339</sup> The 12% figure was derived from steering agreements between record labels and non-interactive streaming services that gave discounted royalty rates to non-interactive streaming services in return for increased plays of the label’s music.<sup>340</sup> The Judges found that these agreements represented a form of price competition that provided guidance as to what rates willing buyers and willing sellers would agree to in a hypothetical market.<sup>341</sup>

~~(223)~~(224) In the Web V final determination, the Judges found that “the 12% effective competition adjustment that they set in Web IV remains an appropriate measure for an effective competition adjustment (before any adjustment to reflect Spotify’s countervailing power).”<sup>342</sup> They advocated a smaller adjustment for Spotify to reflect what they saw to be their unique countervailing power reflecting their “independent pureplay status.”<sup>343</sup> Therefore, as one possible market power adjustment, I use the 12% discount in my benchmark calculations, adjusting Spotify’s rate as appropriate. I describe the Spotify adjustment in Section XI.C.1.c below.

#### **XI.C.1.b. Major-Indie market power adjustment**

~~(224)~~(225) The “must have” nature of large agglomerations of copyrights for interactive streaming services implies that below a certain level, an agglomeration of copyrights would have less of a “must have” nature and thus less complementary oligopoly power. Indeed, the Board has found a distinction in

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legislative history equates rates set under the willing buyer/willing seller standard with ‘reasonable rates.’ ...As discussed in detail *infra*, it is precisely this complementary oligopoly value that the Judges are declining to include in the statutory rate based upon their analyses of the parties’ benchmarks proffered in this proceeding.”). In both Web IV and Web V, the Board applied an adjustment to benchmark rates to remove the complementary oligopoly power of record labels. Web V Determination, at 66 (“[T]he Judges find that the 12% effective competition adjustment that they set in Web IV remains an appropriate measure for an effective competition adjustment.... Relying on all the steering evidence presented, the Web IV Judges determined that benchmark rates that were inflated by the complementary oligopoly effect needed to be adjusted downward by 12%, in order to establish an effectively competitive rate.”).

<sup>338</sup> Web V Determination, at 66, 70 (“Relying on all the steering evidence presented, the Web IV Judges determined that benchmark rates that were inflated by the complementary oligopoly effect needed to be adjusted downward by 12%, in order to establish an effectively competitive rate. Web IV, 81 Fed. Reg. at 26404-05. [...] They [The Judges] emphasize that basic economic principles do not change with the mere passage of a few years. Although new probative factual evidence or advances in economic theory or modeling presented by an expert witness could show either that the principle is factually inapplicable or needs to be revisited, no such record has been presented in this proceeding. Accordingly, the Judges find that the economic experts cited above have properly relied on the evidence supporting the Web IV steering adjustment to establish the appropriate steering adjustment in this proceeding.”).

<sup>339</sup> Web V Determination, at 66 (“the Judges find that the 12% effective competition adjustment that they set in Web IV remains an appropriate measure for an effective competition adjustment.”).

<sup>340</sup> Web IV Determination, at 26404–26405.

<sup>341</sup> Web V Determination, at 69.

<sup>342</sup> Web V Determination, at 66.

<sup>343</sup> Web V Determination, at 72.

past proceedings between the market power of major labels and indie labels, noting in the Web V final determination its finding in Web IV that “based on the record the Judges observed that ‘in the marketplace, Services have agreed to pay higher rates to’ major record labels (Majors) than to so-called independent labels (Indies).”<sup>344</sup>

~~(225)~~(226) The prices charged by indie labels to interactive streaming services are unlikely to represent competitive prices, however, because [REDACTED].<sup>345</sup> Also, true price competition—firms offering lower prices in return for a greater share of plays—generally does not occur between record labels in either the interactive or non-interactive streaming markets. One reason that the Judges in the Web V proceeding relied on older steering agreements for non-interactive services produced during the Web IV proceeding to make their market power calculation as a proxy for price competition, and not more recent agreements, was that they had not seen any more recent steering agreements, [REDACTED].<sup>346</sup> This has been attributed to “no-steering” clauses that prevent record labels from offering lower prices in return for a higher share of plays on non-interactive services.<sup>34</sup> [REDACTED]

<sup>344</sup> Web V Determination, at 5.

<sup>345</sup> Gayadien ~~WDTAWDT~~, ¶ 9 (“Customers that subscribe to a premium music service expect ‘on demand’ access to a comprehensive music library that includes popular, niche, and even obscure songs from the Major record labels and a wide range of Independent record labels. [REDACTED]”).

<sup>346</sup> Web V Determination, at 9 (“‘Steering’ in this context means the presence of contract provisions by which a licensee will increase the number of plays of the counterparty record company above its historic market share, in exchange for the record company’s agreement to accept a lower royalty rate than other record companies”); *See also* Web V Determination, at 67–68 (“SoundExchange could have called a witness from Merlin in Web V (as it did in Web IV) to present testimony that may have shed light on *why* [REDACTED] but elected not to. By contrast, Pandora presented testimony from Professor Shapiro explaining that Merlin (and the Majors) had refused to agree to continue steering.”).

<sup>347</sup> Web V Determination, at 67–68 (“SoundExchange argues that this evidence of steering is now ‘stale,’ because the experiments are outdated, as are the two cited agreements, SX PFFCL ¶¶ 490–91. But the dates of the experiment and those agreements are insufficient to wash away the importance of steering as a price competition mechanism applicable to the noninteractive market. The Judges note that SoundExchange could have called a witness from Merlin in Web V (as it did in Web IV) to present testimony that may have shed light on *why* [REDACTED] but elected not to. By contrast, Pandora presented testimony from Professor Shapiro explaining that Merlin (and the Majors) had refused to agree to continue steering. Specifically, Professor Shapiro testified: Following the *Web IV* Determination, as a condition for obtaining the additional rights necessary to offer its non-statutory services, [REDACTED]”) [emphasis original].

<sup>348</sup> [REDACTED]

~~(226)~~(227) Therefore, prices charged by independent labels to full-catalog interactive streaming services are not competitive prices, and the difference between those prices and the major label prices does not fully correct for the market power of major labels. A better estimate of major label market power can be found by comparing the prices major labels are able to charge a *limited catalog* streaming service relative to what an independent label is able to charge the same service. In the case of a limited catalog service, a major label still has substantial market power by virtue of its control of many “hit” songs.<sup>349</sup> In contrast, an independent label, in particular a smaller one, can more easily be excluded entirely from a limited catalog service than from a full-catalog service.

~~(227)~~(228) Two notable limited catalog services in the interactive streaming market are Prime Music and Free. Prime Music offers approximately 2 million songs while Free offers its users a limited catalog of pre-set playlists, as opposed to roughly 75 million for full-catalog services.<sup>350</sup> [REDACTED]

[REDACTED]<sup>351</sup>

~~(228)~~(229) In light of the discussion above, for one measure of label market power, I calculate the difference in the effective sound recording rates that Amazon pays to major labels and indies for its Prime Music and Free services.<sup>352</sup> These calculations are shown in Figure 36 below.

<sup>349</sup> Web V Determination, at 71.

<sup>350</sup> See Figure 12.

<sup>351</sup> Gayadien ~~WDT~~AWDT, ¶¶ 18-19 (“Because Prime Music is a limited-catalog service with approximately ~~2~~two million songs, [REDACTED]

[REDACTED]”). See ~~also~~Gayadien ~~WDT~~also Gayadien AWDT, ¶ 25 (“[REDACTED]

<sup>352</sup> [REDACTED]

**Figure 36: Sound recording rates comparison between major and indie labels, March 2020–February 2021**

Service	Sound recording rates		% Market power adjustment
	Majors	Indies	
Amazon Music Prime			
Amazon Music Free			
Overall			

Source: Amazon data.

### XI.C.1.c. Adjustments as applied to Spotify

~~(229)~~(230) The CRB found in its Web V final determination that Spotify played a unique role in the interactive streaming market as the only independent pureplay service, which gave it, in the Board’s view, some countervailing power against the market power of the record labels.<sup>353</sup> In the Web V determination, the Judges therefore [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]<sup>354</sup> [REDACTED]

[REDACTED]

[REDACTED]. In Appendix C, I present rates [REDACTED].

### XI.C.2. Publisher market power adjustment

~~(230)~~(231) For some of my calculations, it is necessary to estimate the latent market power that publishers hold. Amazon’s Head of Music Publishing in the Americas, Amy Braun, has testified [REDACTED]

[REDACTED]<sup>355</sup> [REDACTED]

[REDACTED] Ms. Braun opined that [REDACTED]

[REDACTED]

[REDACTED]<sup>356</sup> She then showed that “ [REDACTED]

<sup>353</sup> Web V Determination at 72, 138.

<sup>354</sup> Web V Determination, at 72. The judges also noted that this lower adjustment may not apply to all of Spotify’s rates, and in certain cases a 12% adjustment should apply (“However, as explained *infra*, that [REDACTED]% adjustment applies only to a headline rate that serves as a benchmark in this proceeding and that is consistent with [REDACTED] in *effective* per-play rate. To the extent the [REDACTED]% adjustment does not apply to discounted subscriptions, such as student play subscriptions, or to ad-supported plans, then the [REDACTED]% reduction is not applicable. Rather, in such instances, the full 12% competition adjustment applies.”). In Appendix C, I present my benchmark results based on unreduced label market power adjustments for Spotify. If the full 12% adjustment applies to Spotify’s services other than Premium (see *infra* n. 359), the resultant benchmark rates would be between those that I present in the body of the report and those contained in Appendix C.

<sup>355</sup> Braun WDT.

<sup>356</sup> Braun WDT, ¶65.



\_\_\_\_\_”<sup>357</sup> Given that aside from not operating under a consent decree, \_\_\_\_\_, I do not rely on Ms. Braun’s estimate.<sup>358</sup> But her general point is informative in helping to reinforce my opinion that musical works rates reflect publisher market power.

~~(231)~~(232) Instead, as one way to quantify a publisher market power adjustment, I examine the 2014 decision of the rate court overseeing the ASCAP-BMI consent decrees.<sup>359</sup> That decision pertains to the determination of the WBWS musical works rate for Pandora’s non-interactive streaming service. In the decision, the Court rejected Sony’s contract with Pandora because it did not meet the WBWS standard. Specifically, the Court found that “the agreement fails the parties’ agreed-upon definition of fair market value.”<sup>360</sup> The Court therefore rejected Sony’s 2.28% rate and instead determined that a WBWS rate would be 1.85% of Pandora’s revenue.<sup>361</sup> I use the difference between Sony’s rate that was affected by Sony’s market power and the WBWS rate defined by the Court to calculate a publisher market power adjustment of 18.9%.<sup>362</sup>

~~(232)~~(233) An alternative way to quantify the publisher market power is to use the label market power that I discussed in Section VIII.C.1 above. As discussed in Section VIII.C.2, the publishing arm of each major label controls a large portfolio of songs. Furthermore, the fractional ownership structure of musical works rights “magnify publishers’ [REDACTED].”<sup>363</sup> Consequently, “[REDACTED] [REDACTED]

[REDACTED]”<sup>364</sup> Given the relative lack of the fractional ownership on the label side, the label market power adjustment may understate the appropriate publisher market power adjustment.

<sup>357</sup> Braun WDT, ¶ 70.

358 Braun WDT, ¶ 59 (“[REDACTED]  
[REDACTED]  
[REDACTED]”).

<sup>359</sup> *United States v. Am. Soc'y of Composers, Authors, & Publishers (In re Pandora Media, Inc.)*, 12 Civ. 8035 (DLC) (S.D.N.Y. Mar. 14, 2014).

<sup>360</sup> *United States v. Am. Soc’y of Composers, Authors, & Publishers (In re Pandora Media, Inc.)*, 12 Civ. 8035 (DLC) (S.D.N.Y. Mar. 14, 2014), at 101. The decision also states that “[e]ven if Sony had provided the list of its works to Pandora, Sony would have retained enormous bargaining power,” at 102.

<sup>361</sup> *United States v. Am. Soc’y of Composers, Authors, & Publishers (In re Pandora Media, Inc.)*, 12 Civ. 8035 (DLC) (S.D.N.Y. Mar. 14, 2014), at 91–92 (“Third, the circumstances under which Sony imposed upon Pandora an implied ASCAP headline rate of 2.28% confirm that any reasonable rate for an ASCAP-Pandora license is below 2.28% by a measurable margin. For these and the other reasons described below, the 1.85% license rate is the reasonable rate for the entirety of the five year term of the ASCAP-Pandora license.”).

<sup>362</sup>  $18.9\% = 1 - 1.85\% \div 2.28\%$ .

<sup>363</sup> Duffett-Smith WDT, ¶ 38.

364 Duffett-Smith WDT, ¶ 42.



## XI.D. Calculation of WBWS percentage of revenue musical works rates

~~(233)~~(234) In this section, I combine the benchmark ratios described in Section XI.B with the market power adjustments described in Section XI.C to calculate a range of WBWS musical works percent-of-revenue rates for interactive streaming. This calculation proceeds in four steps:

1. Apply market power adjustments as necessary to ensure that the benchmark ratios reflect WBWS rates on both sides of the market.
2. Calculate the effective sound recording royalty rate for the major interactive streaming services.<sup>365</sup>
3. Apply a label market power adjustment to the effective sound recording royalty rates for the major interactive streaming services to arrive at WBWS sound recording rates.
4. Apply the benchmark ratios to the WBWS sound recording rates to arrive at WBWS musical works rates.

<sup>365</sup> To calculate the effective sound recording royalty rates for the major interactive streaming services, I relied on ~~their own~~ Dr. Eisenach's processing of MLC rate calculation files used to determine their services' mechanical royalty rates under Phono II and Phono III. I relied on data Dr. Eisenach produced by Amazon, Google, Pandora, and Spotify. Because of time constraints, I have not been able to review and incorporate Apple data or recently produced updated data from Google, Pandora, and Spotify into this Written Direct Testimony. In creating this database, he made a number of adjustments, as outlined in Appendix C of his testimony. I accepted these adjustments at face value and relied on them for the purpose of my benchmark calculations in this report. However, in the event these adjustments are not appropriate, I also produce results that do not incorporate Dr. Eisenach's adjustments to the MLC rate files. See XII.Appendix D. The only modifications that I will revise make to Dr. Eisenach's processed royalty rate dataset are outlined below. None of these modifications affect my overall conclusions.

1. I categorize SoundCloud GO as a "Limited Offering" in January 2021. Dr. Eisenach's dataset classifies this service as a Standalone Portable service in January 2021, and a Limited Offering in all other months.
2. I categorize the Audiomack Free service as a "Free Non-Subscription/Ad-Supported" service in 2018 through 2021 because the service was available for free to end users. Dr. Eisenach's dataset classifies this service as a "Limited Offering" from 2018 through 2020, and as a "Free Non-Subscription/Ad-Supported" service in 2021 only.
3. I do not exclude Primephonic from my analysis once I have reviewed these. Dr. Eisenach excludes Primephonic because it was acquired by Apple in August 2021 and other data productions taken offline the following month. Primephonic's acquisition by Apple does not overlap with my benchmark analysis.
4. Dr. Eisenach attempts to calculate the number of monthly end users, as opposed to subscribers, for Amazon, Apple, and Spotify. I do not rely on his end user calculations.

As described in Section VII, both service revenue and sound recording payments are used as an input to determine a service's mechanical royalty rate. Thus, for each service, I calculated the total revenue and total sound recording payments made ~~in from June 2020 to May 2021~~, the most recent ~~full year~~ 12-month period available to me across services. I then divided the sound recording payments by the revenue to determine the effective sound recording royalty rate. For Prime, instead of calculating the effective sound recording rate as a percent of revenue, I calculated it as a per-play rate. Further, Free is a relatively new service that was launched in 2019.

Therefore, instead of 2020, I used 2020H2 and 2021H1 data to get a more accurate approximation of Free's sound recording royalty rate going forward.

(234)(235) I use data available to me across ~~1459~~ different interactive streaming services, including those offered by Amazon, Apple, Google, Pandora, and Spotify to make these calculations.<sup>366</sup> These ~~1459~~ services span ~~56~~ different categories of interactive streaming service. To determine a headline percent-of-revenue rate, I calculate a weighted average headline rate across all service types using service revenue as the weights.<sup>367</sup> This weighting method is reasonable because it grants greater significance to services that represent a greater share of revenue.<sup>368</sup>

(235)(236) Figure 37 shows the revenues used for weighting purposes. I use the revenue as reported for each service in the rate calculation files.

<sup>366</sup> ~~I have not been able to review and incorporate Apple data into this report. I will revise my analysis once I have reviewed the Apple data as well as more recent data produced by other services.~~

<sup>367</sup> I present a single headline percent-of-revenue rate for all service categories. If the Board elects to assign different headline rates to different service categories, my analysis can also be used to inform those rates.

<sup>368</sup> Further, from a practical perspective, revenue-based weights can be consistently applied across subscription and ad-supported services, whereas weights based on subscriber counts are not appropriate for ad-supported services and weights based on plays may not be appropriate if a play on an ad-supported “lean-back” service is not comparable to a play that was directed by the user on a fully interactive service.

Figure 37: Service revenue and weights for each service (~~June 2020~~–May 2021)

Service type	Service	Service revenue	Service weight
Standalone Portable	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
Free Non-Subscription/Ad-Supported	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
Bundled Subscription	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
Limited Offering	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
Standalone Non-Portable Streaming	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
<u>Paid Locker Service</u>	[REDACTED]	[REDACTED]	[REDACTED]

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

~~(236)~~(237) My benchmark calculations, which I describe in detail in the following sections, yield percent-of-revenue rates from 6% to 11.~~5~~6%, as shown in Figure 38.

**Figure 38: Summary of musical works percent of revenue rates from the benchmark analyses**

Benchmark	Musical works percentage of revenue rates
Non-interactive streaming benchmark	10.2% – 10.91% – 11.0%
PDD benchmark	6.0% – 8.42%
Prime Music Benchmark	10.67% – 11.56%
Overall	6.0% – 11.56%

### XI.D.1. Non-interactive streaming benchmark

(237)(238) Sound recording rates for non-interactive services are set by the Board under the WBWS standard. Similarly, musical works rates for non-interactive services are negotiated with PROs, and in the case of ASCAP and BMI are overseen by the rate court under the WBWS standard.<sup>369</sup> Thus, no adjustment is necessary to the non-interactive 4.65:1 benchmark ratio. Figure 39 below applies this benchmark ratio and my two alternative market power adjustments to effective interactive streaming label rates to calculate a range of WBWS musical works rates for interactive streaming: 10.21% to 10.911.0%.

<sup>369</sup> ASCAP and BMI are the only PROs that operate under consent decrees because of “competitive concerns arising from the market power each organization acquired through the aggregation of public performance rights held by their member songwriters and music publishers.” “Antitrust Consent Decree Review - ASCAP and BMI 2019,” Antitrust Division, The United States Department of Justice, accessed October 12, 2021, <https://www.justice.gov/atr/antitrust-consent-decree-review-ascap-and-bmi-2019>.

Figure 39: WBWS musical works rates under the non-interactive streaming benchmark

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (higher MP adjustment)	WBWS musical works rate (lower MP adjustment)
Standalone Portable	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Free Non-Subscription/Ad-Supported	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Bundled Subscription	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Limited Offering	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Standalone Non-Portable Streaming	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Paid Locker Service	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Combined	Combined	12.02%	10.21%	10.91%

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

## XI.D.2. PDD benchmark

(238)(239) The recent subpart B settlement that set musical works rates for PDDs occurred while Section 115 mechanical royalty rates are set under the WBWS standard. PDD sound recording rates, like those of interactive streaming, are set via unregulated negotiations with the record labels.

(239)(240) Unlike an interactive streaming service, a seller of PDDs does not necessarily need to offer a full catalog of songs or even all of the “hits” to run a PDD store.<sup>370</sup> It is therefore unlikely that labels would exhibit the same degree of market power over sellers of PDDs that they do over interactive

<sup>370</sup> Gayadien WDTAWDT, fn 56 (“[REDACTED]”).

streaming services. That said, a PDD store may have relatively more difficulty attracting shoppers if it does not have a reputation for selling a broad range of music, so some market power adjustment may be necessary.

~~(240)~~(241) The WBWS sound recording to musical works ratio for PDDs thus likely lies somewhere between the unadjusted ratio of [REDACTED] and the ratio that would obtain after applying the higher of the two market power adjustments (~[REDACTED]) to PDD sound recording rates, or [REDACTED].<sup>371</sup>

~~(241)~~(242) Figure 40 below applies these two benchmark ratios and my two alternative market power adjustments to effective interactive streaming label rates to calculate a range of WBWS musical works rates for interactive streaming: 6.0% to 8.42%. [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] XII. Appendix B contains additional calculations related to the PDD benchmarks.

<sup>371</sup> See Figure 35 and Figure 36. See my working papers for the calculation of the PDD benchmark ratio after adjusting for label market power.

Figure 40: WBWS musical works rates under the PDD benchmark

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (higher MP adjustment)	WBWS musical works rate (lower MP adjustment)
Standalone Portable	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Free Non-Subscription/Ad-Supported	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Bundled Subscription	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Limited Offering	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Standalone Non-Portable Streaming	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<u>Paid Locker Service</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Combined	Combined	7.43%	6.0%	8.42%

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

### XI.D.3. Prime Music benchmark

(242)(243)

[REDACTED] Both sides of the ratio are subject to market power since neither market is effectively competitive because [REDACTED].<sup>372</sup> Although

<sup>372</sup> Duffett-Smith WDT, ¶ 27 (“[REDACTED]”).  
Gayadien ~~WDT~~AWDT, ¶¶ 18-19 (“[REDACTED]”).

I view [REDACTED]  
[REDACTED] Thus, market power adjustment on both sides of the ratio remains appropriate.

(243)(244) Figure 41 below applies two versions of this publisher market power adjustment: one assuming that publisher market power is equal to label market power and a second using the publisher market power adjustment described in XI.C.2 above. The resulting WBWS musical works rates for interactive streaming range from 10.67% to 11.56%. [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]. Appendix B contains results for additional market power adjustments for this benchmark.

[REDACTED]  
[REDACTED]”).



**Figure 41: WBWS musical works rates under the Prime Music benchmark**

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (higher MP adjustment)	WBWS musical works rate (lower MP adjustment)
Standalone Portable				
Free Non-Subscription/Ad-Supported				
Bundled Subscription				
Limited Offering				
Standalone Non-Portable Streaming				
<u>Paid Locker Service</u>				
<b>Combined</b>	<b>Combined</b>	<b>12.69%</b>	<b>10.67%</b>	<b>11.56%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

## XI.E. Calculation of backstops for headline percent-of-revenue rates

~~(244)~~(245) As discussed in Section X.C above, previous mechanical royalty rate structures for interactive streaming services, as well as many private contracts, contain backstops to percent-of-revenue rates, which can supersede percent-of-revenue rates if those rates fall below a certain level. These backstops can serve useful purposes, such as protecting against difficulties in measuring revenue.<sup>373</sup> To maintain the benefits of a percent-of-revenue rate, a backstop should not normally bind, but should only be activated for significant declines in the measured streaming revenue. In this section, I first discuss

<sup>373</sup> As discussed in Section X above, there is no economic justification for mechanical-only backstops. The backstops that I present in this section apply to all-in musical works royalties.

backstops for paid standalone portable services, then I turn to backstops for ad-supported services and other paid subscription services other than Prime.<sup>374</sup>

~~(245)~~(246) To the degree that the Board finds a need for backstops, a reasonable backstop for standalone portable subscriptions is at most 80 cents. A reasonable backstop for standalone non-portable subscriptions is at most 40 cents. A backstop of 19.~~40~~% TCC is reasonable for ad-supported services. I explain below the calculations that underlie these conclusions.

### **XI.E.1. Backstops for paid subscriptions**

~~(246)~~(247) In this section, I provide reasonable per-subscriber backstops for two service categories: (1) standalone portable and (2) standalone non-portable–streaming only. In addition, I provide a framework for determining a reasonable backstop for bundled subscription offerings

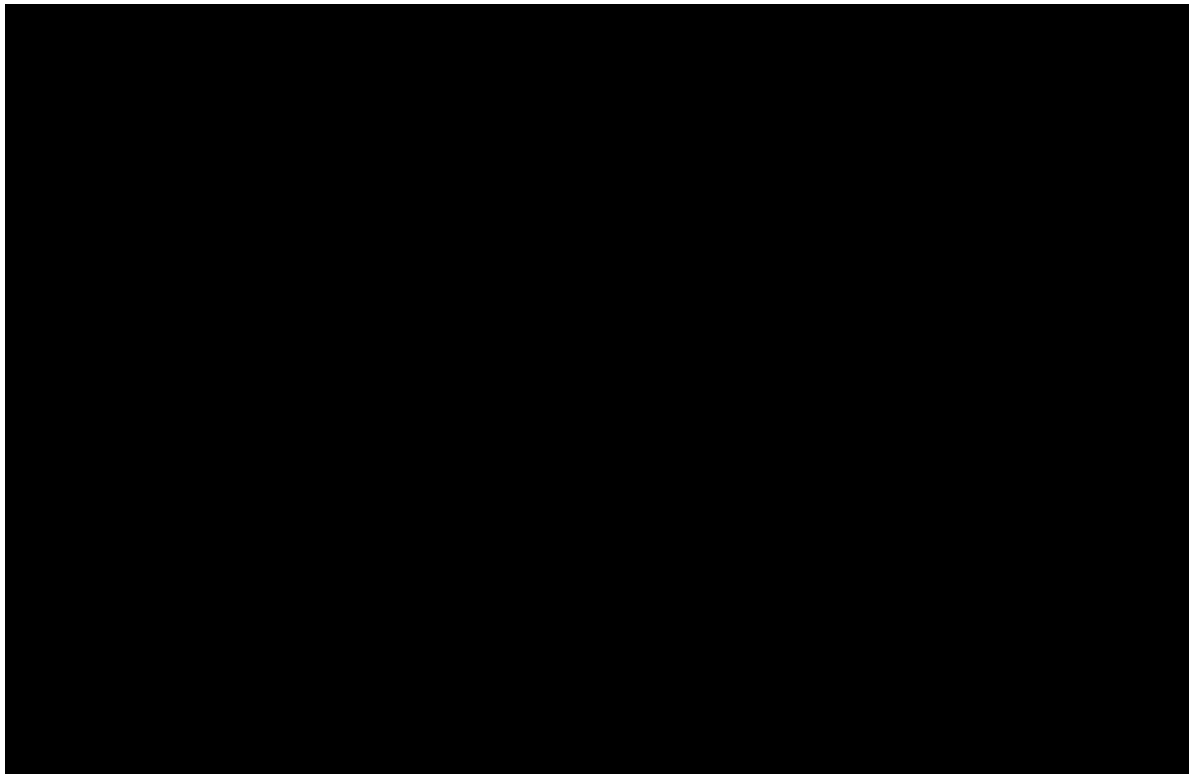
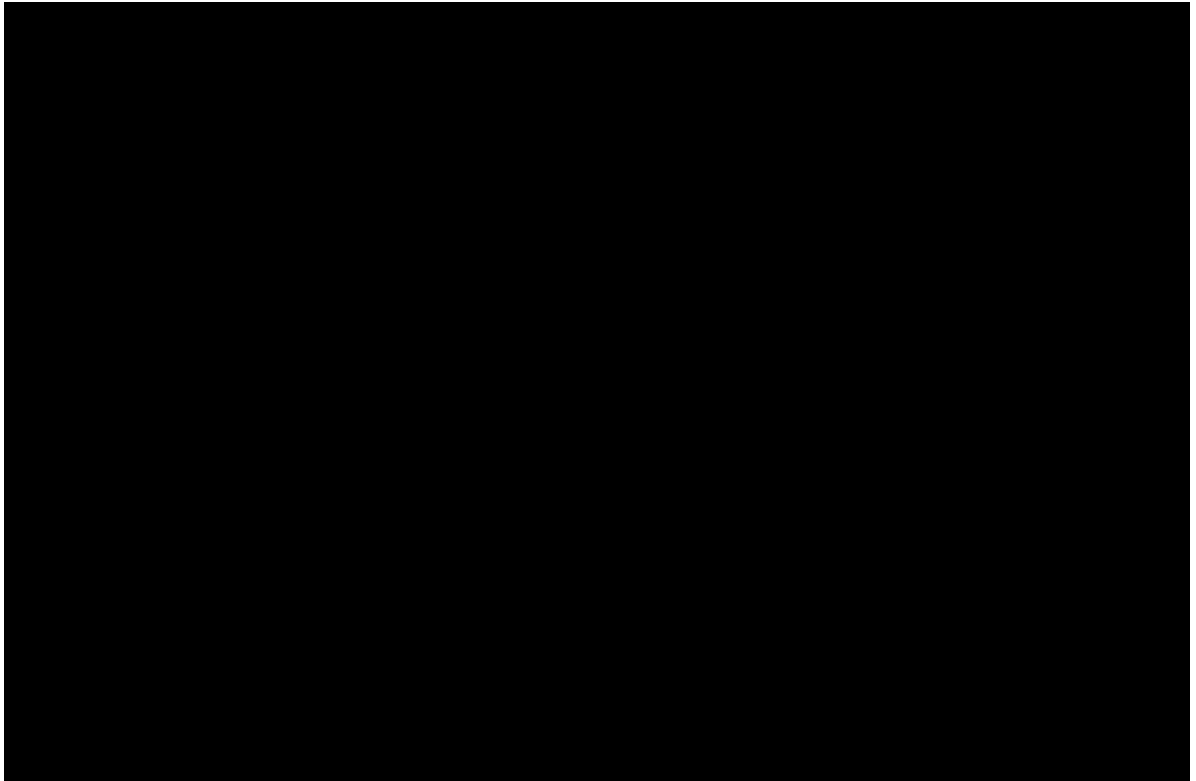
~~(247)~~(248) As I discussed in Section X, a rate structure based solely on a per-subscriber prong can promote economic inefficiency. In contrast, a percent-of-revenue rate structure benefits both services and the copyright owners by aligning the services’ incentives to maximize revenue with the copyright owners’ interest in profiting from their musical works. Therefore, an appropriate backstop would not bind at the benchmark percentage of revenue rates, given existing pricing, but would be close enough to mitigate the risk of significant decline in measured revenue. This allows the economic efficiency of rates based on a percentage of revenue so long as the revenue stream from subscriptions does not decline significantly.

~~(248)~~(249) I calculate per-subscriber equivalents for the percent-of-revenue rates for each of my three benchmarks and find that an 80-cent backstop is appropriate for standalone portable subscriptions, whereas a 40-cent backstop is appropriate for standalone non-portable–streaming only subscriptions. Because bundled offerings can span a variety of subscription categories, I find that the most reasonable approach is to choose the backstop that would apply to the music component of the bundle if it were offered on a standalone basis. These rates work to protect against substantial rate diminution from current levels but do not bind under most of my benchmarks.

~~(249)~~(250) Figure 42 shows per-subscriber equivalents for the percent-of-revenue rates for each of my three benchmarks for standalone portable subscriptions, compared to an 80-cent backstop. The solid bars correspond to the lower market power adjustments, whereas the striped bars correspond to the higher market power adjustments that are shown in Figure 39–Figure 41 above.

<sup>374</sup> See Section X.F for a discussion of benchmarks for Prime Music.

**Figure 42: WBWS musical works per-subscriber equivalents from benchmark analyses for standalone portable subscriptions**



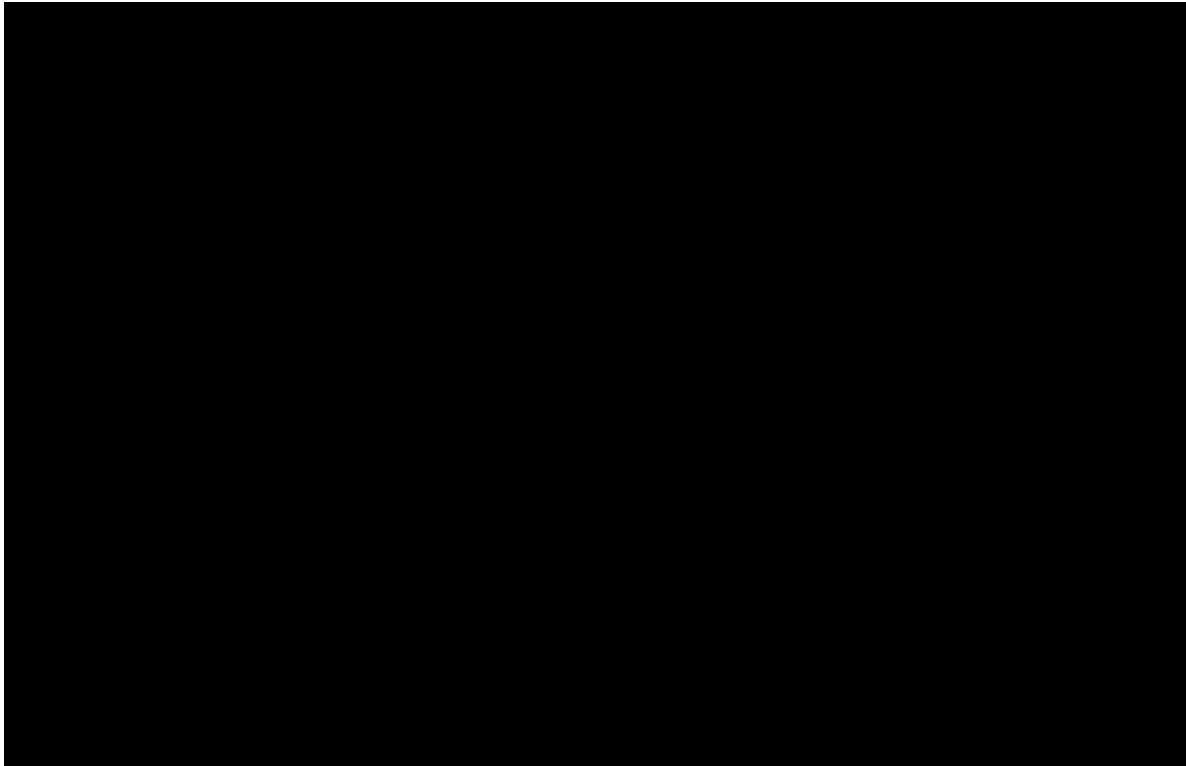
Note: Figures containing the complete set of services making up the “All other services” columns in this figure are available in my backup materials.

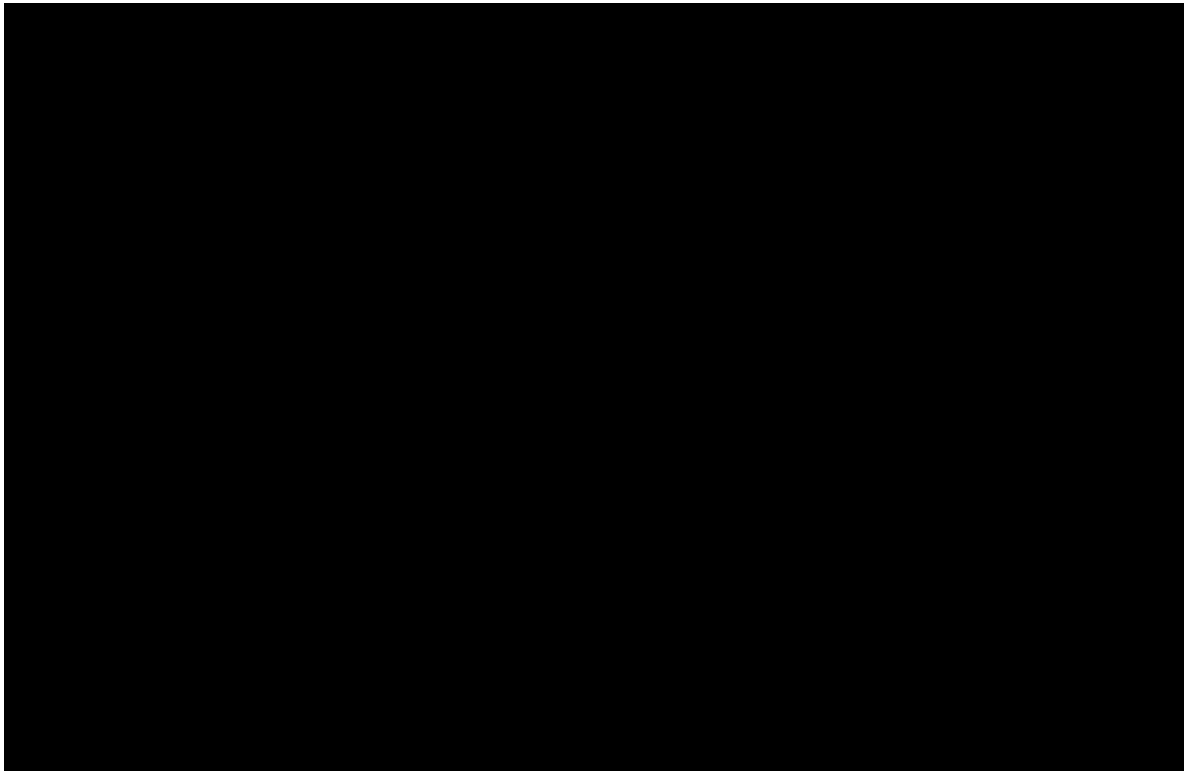
~~(250)~~(251) Figure 42 shows that for both the non-interactive streaming and the Prime Music benchmarks, an 80 cent per-subscriber prong would not currently bind for most services, but would be close enough to the per-subscriber benchmark rates for the standalone portable services to serve a backstop’s purpose of protecting upstream royalties from significant decline in measured streaming revenue.<sup>375</sup> It would therefore serve as a useful backstop to the range of headline rates produced by the non-interactive streaming and Prime Music benchmarks.

~~(251)~~(252) Figure 43 shows per-subscriber equivalents for the percent-of-revenue rates for each of my three benchmarks for standalone non-portable-streaming only subscriptions compared to a 40-cent backstop. As above, the solid bars correspond to the lower market power adjustments, whereas the striped bars correspond to the higher market power adjustments that are shown in Figure 39–Figure 41 above.

<sup>375</sup> An 80 cent per-subscriber prong would not be a good backstop for the percent-of-revenue rates implied by the PDD benchmark ratio. If that benchmark were to be used to set the headline rate, the per-subscriber backstop would need to be reduced to about 50 cents per subscriber. Because I conclude that the ultimate headline rate should be set closer to the ones implied by the non-interactive and Prime benchmarks, I conclude that an 80-cent backstop is appropriate.

**Figure 43: WBWS musical works per-subscriber equivalents from benchmark analyses for standalone non-portable-streaming only**





~~(252)~~(253) Figure 43 shows that for both the non-interactive streaming and the Prime Music benchmarks, a 40 cent per-subscriber prong would not currently bind but would be close enough to the per-subscriber benchmark rates for each of the standalone non-portable-streaming only subscriptions to serve a backstop's purpose of protecting upstream royalties from significant decline in measured streaming revenue.<sup>376</sup> It would therefore serve as a useful backstop to the range of headline rates produced by the non-interactive streaming and Prime Music benchmarks.

### **XI.E.2. Backstops for ad-supported services**

~~(253)~~(254) As discussed in Section X.E above, a per-subscriber backstop is not a good fit for an ad-supported service where subscribers may vary more dramatically in their usage of and valuation for the service than subscribers of a paid subscription service. I instead calculate appropriate levels for TCC backstops for free, ad-supported services.

<sup>376</sup> A 40 cent per-subscriber prong would not be a good backstop for the percent-of-revenue rates implied by the PDD benchmark ratio. If that benchmark were to be used to set the headline rate, the per-subscriber backstop would need to be reduced to about 25 cents per subscriber. Because I conclude that the ultimate headline rate should be set closer to the ones implied by the non-interactive and Prime benchmarks, I conclude that a 40-cent backstop is appropriate.

(254)(255) Figure 44 below uses my benchmark approach to determine appropriate TCC backstops for free, ad-supported services.<sup>377</sup> It finds rates of ~~10.9~~11.0% to 20.8%, depending on the benchmark.

**Figure 44: WBWS musical works TCC backstops for ad-supported services under my benchmarks**

Benchmark	WBWS musical works TCC rate (higher MP adjustment)	WBWS musical works TCC rate (lower MP adjustment)
Non-interactive	18. <del>54</del> %	19. <del>76</del> %
PDD	<del>10.9</del> <u>11.0</u> %	14. <del>67</del> %
Prime Music	19.2%	20.8%

## XI.F. Calculation of rates for Amazon Music Prime

(255)(256) As discussed in Section X.E above, Prime Music is not well suited to either percent-of-revenue or per-subscriber rates. As I discussed in Section XI.B.3, [REDACTED]

[REDACTED] Therefore, as with my Prime Music benchmark, I use three potential market power adjustments for this rate. First, I use an adjustment based on publisher market power derived from the Pandora-ASCAP decision. Alternatively, I assume that publisher market power is similar to the label market power and use my two label market power adjustments: one based on the Web V determination and another based on Amazon's data comparing label rates for the Majors and the Indies. Figure 45 summarizes the resultant WBWS rates from this benchmark.

**Figure 45: WBWS musical works rates for Amazon Music Prime**

Benchmark	Unadjusted musical works benchmark rate	WBWS musical works rate (Publisher MP)	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

(256)(257) The rates presented in Figure 45 are my preferred benchmark rates for Prime Music. [REDACTED]

<sup>377</sup> My benchmark analysis applies a benchmark ratio to sound recording royalty rates of a given service. Thus, the corresponding TCC for a given benchmark ratio is the same for all services other than Spotify because, to be consistent with the Board's decision in Web V, I use a lower market power adjustment for Spotify. Therefore, I only report combined resultant TCC backstops for each benchmark.

[REDACTED] Thus, this benchmark has many desirable properties that the Board has highlighted in the past.<sup>378</sup>

~~(257)~~(258) As a robustness check, I also use my benchmark ratio approach to derive additional benchmarks for Prime Music. Figure 46 summarizes the application of my benchmark ratios to Amazon Prime’s effective per-play sound recording rates to determine WBWS per-play musical works rates for Prime Music. These result in a range of [REDACTED]

**Figure 46: WBWS musical works rates for Amazon Music Prime**

Benchmark	Unadjusted musical works benchmark rate	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)
Non-interactive	[REDACTED]	[REDACTED]	[REDACTED]
PDD - MP Web V	[REDACTED]	[REDACTED]	[REDACTED]

<sup>378</sup> See Section XI.A for details.



## XII. Reasonable musical works royalty rates: summary of benchmark results

(258)(259) My benchmark approach yields a range of WBWS percent-of-revenue rates of from 6.0% to 11.56% and Prime Music per play-rates from [REDACTED]. For all services but Prime Music, the non-interactive streaming benchmark is the most appropriate benchmark because it lies the middle of my three benchmarks and is the only benchmark ratio based on explicit WBWS rates on both the sound recording and musical works sides of the market. Combining the rates implied by the midpoint of the non-interactive streaming benchmark range with the associated backstops yields the WBWS musical works rates and rate structure shown in Figure 47 below. For Prime Music, [REDACTED] and [REDACTED] of the WBWS musical works rates for that benchmark in Figure 47 below.

**Figure 47: Musical works headline rates and backstops for all-in musical works royalties based on preferred benchmark**

Service type	Musical works rate	Backstop
Standalone Portable	10.54%	\$0.80 per subscriber
Free Non-Subscription/Ad-Supported	10.54%	19.40% TCC
Bundled Subscription	10.54%	Backstop that would apply to the music component of the bundle if it were offered on a standalone basis
Standalone Non-Portable Streaming	10.54%	\$0.40 per subscriber
Amazon Music Prime	\$0.00085 per play	N/A

**Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
The Library of Congress**

**In the Matter of:**

**DETERMINATION OF RATES  
AND TERMS FOR MAKING AND  
DISTRIBUTING PHONORECORDS  
(Phonorecords IV)**

**Docket No. 21-CRB-0001-PR  
(2023-2027)**

**DECLARATION OF LESLIE M. MARX**

I, Leslie M. Marx, declare under penalty of perjury that the statements contained in my Written Direct Testimony in the above-captioned proceeding are true and correct to the best of my knowledge, information, and belief.

*Leslie M. Marx*

Dated: ~~October 13, 2021~~ March 8, 2022

\_\_\_\_\_  
Leslie M. Marx

## Appendix A. Curriculum vitae for Professor Leslie Marx

### A.1. Summary of experience

Leslie M. Marx is the Robert A. Bandeen Professor of Economics at the Fuqua School of Business at Duke University. She is an expert in auctions, vertical contracting, antitrust liability, and cartels. Dr. Marx is well known for her innovative ideas in the areas of industrial organization, applied game theory, auctions, procurements, and collusion. She served as Chief Economist of the Federal Communications Commission from August 2005 through August 2006.

Dr. Marx has published extensively in peer-reviewed journals and elsewhere on topics related to industrial organization, applied game theory, auctions, procurements, and collusion. Her published work includes papers on collusive mechanisms, incentives in procurement contracting, slotting allowances, and exclusive dealing. In addition, Dr. Marx has been named among the *Who's Who Legal* of Competition Economists since 2017.

### A.2. Education

- PhD, Economics, Northwestern University
- MA, Economics, Northwestern University
- BS, Mathematics, Duke University

### A.3. Professional experience

- Fuqua School of Business and Department of Economics, Duke University
  - Robert A. Bandeen Professor of Economics, 2013–present
  - William and Sue Gross Research Fellow and Professor of Economics, 2012–2013
  - Professor of Economics, 2008–2013
  - Associate Professor of Economics, 2002–2008 (with tenure). On leave 2005–2006
- Toulouse School of Economics, Visiting Scholar, 2018
- University of Melbourne
  - Visiting Eminent Scholar, 2014, 2016, 2019

- Academic Visitor, 2012
- US Federal Communications Commission (FCC), Chief Economist, 2005–2006
- W.E. Simon Graduate School of Business Administration, University of Rochester
  - Associate Professor of Economics and Management, 2000–2002 (with tenure), 1999–2000
  - Assistant Professor of Economics and Management, 1994–1999
- California Institute of Technology, Visiting Associate, 2000

## A.4. Teaching

- MBA: Managerial Economics, Environmental Economics, Managerial Decision Analysis, Managerial Game Theory
- Executive MBA: Environmental Economics, Managerial Decision Analysis, Managerial Economics, Managerial Game Theory
- PhD: Game Theory, Industrial Organization

## A.5. Selected consulting experience

- On behalf of Spotify, submitted expert reports in *Thomas Morgan Robertson et al. v. Spotify USA Inc.* and *Robert Gaudio et al. v. Spotify USA Inc.* Analyzed the economic choices faced by relevant actors in the music streaming industry, calculated the actual economic damages caused by Spotify's alleged infringement, and analyzed plaintiffs' statutory damage request in light of actual economic damages.
- On behalf of several direct action plaintiffs that include large electronic component distributors and contract manufacturers, submitted expert reports in *In re Capacitors Antitrust Litigation*. The plaintiffs allege that more than 15 capacitor manufacturers colluded to fix the prices of aluminum, film, and tantalum capacitors in the United States for at least 12 years.
- Provided economic analysis in consulting capacity related to two mergers in the retail gasoline industry. Analyzed the relevant antitrust markets, price patterns, and market positioning of the merging parties. Opined on whether the proposed mergers would substantially lessen competition in the retail gasoline market.
- In the matter *In re Optical Disk Drive Products Antitrust Litigation*, testified on behalf of Dell Inc. and Dell Products, Inc.

- Retained by the Department of Justice (DOJ) to evaluate the potential competitive effects of Sinclair Broadcast Group’s proposed acquisition of Tribune Media. Analyzed potential competitive effects of the merger, which would have expanded Sinclair’s reach to more than 70% of US homes. Tribune ultimately terminated the merger agreement.
- In the case *SOCAN-Re: Sound Pay Audio Services Tariffs, 2007–2016* (Copyright Board of Canada proceeding), submitted an expert report and testified on behalf of Stingray Digital and the broadcasting distribution undertakings in Canadian Copyright Board litigation involving performing rights royalties for pay audio services payable for musical works and sound recordings.
- In *In re Determination of Rates and Terms for Making and Distributing Phonorecords*, testified on behalf of Spotify USA Inc. regarding royalty payments under Section 115 of the Copyright Act.
- Submitted an expert report in *In re Cathode Ray Tube (CRT) Antitrust Litigation* on behalf of a class of direct purchasers. Analyzed economic evidence related to defendant’s role in alleged price-fixing conspiracy.
- Prepared as a testifying expert on behalf of DOJ in support of its successful challenge of the proposed \$34.6 billion merger of Halliburton and Baker Hughes.
- Served as testifying expert at trial on behalf of a large coalition of direct action plaintiffs in *In re Urethane Antitrust Litigation*. Analyzed impact and estimated damages. Analysis indicated that plaintiffs were overcharged by \$608 million, or 11%, between 1994 and 2003 as a result of alleged price-fixing conspiracy among chemicals suppliers. Direct action plaintiffs reached settlements, including a \$400 million settlement with The Dow Chemical Company.
- In the matter *ACCC v. Informed Sources*, provided economic analysis on behalf of the Australian Competition and Consumer Commission in its Federal Court of Australia proceedings against Informed Sources. Analyzed whether the retail gasoline price information provided by Informed Sources to fuel retailers that subscribed to the service likely lessened competition in metropolitan Melbourne.
- In the matter *Anderson News, LLC v. American Media, Inc.*, submitted expert reports on behalf of Anderson News regarding allegations that leading magazine publishers and distributors engaged in a conspiracy to boycott magazine wholesaler Anderson.
- In the matter *In re Petition of Pandora Media, Inc.*, served as testifying expert on behalf of Pandora in its litigation with the American Society of Composers, Authors, and Publishers (ASCAP). The court ultimately adopted key aspects of Dr. Marx’s analysis of proposed benchmarks and set a rate within the range of rates proposed by Dr. Marx.
- Served as a testifying damage expert on behalf of plaintiffs in *In re TFT-LCD (Flat Panel) Antitrust Litigation*.

- In the matter *In re Chocolate Confectionary Antitrust Litigation*, assisting testifying expert on behalf of defendant regarding its participation in an alleged price-fixing conspiracy of chocolate candy products in the United States.
- Filed a report with the FCC on behalf of Verizon regarding proposals to restrict Verizon's and AT&T's participation in the upcoming Incentive Auction for wireless spectrum.
- Assisted lead testifying expert in *United States ex rel. Bunk v. Birkart Globistics* and *United States ex rel. Ammons v. Pasha Group*. On behalf of the United States, provided support on economic damages related to a conspiracy by Department of Defense contractors for moving services.
- Submitted a white paper to and participated in meetings with DOJ and the FCC on behalf of the Communications Workers of America (CWA), an interested party in the proposed T-Mobile/AT&T merger. Opined on the appropriate methods of analysis and horizontal and vertical concerns with the proposed merger.
- Provided economic analysis related to the Comcast-NBCU merger on behalf of Bloomberg, LP. Conditions were imposed on the transaction to protect Bloomberg TV and other competitors of Comcast-NBCU's business news network CNBC from being disadvantaged.
- Served as a testifying expert in *In re Electrical Carbon Products Antitrust Litigation*. Submitted an expert report on damages.
- In *In re Vitamins Antitrust Litigation*, served as a consulting expert. Worked closely with Bates White professionals to examine whether the economic evidence was inconsistent with noncooperative conduct during a period of time predating the defendants' guilty pleas.
- In *Oxford Health Plans v. Liberty Surplus Ins. Corp.*, provided expert testimony for Liberty Surplus Insurance Corporation in litigation that concerned Oxford Health Plans' settlement negotiations in a securities class action lawsuit.

## A.6. Testifying experience

- *In Re Rail Freight Fuel Surcharge Antitrust Litigation*, MDL No. 1869, Case No. 07-489. Expert report and deposition testimony: 2020–2021.
- *Thomas Morgan Robertson et al. v. Spotify USA Inc.*, No. 3:17-cv-01616 (M.D. Tenn., filed 2017) and *Robert Gaudio et al. v. Spotify USA Inc.*, No. 3:17-cv-01052 (M.D. Tenn., filed 2017). Expert reports, deposition testimony: 2018–2019.
- *In re Capacitors Antitrust Litigation*, No. 3:14-cv-03264 (N.D. Cal. filed 2014). Expert reports, deposition, and Daubert hearing testimony: 2018–2020.

- *Dell Inc. and Dell Products L.P. v. Hitachi-LG Data Storage Korea, Inc., et al.*, No. 3:13-cv-03550-RS (W.D. Texas). Expert report and deposition testimony: 2017.
- United States Copyright Royalty Judges, *Determination of Rates and Terms for Making and Distributing Phonorecords* (Phonorecords III), Docket No. 16–CRB–0003–PR (2018–2022). Written direct, rebuttal, and remand testimony, deposition, and hearing testimony: 2016–~~2021~~2022.
- *ACCC v. Informed Sources (Australia) Pty Ltd & Ors* VID450/2014. Provided economic analysis on behalf of the Australian Competition and Consumer Commission in its Federal Court of Australia proceedings against Informed Sources. Expert report: 2015.
- *In Re Cathode Ray Tube (CRT) Antitrust Litigation*, Master File No. C-07-5944 JST, MDL No. 1917. Expert report: 2016.
- *SOCAN-Re: Sound Pay Audio Services Tariffs, 2007–2016* (Copyright Board of Canada proceeding). Expert report and trial testimony: 2016.
- Expert report and testimony in arbitration involving two large telecommunications companies: 2016.
- *In re Urethane Antitrust Litig.*, No. 08-cv-05169 (D.N.J. filed 2008). Expert report, deposition, and trial testimony: 2013–2016.
- *In re Anderson News, L.L.C. v. Am. Media, Inc.*, No. 09-cv-2227 PAC (S.D.N.Y.). Expert report and deposition testimony: 2014.
- *In re Petition of Pandora Media, Inc.*, No. 12-cv-8035 (S.D.N.Y. filed 2013). Expert reports, declaration, deposition, and trial testimony: 2013–2014.
- *In re Urethane Antitrust Litig.*, MDL No. 04-1616 (D. Kan. filed 2004). Rule 26 Disclosure and deposition testimony: 2013.
- *In re TFT-LCD (Flat Panel) Antitrust Litig.*, MDL No. 07-1827 (N.D. Cal. filed 2007). Expert reports and deposition testimony: 2011–2014.
- *In re Elec. Carbon Prod. Antitrust Litig.*, No. 05-6042 (D.N.J. filed 2006) Expert report: 2009.
- *Oxford Health Plans v. Liberty Mutual Insurance Company et al.*, C.A. No. 03C-04-268 (W.C.C.) (Del. Super. Ct. filed 2004). Expert report and deposition.

## A.7. Consulting

- Bates White Economic Consulting, Washington, DC, 2002–2005, 2007–present
- Bloomberg, LP, 2010

- Federal Communications Commission, Washington, DC, 2006–2007
- Latex International, Ansonia, CT, 2001
- Xerox Corp., Rochester, NY, 1999
- Rochester Gas & Electric Corp., Rochester, NY, 1997, 1998
- Eastman Kodak Company, Rochester, NY, 1995, 1996, 1999

## A.8. Publications

### A.8.a. Research papers in academic journals

- “Bilateral Trade with Multi-Unit Demand and Supply.” With Simon Loertscher. Forthcoming in *Management Science*.
- “Incomplete Information Bargaining with Applications to Mergers, Investment, and Vertical Integration.” (With Simon Loertscher.) *American Economic Review* 112, no. 2 (2022), 616–649.
- “Coordinated Effects in Merger Review.” With Simon Loertscher. ~~Forthcoming in~~ *Journal of Law & Economics* 64, no. 4 (2021): 705–744.
- “The Possibility of Social-Surplus-Reducing Vertical Mergers.” With Simon Loertscher. *CPI Antitrust Chronical* (October 2020): 1–5.
- “Digital Monopolies: Privacy Protection or Price Regulation?” With Simon Loertscher. *International Journal of Industrial Organization* 71 (2020): 1–13.
- “Asymptotically Optimal Prior-Free Clock Auctions.” With Simon Loertscher. *Journal of Economic Theory* 187 (2020).
- “A Dominant Strategy Asset Market Mechanism.” With Simon Loertscher. *Games and Economic Behavior* 120 (2020): 1–15.
- “Merger Review with Intermediate Buyer Power.” With Simon Loertscher. *International Journal of Industrial Organization* 67 (2019): 1–16.
- “Mix-and-Match Divestitures and Merger Harm.” With Simon Loertscher. *Japanese Economic Review* 70, no. 3 (2019): 346–66.
- “Merger Review for Markets with Buyer Power.” With Simon Loertscher. *Journal of Political Economy* 127, no. 9 (2019).
- “Two-Sided Allocation Problems, Decomposability, and the Impossibility of Efficient Trade.” With David Delacrétaz, Simon Loertscher, and Tom Wilkening. *Journal of Economic Theory* 179 (2019): 416–54.



- “Auctions with Bid Credits and Resale.” With Simon Loertscher. *International Journal of Industrial Organization* 55 (2017): 58–90.
- “Defending Against Potential Collusion by Your Suppliers—26th Colin Clark Memorial Lecture.” *Economic Analysis and Policy* 53 (2017): 123–28.
- “Club Good Intermediaries.” With Simon Loertscher. *International Journal of Industrial Organization* 50 (2017): 430–59.
- “A Long Way Coming: Designing Centralized Markets with Privately Informed Buyers and Sellers.” With Simon Loertscher and Tom Wilkening. *Journal of Economic Literature* 53(4) (2015): 857–97.
- “Antitrust Leniency with Multi-Market Colluders.” With Claudio Mezzetti and Robert C. Marshall. *American Economic Journal: Microeconomics* 7, no. 3 (2015): 205–40.
- “Buyer Resistance for Cartel versus Merger.” With Vikram Kumar, Robert C. Marshall, and Lily Samkharadze. *International Journal of Industrial Organization* 39 (2015): 71–80.
- “Effects of Antitrust Leniency on Concealment Effort by Colluding Firms.” With Claudio Mezzetti. *Journal of Antitrust Enforcement* 2, no. 2 (2014): 305–32.
- Winner of Best Economics Article—2015 Antitrust Writing Awards.
- “An Oligopoly Model for Analyzing and Evaluating (Re)-Assignments of Spectrum Licenses.” With Simon Loertscher. *Review of Industrial Organization* 45, no. 3 (2014): 245–73.
- “Plus Factors and Agreement in Antitrust Law.” With William E. Kovacic, Robert C. Marshall, and Halbert L. White. *Michigan Law Review* 110, no. 3 (2011): 393–436.
- Winner of the 10th Annual Jerry S. Cohen Memorial Fund Writing Award for the best antitrust piece during the prior year.
- “Bidder Collusion at First-Price Auctions.” With Giuseppe Lopomo and Peng Sun. *Review of Economic Design* 15, no. 3 (2011): 177–211.
- “Carbon Allowance Auction Design: An Assessment of Options for the U.S.” With Giuseppe Lopomo, David McAdams, and Brian Murray. *Review of Environmental Economics and Policy* 5, no. 1 (2011): 25–43.
- “Coordinated Effects in the 2010 Horizontal Merger Guidelines.” With Wayne-Roy Gayle, Robert C. Marshall, and Jean-Francois Richard. *Review of Industrial Organization* 39, no. 1 (2011): 39–56.
- “The Economics of Contingent Re-Auctions.” With Sandro Brusco and Giuseppe Lopomo. *American Economic Journal: Microeconomics* 3, no. 2 (2011): 165–93.

- “Break-Up Fees and Bargaining Power in Sequential Contracting.” With Greg Shaffer. *International Journal of Industrial Organization* 28, no. 5 (2010): 451–63.
- “Slotting Allowances and Scarce Shelf Space.” With Greg Shaffer. *Journal of Economics & Management Strategy* 19, no. 3 (2010): 575–603.
- “Cartels as Two-Stage Mechanisms: Implications for the Analysis of Dominant-Firm Conduct.” With Randal D. Heeb, William E. Kovacic, and Robert C. Marshall. *Chicago Journal of International Law* 10, no. 1 (2009): 213–31.
- “Individual Accountability in Teams.” With Francesco Squintani. *Journal of Economic Behavior & Organization* 72, no. 1 (2009): 260–73.
- “Quantitative Analysis of Coordinated Effects.” With William E. Kovacic, Robert C. Marshall, and Steven P. Schulenberg. *Antitrust Law Journal* 76, no. 2 (2009): 397–430.
- “The ‘Google Effect’ in the FCC’s 700 MHz Auction.” With Sandro Brusco and Giuseppe Lopomo. *Information Economics and Policy* 21, no. 2 (2009): 101–14.
- “The Vulnerability of Auctions to Bidder Collusion.” With Robert C. Marshall. *Quarterly Journal of Economics* 124, no. 2 (2009): 883–910.
- “Cartel Price Announcements: The Vitamins Industry.” With Robert C. Marshall and Matthew E. Raiff. *International Journal of Industrial Organization* 26, no. 3 (2008): 762–802.
- Awarded the 2009 Paul Geroski Best Article Prize for one of the best two articles published in the *International Journal of Industrial Organization* in 2008.
- “Bidder Collusion.” With Robert C. Marshall. *Journal of Economic Theory* 133, no. 1 (2007): 374–402.
- “Exploring Relations between Decision Analysis and Game Theory.” With Jules van Binsbergen. *Decision Analysis* 4, no. 1 (2007): 32–40.
- “Rent Shifting and the Order of Negotiations.” With Greg Shaffer. *International Journal of Industrial Organization* 25, no. 5 (2007): 1109–25.
- “Upfront Payments and Exclusion in Downstream Markets.” With Greg Shaffer. *RAND Journal of Economics* 38, no. 3 (2007): 823–43.
- “Economics at the Federal Communications Commission.” *Review of Industrial Organization* 29, no. 4 (2006): 349–68.
- “Inefficiency of Collusion at English Auctions.” With Giuseppe Lopomo and Robert C. Marshall. *B. E. Journal of Theoretical Economics* 5, no. 1 (2005).
- “Opportunism and Menus of Two-Part Tariffs.” With Greg Shaffer. *International Journal of Industrial Organization* 22, no.10 (2004): 1399–1414.

- “Opportunism in Multilateral Vertical Contracting: Nondiscrimination, Exclusivity, and Uniformity: Comment.” With Greg Shaffer. *American Economic Review* 94, no. 3 (2004): 796–801.
- “The Joint Determination of Leverage and Maturity.” With Michael J. Barclay and Clifford W. Smith, Jr. *Journal of Corporate Finance* 9, no. 2 (2003): 149–67.
  - Winner of Outstanding Paper in Corporate Finance at the 1997 Southern Finance Association Meetings.
- “Adverse Specialization.” With Glenn M. MacDonald. *Journal of Political Economy* 109, no. 4 (2001): 864–99.
- “Insurer Ownership Structure and Executive Compensation as Complements.” With David Mayers and Clifford W. Smith, Jr. *Journal of Risk and Insurance* 68, no. 3 (2001): 449–63.
  - Winner of Outstanding Paper in Financial Services at the 1998 Southern Finance Association Meetings.
- “Dynamic Voluntary Contribution to a Public Project.” With Steven A. Matthews. *Review of Economic Studies* 67, no. 2 (2000): 327–58.
- “Adaptive Learning and Iterated Weak Dominance.” *Games and Economic Behavior* 26, no. 2 (1999): 253–78.
- “Odd-Eighth Avoidance as a Defense against SOES Bandits.” With Eugene Kandel. *Journal of Financial Economics* 51, no.1 (1999): 85–102.
- “Payments for Order Flow on NASDAQ.” With Eugene Kandel. *Journal of Finance* 54, no. 1 (1999): 35–66.
- “Predatory Accommodation: Below-Cost Pricing without Exclusion in Intermediate Goods Markets.” With Greg Shaffer. *RAND Journal of Economics* 30, no. 1 (1999): 22–43.
- “Process Variation as a Determinant of Bank Performance: Evidence from the Retail Banking Study.” With Frances Frei, Ravi Kalakota, and Andrew Leone. *Management Science* 45, no. 9 (1999): 1210–20.
- “Efficient Venture Capital Financing Combining Debt and Equity.” *Review of Economic Design* 3, no. 4 (1998): 371–87.
  - Winner of the Koç University Prize for the Best Paper of the Year in *Review of Economic Design*.
- “The Effects of Transaction Costs on Stock Prices and Trading Volume.” With Michael J. Barclay and Eugene Kandel. *Journal of Financial Intermediation* 7, no. 2 (1998): 130–50.

- “Cost Effective Use of Muscle Relaxants: A Decision Analysis.” With Jeffrey S. Rubenstein, Wendy Colin, Darryl Jackson, Craig Lockwood, and Janice Molloy. *Pediatrics* 100, no. 3 (1997): 451–52.
- “NASDAQ Market Structure and Spread Patterns.” With Eugene Kandel. *Journal of Financial Economics* 45, no. 1 (1997): 35–60.
- “Order Independence for Iterated Weak Dominance.” With Jeroen M. Swinkels. *Games and Economic Behavior* 18, no. 2 (1997): 219–45. Corrigendum, *Games and Economic Behavior* 31 (2000): 324–29.

#### **A.8.b. Research papers published in books and conference volumes**

- “What Next? Cartel Strategy after Getting Caught.” With Robert C. Marshall and Claudio Mezzetti. In *Competition Law and Economics: Developments, Policies, and Enforcement Trends in the US and Korea*, eds. Jay Pil Choi, Wonhuyk Lim, and Sang-Hyop Lee, 125–144. Edward Elgar Publishing, 2020.
- “A Tussle over Royalties: *Pandora v. ASCAP*, *Pandora v. BMI*, and the DOJ’s Consent Decree Review.” With Keith Waehrer. In *The Antitrust Revolution*, 7th ed., eds. John Kwoka and Lawrence White. Oxford University Press, 2018.
- “Leniency, Profiling and Reverse Profiling: Strategic Challenges for Competition Authorities.” With Claudio Mezzetti. In *Anti-Cartel Enforcement in a Contemporary Age: The Leniency Religion*, eds. C. Beaton-Wells and C. Tran. Hart Publishing, 2015.
- “Tacit Collusion in Oligopoly.” With Edward J. Green and Robert C. Marshall. In *Oxford Handbook of International Antitrust Economics*, vol. 2, eds. Roger D. Blair and D. Daniel Sokol. Oxford University Press, 464–497 (2015).
- “Section 1 Compliance from an Economic Perspective.” With Robert C. Marshall. In *William E. Kovacic: An Antitrust Tribute Liber Amicorum*, vol. 2, eds. Nicolas Charbit and Elisa Ramundo, 293–302. Institute of Competition Law, 2014. Reprinted in *Concurrences* 1 (2016).
- “Economics and the Efficient Allocation of Spectrum Licenses.” With Simon Loertscher. In *Mechanisms and Games for Dynamic Spectrum Access*, eds. Tansu Alpcan, Holger Boche, Michael L. Honig, and H. Vincent Poor. Cambridge University Press, 2014.
- “The Economics of Auctions and Bidder Collusion.” With Robert C. Marshall and Michael J. Meurer. In *Game Theory and Business Applications*, 2nd ed., eds. Kalyan Chatterjee and William F. Samuelson. Kluwer Academic Publishers, 2014.
- “Coordinated Effects in Merger Review: Quantifying the Payoffs from Collusion.” With William E. Kovacic, Robert C. Marshall, and Steven P. Schulenberg. In *Annual Proceedings of the*

*Fordham Competition Law Institute: International Antitrust Law & Policy*, ed. Barry E. Hawk, 271–85. Juris Publishing, Inc., 2007.

- “Lessons for Competition Policy from the Vitamins Cartel.” With William E. Kovacic, Robert C. Marshall, and Matthew E. Raiff. In *The Political Economy of Antitrust*, vol. 282, eds. Vivek Ghosal and Johan Stennek, 149–76. Elsevier, 2007.
- “Bidding Rings and the Design of Anti-Collusion Measures for Auctions and Procurements.” With William E. Kovacic, Robert C. Marshall, and Matthew E. Raiff. In *Handbook of Procurement*, eds. Nicola Dimitri, Gustavo Piga, and Giancarlo Spagnolo, 381–411. Cambridge University Press, 2006.

### A.8.c. Books

- *The Economics of Collusion: Cartels and Bidding Rings*. With Robert C. Marshall. MIT Press, 2012.

## A.9. Honors and awards

- Outstanding paper awards as listed above
- Economic Theory Fellow, Society for the Advancement of Economic Theory, 2021
- Top Women in Antitrust, *Global Competition Review*, 2013, 2021
- Excellence in Teaching Award, Global Executive MBA Class of 2019
- Fellow of the Game Theory Society, 2019
- *Who’s Who Legal* of Competition Economists, 2017–present
- Outstanding Antitrust Litigation Achievement in Economics, American Antitrust Institute, October 2016
- FCC Woman Leader, Minority Media and Telecommunications Council, April 2013
- Business School Professor of the Week, *Financial Times*, July 2012
- Alfred P. Sloan Doctoral Dissertation Fellowship, 1993–1994
- Teaching Honor Roll, Simon School of Business, University of Rochester, 1999, 2001
- National Science Foundation Graduate Fellowship, 1989–1992
- Mary Love Collins Memorial Scholarship, 1989–1990
- Julia Dale Memorial Award in Mathematics, 1989

- Marie James Postgraduate Scholarship, 1989
- Phi Eta Sigma Graduate Scholarship, 1989
- Duke University Valedictorian, 1989
- Alice M. Baldwin Scholarship 1988–1989
- Duke University Faculty Scholar Award, 1988–1989
- Phi Chi Theta Foundation Scholarship, 1988–1989
- Phi Eta Sigma Senior Award, 1988–1989
- Golden Key National Honor Society Scholarship, 1987–1988
- National Merit Scholarship, 1985
- Phi Beta Kappa Scholarship, 1985

## A.10. Professional activities

- Co-editor, *American Economic Journal: Microeconomics*, 2019–present
- Research Fellow, Mannheim Centre for Competition and Innovation (MaCCI), 2022–present
- Chair of the Program Committee, Asia-Pacific IO Conference, 2022
- Scientific Committee, 2021 EARIE Conference
- Selection Committee for YEEA awards, 2021 EARIE Conference
- Asia-Pacific IO Society, Scientific Board, 2021–present
- Scientific Committee, CEPR Virtual IO Seminar Series, 2021
- Program Committee, Asia-Pacific IO Conference, 2021
- Executive Committee, European Association for Research in Industrial Economics, 2020–present
- Guest Editor, EARIE 2020 Special Issue of International Journal of Industrial Organization
- Chair of the Scientific Committee, European Association for Research in Industrial Economics, 47th Annual Conference, 2020
- Scientific Committee, CRESSE, 2019–present
- CRESSE Associate (Academics – Economists), 2018–2019
- Scientific Advisory Board, *International Journal of Industrial Organization*, 2018–present
- Co-Editor, *American Economic Journal: Microeconomics*, 2019–present

- Editorial Board, *American Economic Journal: Microeconomics*, 2007–2019
- Academic Affiliate, Center for the Study of Auctions, Procurements and Competition Policy at Penn State University, 2007–present
- Editorial Board, *International Journal of Game Theory*, 2009–2021
- Council Member, Game Theory Society, 2013–2019
- Academic Steering Committee, Concurrences Journal Antitrust Writing Awards, 2015–2016
- Editorial Board, *Journal of Economic Literature*, 2010–2013
- Advisory Editor, *Games and Economic Behavior*, 2010–2012
- Associate Editor, *International Economic Review*, 2002–2005
- Referee: *American Economic Review*, *Econometrica*, *Games and Economic Behavior*, *International Journal of Industrial Organization*, *Journal of Economic Theory*, *RAND Journal of Economics*, *Review of Economic Studies*, *Review of Industrial Organization*

## A.11. Selected speaking engagements

- “Incomplete Information Models in Industrial Organization,” Invited semi-plenary speaker, 6th World Congress of the Game Theory Society, July 22, 2021.
- “Incomplete Information Models in Industrial Organization,” Invited semi-plenary speaker, Econometric Society and Bocconi University Virtual World Congress, August 21, 2020.
- “Vertical Mergers: Enforcement Developments and Guidelines.” Panelist, Online CRESSE Special Policy Sessions, July 1, 2020.
- “Competition Policy and Procurement,” Invited keynote speaker, 4th Asia-Pacific IO Conference, Tokyo, December 13, 2019.
- “Digital Monopolies: Privacy Protection or Price Regulation?” Invited keynote speaker, Japan Fair Trade Commission, 18th CPRC International Symposium, Tokyo, December 12, 2019.
- “Merger Review for Markets with Buyer Power and Coordinated Effects,” Invited speaker, US Department of Justice, Washington, DC, March 26, 2019.
- “Budget-Constrained Procurement.” Invited speaker, 13th CRESS Conference, Advances in the Analysis of Competition Policy and Regulation. Crete, Greece, June 29, 2018.
- “Fundamentals: Economics.” Invited panelist, 2017 ABA Antitrust Law Spring Meeting Panel. Washington, DC, March 29, 2017.

- “A Mechanism Design Approach to Merger Review.” Invited keynote speaker, 9th annual Federal Trade Commission Microeconomics Conference. Washington, DC, November 4, 2016.
- “A Mechanism Design Approach to Merger Review.” Invited speaker, First Annual Asia-Pacific Industrial Organization Conference (APIOC). Melbourne, Australia, December 12, 2016.
- Invited speaker, ABA Section of Antitrust Law Masters Course. Williamsburg, VA, September 28, 2016.
- “Collaboration, Conversations and Cartels.” Invited speaker, Georgetown Law 9th Annual Global Antitrust Enforcement Symposium. Washington, DC, September 29, 2015.
- “Reverse Auction.” Invited panelist, Digital Policy Institute Webinar on the FCC Incentive Auction. Muncie, IN, May 6, 2014.
- “Coordinated Effects.” Invited speaker, 5th Lear Conference on the Economics of Competition Law. Rome, June 27, 2013.
- “Cartels.” Invited presenter, George Mason University Judicial Education Program. Arlington, VA, October 7, 2013.



## Appendix B. Additional benchmark tables

**Figure 48: WBWS musical works rates under the PDD benchmark (no ratio adjustment)**

Service type	Service	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)
Standalone Portable	Amazon Music Unlimited	██████████	██████████
	<a href="#">Apple</a>	██████████	██████████
	Google - YouTube Music Premium	██████████	██████████
	<a href="#">Google Play Music</a>	██████████	██████████
	Pandora Premium	██████████	██████████
	Spotify Premium	██████████	██████████
	<a href="#">All other services</a>	██████████	██████████
Free Non-Subscription/Ad-Supported	Amazon Music Free	██████████	██████████
	Google - YouTube Music Free	██████████	██████████
	Spotify Free	██████████	██████████
	<a href="#">All other services</a>	██████████	██████████
Bundled Subscription	Amazon Music Unlimited	██████████	██████████
	<a href="#">Apple</a>	██████████	██████████
	Spotify Premium	██████████	██████████
	<a href="#">All other services</a>	██████████	██████████
Limited Offering	Pandora Plus	██████████	██████████
	Pandora Premium Access	██████████	██████████
	<a href="#">All other services</a>	██████████	██████████
Standalone Non-Portable Streaming	Amazon Music Unlimited	██████████	██████████
	Spotify	██████████	██████████
	<a href="#">All other services</a>	██████████	██████████
<a href="#">Paid Locker Service</a>	<a href="#">Apple</a>	██████████	██████████
<b>Combined</b>	<b>Combined</b>	<b>6.0%</b>	<b>6.5%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

**Figure 49: WBWS musical works rates under the PDD benchmark (Label MP - Major-Indie ratio adjustment)**

Service type	Service	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)
Standalone Portable	Amazon Music Unlimited		
	<a href="#">Apple</a>		
	Google - YouTube Music Premium		
	<a href="#">Google Play Music</a>		
	Pandora Premium		
	Spotify Premium		
	<a href="#">All other services</a>		
Free Non-Subscription/Ad-Supported	Amazon Music Free		
	Google - YouTube Music Free		
	Spotify Free		
	<a href="#">All other services</a>		
Bundled Subscription	Amazon Music Unlimited		
	<a href="#">Apple</a>		
	Spotify Premium		
	<a href="#">All other services</a>		
Limited Offering	Pandora Plus		
	Pandora Premium Access		
	<a href="#">All other services</a>		
Standalone Non-Portable Streaming	Amazon Music Unlimited		
	Spotify		
	<a href="#">All other services</a>		
<a href="#">Paid Locker Service</a>	<a href="#">Apple</a>		
<b>Combined</b>	<b>Combined</b>	<b>7.6%</b>	<b>8.42%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my [backup materials](#).

**Figure 50: WBWS musical works rates under the PDD benchmark (Label MP - Web V ratio adjustment)**

Service type	Service	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)
Standalone Portable	Amazon Music Unlimited	██████████	██████████
	<a href="#">Apple</a>	██████████	██████████
	Google - YouTube Music Premium	██████████	██████████
	<a href="#">Google Play Music</a>	██████████	██████████
	Pandora Premium	██████████	██████████
	Spotify Premium	██████████	██████████
	<a href="#">All other services</a>	██████████	██████████
Free Non-Subscription/Ad-Supported	Amazon Music Free	██████████	██████████
	Google - YouTube Music Free	██████████	██████████
	Spotify Free	██████████	██████████
	<a href="#">All other services</a>	██████████	██████████
Bundled Subscription	Amazon Music Unlimited	██████████	██████████
	<a href="#">Apple</a>	██████████	██████████
	Spotify Premium	██████████	██████████
	<a href="#">All other services</a>	██████████	██████████
Limited Offering	Pandora Plus	██████████	██████████
	Pandora Premium Access	██████████	██████████
	<a href="#">All other services</a>	██████████	██████████
Standalone Non-Portable Streaming	Amazon Music Unlimited	██████████	██████████
	Spotify	██████████	██████████
	<a href="#">All other services</a>	██████████	██████████
<a href="#">Paid Locker Service</a>	<a href="#">Apple</a>	██████████	██████████
<b>Combined</b>	<b>Combined</b>	<b>6.9%</b>	<b>7.34%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my [backup materials](#).

Figure 51: WBWS musical works rates under the Prime Music benchmark (all adjustments)

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)	WBWS musical works rate (Publisher MP, Label MP - Web V)	WBWS musical works rate (Publisher MP, Label MP - Major-Indie)
Standalone Portable	Amazon Music Unlimited	████████	████████	████████	████████	████████
	<del>Google - YouTube Music Premium</del> Apple	████████	████████	████████	████████	████████
	Google <del>Play - YouTube</del> Music Premium	████████	████████	████████	████████	████████
	Pandora Premium	████████	████████	████████	████████	████████
	Spotify Premium	████████	████████	████████	████████	████████
	All other services	████████	████████	████████	████████	████████
Free Non-Subscription/Ad-Supported	Amazon Music Free	████████	████████	████████	████████	████████
	Google - YouTube Music Free	████████	████████	████████	████████	████████
	Spotify Free	████████	████████	████████	████████	████████
	All other services	████████	████████	████████	████████	████████
Bundled Subscription	Amazon Music Unlimited	████████	████████	████████	████████	████████
	Apple	████████	████████	████████	████████	████████
	Spotify Premium	████████	████████	████████	████████	████████
	All other services	████████	████████	████████	████████	████████
Limited Offering	Pandora Plus	████████	████████	████████	████████	████████
	Pandora Premium Access	████████	████████	████████	████████	████████
	All other services	████████	████████	████████	████████	████████
Standalone Non-Portable Streaming	Amazon Music Unlimited	████████	████████	████████	████████	████████
	Spotify	████████	████████	████████	████████	████████
	All other services	████████	████████	████████	████████	████████
Paid Locker Service	Apple	████████	████████	████████	████████	████████
Combined	Combined	12.69%	10.87%	11.56%	10.67%	10.9%

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

## Appendix C. Benchmark results assuming no reduced label market power against Spotify

Figure 52: WBWS musical works rates under the non-interactive streaming benchmark (no market power reduction for Spotify)

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)
Standalone Portable	Amazon Music Unlimited			
	<del>Google - YouTube Music Premium</del> <del>Apple</del>			
	Google <del>Play - Youtube</del> Music Premium			
	Pandora Premium			
	Spotify Premium			
	All other services			
Free Non-Subscription/Ad-Supported	Amazon Music Free			
	Google - YouTube Music Free			
	Spotify Free			
	All other services			
Bundled Subscription	Amazon Music Unlimited			
	<del>Apple</del>			
	Spotify Premium			
	All other services			
Limited Offering	Pandora Plus			
	Pandora Premium Access			
	All other services			
Standalone Non-Portable Streaming	Amazon Music Unlimited			
	Spotify			
	All other services			
<del>Paid Locker Service</del>	<del>Apple</del>			
Combined	Combined	12.92%	9.57%	10.57%

Note: Figures containing the complete set of services making up the "All other services" rows in this figure are available in my backup materials.

**Figure 53: WBWS musical works rates under the PDD benchmark (no market power reduction for Spotify)**

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (higher MP adjustment)	WBWS musical works rate (lower MP adjustment)
Standalone Portable	Amazon Music Unlimited	██████████	██████████	██████████
	<del>Google - YouTube Music Premium</del> Apple	██████████	██████████	██████████
	Google <del>Play- Youtube</del> Music Premium	██████████	██████████	██████████
	Pandora Premium	██████████	██████████	██████████
	Spotify Premium	██████████	██████████	██████████
	All other services	██████████	██████████	██████████
Free Non-Subscription/Ad-Supported	Amazon Music Free	██████████	██████████	██████████
	Google - YouTube Music Free	██████████	██████████	██████████
	Spotify Free	██████████	██████████	██████████
	All other services	██████████	██████████	██████████
Bundled Subscription	Amazon Music Unlimited	██████████	██████████	██████████
	Apple	██████████	██████████	██████████
	Spotify Premium	██████████	██████████	██████████
	All other services	██████████	██████████	██████████
Limited Offering	Pandora Plus	██████████	██████████	██████████
	Pandora Premium Access	██████████	██████████	██████████
	All other services	██████████	██████████	██████████
Standalone Non-Portable Streaming	Amazon Music Unlimited	██████████	██████████	██████████
	Spotify	██████████	██████████	██████████
	All other services	██████████	██████████	██████████
<del>Paid Locker Service</del>	<del>Apple</del>	██████████	██████████	██████████
<b>Combined</b>	<b>Combined</b>	<b>7.43%</b>	<b>5.78%</b>	<b>7.8.0%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

**Figure 54: WBWS musical works rates under the Prime Music benchmark (no market power reduction for Spotify)**

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (Label MP - Major-Indie)	WBWS musical works rate (Label MP - Web V)	WBWS musical works rate (Publisher MP)
Standalone Portable	Amazon Music Unlimited	██████████	██████████	██████████	██████████
	<del>Google - YouTube Music Premium</del> <del>Apple</del>	██████████	██████████	██████████	██████████
	Google <del>Play - YouTube Music Premium</del>	██████████	██████████	██████████	██████████
	Pandora Premium	██████████	██████████	██████████	██████████
	Spotify Premium	██████████	██████████	██████████	██████████
	<del>All other services</del>	██████████	██████████	██████████	██████████
Free Non-Subscription/Ad-Supported	Amazon Music Free	██████████	██████████	██████████	██████████
	Google - YouTube Music Free	██████████	██████████	██████████	██████████
	Spotify Free	██████████	██████████	██████████	██████████
	<del>All other services</del>	██████████	██████████	██████████	██████████
Bundled Subscription	Amazon Music Unlimited	██████████	██████████	██████████	██████████
	<del>Apple</del>	██████████	██████████	██████████	██████████
	Spotify Premium	██████████	██████████	██████████	██████████
	<del>All other services</del>	██████████	██████████	██████████	██████████
Limited Offering	Pandora Plus	██████████	██████████	██████████	██████████
	Pandora Premium Access	██████████	██████████	██████████	██████████
	<del>All other services</del>	██████████	██████████	██████████	██████████
Standalone Non-Portable Streaming	Amazon Music Unlimited	██████████	██████████	██████████	██████████
	Spotify	██████████	██████████	██████████	██████████
	<del>All other services</del>	██████████	██████████	██████████	██████████
<del>Paid Locker Service</del>	<del>Apple</del>	██████████	██████████	██████████	██████████
<b>Combined</b>	<b>Combined</b>	<b>12.69%</b>	<b>10.43%</b>	<b>11.43%</b>	<b>10.34%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.



## Appendix D. Benchmark results using Dr. Eisenach’s processed MLC data, excluding Dr. Eisenach’s adjustments to the data

**Figure 55: Musical works headline rates and backstops for all-in musical works royalties based on preferred benchmark (alternative Figure 1)**

Service type	Musical works rate	Backstop
<u>Standalone portable</u>	<u>10.83%</u>	<u>\$0.80 per subscriber</u>
<u>Free non-subscription/ad-supported</u>	<u>10.83%</u>	<u>19.0% TCC</u>
<u>Bundled subscription</u>	<u>10.83%</u>	<u>Backstop that would apply to the music component of the bundle if it were offered on a standalone basis</u>
<u>Standalone Non-Portable Streaming</u>	<u>10.83%</u>	<u>\$0.40 per subscriber</u>
<u>Amazon Music Prime</u>	<u>\$0.00085 per play</u>	<u>N/A</u>

**Figure 56: Service revenue and weights for each service (June 2020–May 2021) (alternative Figure 37)**





















































































Service type	Service	Service revenue	Service weight
<u>Standalone Portable</u>			
<u>Free Non-Subscription/Ad-Supported</u>			
<u>Bundled Subscription</u>			
<u>Limited Offering</u>			
<u>Standalone Non-Portable Streaming</u>			
<u>Paid Locker Service</u>			

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

**Figure 57: Summary of musical works percent of revenue rates from the benchmark analyses (alternative Figure 38)**

<u>Benchmark</u>	<u>Musical works percentage of revenue rates</u>
<u>Non-interactive streaming benchmark</u>	<u>10.4% – 11.3%</u>
<u>PDD benchmark</u>	<u>6.2% – 8.4%</u>
<u>Prime Music Benchmark</u>	<u>11.0% – 11.9%</u>
<b><u>Overall</u></b>	<b><u>6.2% – 11.9%</u></b>

**Figure 58: WBWS musical works rates under the non-interactive streaming benchmark (alternative Figure 39)**

<u>Service type</u>	<u>Service</u>	<u>Unadjusted musical works benchmark rate</u>	<u>WBWS musical works rate (higher MP adjustment)</u>	<u>WBWS musical works rate (lower MP adjustment)</u>
<u>Standalone Portable</u>				
				
				
				
				
				
<u>Free Non-Subscription/Ad-Supported</u>				
				
				
				
<u>Bundled Subscription</u>				
				
				
				
<u>Limited Offering</u>				
				
				
<u>Standalone Non-Portable Streaming</u>				
				
				
<u>Paid Locker Service</u>				
<b><u>Combined</u></b>	<b><u>Combined</u></b>	<b><u>12.5%</u></b>	<b><u>10.4%</u></b>	<b><u>11.3%</u></b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

**Figure 59: WBWS musical works rates under the PDD benchmark (alternative Figure 40)**

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (higher MP adjustment)	WBWS musical works rate (lower MP adjustment)
<u>Standalone Portable</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<u>Free Non-Subscription/Ad-Supported</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<u>Bundled Subscription</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<u>Limited Offering</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<u>Standalone Non-Portable Streaming</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<u>Paid Locker Service</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<b><u>Combined</u></b>	<b><u>Combined</u></b>	<b><u>7.5%</u></b>	<b><u>6.2%</u></b>	<b><u>8.4%</u></b>

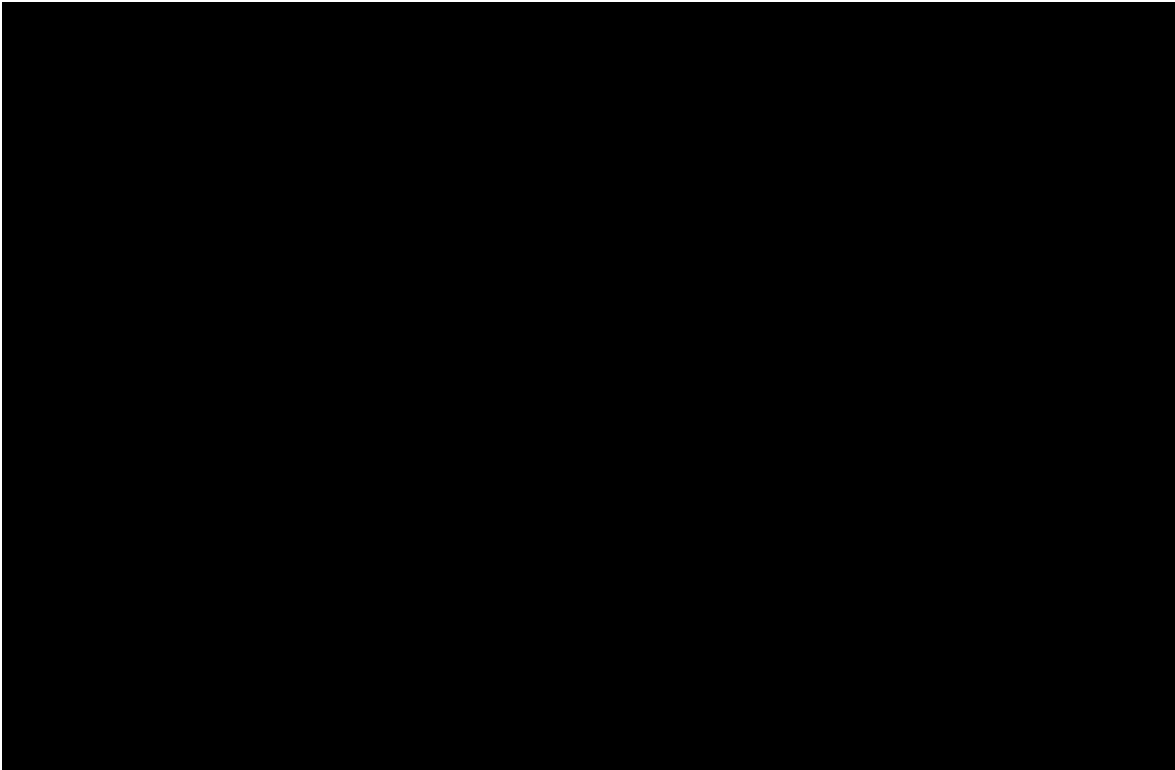
Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

**Figure 60: WBWS musical works rates under the Prime Music benchmark (alternative Figure 41)**

Service type	Service	Unadjusted musical works benchmark rate	WBWS musical works rate (higher MP adjustment)	WBWS musical works rate (lower MP adjustment)
<u>Standalone Portable</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<u>Free Non-Subscription/Ad-Supported</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<u>Bundled Subscription</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<u>Limited Offering</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<u>Standalone Non-Portable Streaming</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<u>Paid Locker Service</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<b>Combined</b>	<b>Combined</b>	<b>13.2%</b>	<b>11.0%</b>	<b>11.9%</b>

Note: Figures containing the complete set of services making up the “All other services” rows in this figure are available in my backup materials.

**Figure 61: WBWS musical works per-subscriber equivalents from benchmark analyses for standalone portable subscriptions (alternative Figure 42)**



Note: Figures containing the complete set of services making up the “All other services” columns in this figure are available in my backup materials.

## ~~Appendix D.~~Appendix E. Materials relied upon

~~(268)~~(269) I incorporate by reference all materials cited in my expert report. Additional materials are listed below.

### ~~D.1.E.1.~~D.1.E.1. Amazon-produced data

#### ~~D.1.a.E.1.a.~~D.1.a.E.1.a. Amazon royalty rate data

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

#### ~~D.1.b.E.1.b.~~D.1.b.E.1.b. Other Amazon-produced data

■ [REDACTED]

■ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

## **D.2.E.2. Other services' data**

### **D.2.a.E.2.a. ~~Google~~Dr. Eisenach's processed MLC royalty ~~rate~~ data**

[REDACTED]

[REDACTED]

[REDACTED]

### **D.2.b. ~~Pandora~~ royalty rate data**

[REDACTED]

[REDACTED]

[REDACTED]

### **D.2.c. ~~Spotify~~ royalty rate data**

[REDACTED]

## **D.3.E.3. Public data**

### **D.3.a.E.3.a. Articles**

- Tim Ingham, “How much money is the US music publishing industry making? A billion dollars more than it was 4 years ago,” *Music Business Worldwide*, June 16, 2019, <https://www.musicbusinessworldwide.com/how-much-money-is-the-us-music-publishing-industry-making-a-billion-dollars-more-than-it-was-four-years-ago/>.
- Tim Ingham, “US Publishers Pulled in \$3.7bn During 2019 – Just Over Half What Record Labels Made,” *Music Business Worldwide*, June 11, 2020, <https://www.musicbusinessworldwide.com/us-publishers-pulled-in-3-7bn-during-2019-just-over-half-what-record-labels-made/>.
- Ed Christman, “Music Publishing Revenue Topped \$4B in 2020, Says NMPA,” *Billboard*, June 9, 2021, <https://www.billboard.com/articles/business/publishing/9585238/music-publishing-revenue-2020-nmpa/>.
- Ed Christman, “Publishers Quarterly: Sony ‘Levitating’ Atop Rankings, Silk Sonic Makes Smooth Entry,” *Billboard*, August 11, 2021, <https://assets.billboard.com/articles/business/publishing/9613100/publishers-quarterly-sony-silk-sonic-q2-2021>.

### **D.3.b.E.3.b. RIAA data**

- Joshua P. Friedlander, “News and Notes on 2014 RIAA Shipment and Revenue Statistics,” Recording Industry Association of America, 2015, [https://www.riaa.com/wp-content/uploads/2015/09/2013-2014\\_RIAA\\_YearEndShipmentData.pdf](https://www.riaa.com/wp-content/uploads/2015/09/2013-2014_RIAA_YearEndShipmentData.pdf).
- Joshua P. Friedlander, “Year-End 2020 RIAA Revenue Statistics,” Recording Industry Association of America, 2021, <https://www.riaa.com/wp-content/uploads/2021/02/2020-Year-End-Music-Industry-Revenue-Report.pdf>.
- Joshua P. Friedlander, “News and Notes on 2015 RIAA Shipment and Revenue Statistics,” Recording Industry Association of America, 2016, <https://www.riaa.com/wp-content/uploads/2016/03/RIAA-2015-Year-End-shipments-memo.pdf>.
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- “US Sales Database,” RIAA, accessed October 2, 2021, <https://www.riaa.com/u-s-sales-database/>.

### **D.3.c.E.3.c. Statista data**

- “Projected Consumer Price Index in the United States from 2010 to 2026,” Statista, April 2020, <https://www.statista.com/statistics/244993/projected-consumer-price-index-in-the-united-states/>.



- “Euro (EUR) to U.S. dollar (USD) exchange rate from January 1999 to September 29, 2021,” Statista, September 2021, <https://www.statista.com/statistics/412794/euro-to-u-s-dollar-annual-average-exchange-rate/>.
- “U.S. dollar (USD) to Japanese yen (JPY) exchange rate from January 2012 to September 29, 2021,” Statista, September 2021, <https://www.statista.com/statistics/960314/quarterly-exchange-rate-usd-to-jpy/>.
- “Revenue market share of the largest music publishers worldwide from 2007 to 2019,” Statista, May 2020, <https://www.statista.com/statistics/272520/market-share-of-the-largest-music-publishers-worldwide/>.
- “Market share of record companies in the United States from 2011 to 2019, by label ownership,” Statista, January 2020, <https://www.statista.com/statistics/317632/market-share-record-companies-label-ownership-usa/>.
- “Digital and physical revenue market share of the largest record companies worldwide from 2012 to 2020,” Statista, April 2021, <https://www.statista.com/statistics/422926/record-companies-market-share-worldwide-physical-digital-revenues/>.

### **D.3.d.E.3.d. Financial statements**

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- Sony Corporation, Annual Report (Form 20-F) (March 31, 2017).
- Sony Corporation, Annual Report (Form 20-F) (March 31, 2018).
- Sony Corporation, Annual Report (Form 20-F) (March 31, 2020).
- Vivendi Financial Report and Audited Consolidated Financial Statements (February 27, 2015).
- Vivendi Financial Report and Audited Consolidated Financial Statements (February 19, 2016).
- Vivendi Financial Report and Audited Consolidated Financial Statements (February 15, 2018).
- Vivendi Financial Report and Audited Consolidated Financial Statements (February 13, 2020).
- Warner Music Group, Annual Report (Form 10-K) (September 30, 2016).
- Warner Music Group, Annual Report (Form 10-K) (September 30, 2017).
- Warner Music Group, Annual Report (Form 10-K) (September 30, 2020).

# Exhibit D

# Exhibit D.2

Before the  
UNITED STATES COPYRIGHT ROYALTY BOARD  
Washington, D.C.

<b>In the Matter of:</b>	)	
	)	
<b>DETERMINATION OF RATES AND TERMS FOR MAKING AND DISTRIBUTING PHONORECORDS (Phonorecords IV)</b>	)	<b>Docket No. 21-CRB-0001-PR (2023-2027)</b>
	)	
	)	
	)	

**AMENDED WRITTEN DIRECT TESTIMONY OF KAJAL GAYADIEN**

1. My name is Kajal Gayadien and I am the Global Head of Record Label Licensing for the digital-music business of Amazon.com Services LLC (“Amazon” or “Amazon Music”). I submit this testimony in connection with Amazon’s Written Direct Statement in the above-captioned proceeding.

2. I lead Amazon’s seven-member Label Licensing Team, which works with representatives of record labels, including the three Major record labels – Sony Music Entertainment (“SME”), Warner Music Inc. (“WMG”), and Universal Music LLC (“UMG”) – and hundreds of Independent record labels, to secure the sound-recording agreements necessary to operate all of Amazon Music’s digital-music services. By virtue of my role, I have deep familiarity with Amazon’s sound-recording agreements and Amazon’s strategy for negotiating those agreements.

3. Over the course of my career, I have negotiated or overseen the negotiation of hundreds of agreements regarding sound-recording and musical-works rights and represented both music-streaming services and rightsholders. During the nearly four years I spent at Buma Stemra, a Dutch collecting society for composers and music publishers, I represented

rightsholders in negotiations with music-streaming services, including Spotify, Google, and Amazon.

4. My testimony describes Amazon's agreements with record labels for each of Amazon's three digital-music services – Amazon Music Unlimited ("Unlimited"), Amazon Prime Music ("Prime Music"), and Amazon Music Free ("Free"). In Part I.A, I explain that Amazon's agreements with record labels [REDACTED]

[REDACTED]

[REDACTED]. The record labels [REDACTED]

[REDACTED]

[REDACTED] In Part I.B, I explain Amazon's agreements [REDACTED]

[REDACTED] that reflects the unique nature of that service, which is a limited-catalog service offered exclusively as part of the Prime membership. [REDACTED]

[REDACTED]

[REDACTED] In Part

I.C, I explain that Amazon's agreements with record labels [REDACTED]

[REDACTED]

[REDACTED]

5. My testimony is based on my personal knowledge, on information made available to me in the course of performing my duties at Amazon, on my work experience in the music industry, and on my review of the documents attached as exhibits to this written testimony. To the extent that the facts and matters set out below are within my knowledge, they are true. To the extent I have relied upon the information provided by others, it is true to the best of my knowledge, information, and belief.

## I. AMAZON’S RECORD LABEL DEALS

6. Amazon has sound-recording agreements with the Major record labels and hundreds of Independent record labels. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

7. [REDACTED]

[REDACTED]

[REDACTED]

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<sup>1</sup> Ex. 205, AMZN Phono IV 00015532.001, [REDACTED]

[REDACTED]

<sup>2</sup> Ex. 163, AMZN Phono IV 00003132, [REDACTED] Ex. 206, AMZN Phono IV 00015566, [REDACTED]

[REDACTED]

<sup>3</sup> Ex. 164, AMZN Phono IV 00047806, [REDACTED]

[REDACTED] Ex. 165, AMZN Phono IV 00015280, [REDACTED]

[REDACTED] Ex. 166, AMZN Phono IV 00015062, [REDACTED]

[REDACTED] Ex. 167, AMZN Phono IV 00015027, [REDACTED]

[REDACTED] Ex. 168, AMZN Phono IV 00015007, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

8. Amazon's record-label deals grant Amazon all of the sound-recording rights necessary to stream the labels' recordings on Unlimited, Prime Music, and Free.<sup>7</sup> Each label identifies all recordings covered by the deals, delivers copies of those recordings to Amazon,<sup>8</sup>

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<sup>4</sup> Ex. 169, AMZN Phono IV\_00000585, [REDACTED]  
[REDACTED] Ex. 170, AMZN Phono IV\_00000678 (from -730), [REDACTED]

<sup>5</sup> Ex. 171, AMZN Phono IV\_00015113, [REDACTED]

<sup>6</sup> Ex. 172, AMZN Phono IV\_00000557, [REDACTED]  
[REDACTED] Ex. 173, AMZN Phono  
IV\_00015113, [REDACTED]

<sup>7</sup> E.g., Ex. 164, AMZN Phono IV\_00047806, [REDACTED]  
[REDACTED] Ex. 174, AMZN00004915, [REDACTED]  
[REDACTED] Ex. 166, AMZN Phono IV\_00015062, [REDACTED]  
[REDACTED] Ex. 205, AMZN Phono  
IV\_00015532.001, [REDACTED] Ex. 169,  
AMZN Phono IV\_00000585, [REDACTED]

<sup>8</sup> E.g., Ex. 164, AMZN Phono IV\_00047806, [REDACTED]  
[REDACTED] Ex. 174, AMZN00004915, [REDACTED]  
[REDACTED] Ex. 166, AMZN Phono IV\_00015062, [REDACTED]

and assumes responsibility for making any necessary payments to “artists, producers, directors, mixers, engineers, photographers and any and all other persons” that might have rights associated with the recording, except for holders of musical-works rights.<sup>9</sup> In my experience, record labels are unwilling to take responsibility for obtaining musical-works rights, and require Amazon to separately obtain those rights, even when those rights are held (in whole or in part) by a record label’s affiliated publisher.<sup>10</sup>

Ex. 169, AMZN Phono IV 00000585,

*E.g.*, Ex. 164,

AMZN\_Phono IV\_00047806,

Ex. 174, AMZN00004915,

Ex. 175, AMZN00004685,

Ex. 205, AMZN\_Phono IV\_00015532.001,

Ex. 169, AMZN Phono

IV 00000585,

<sup>9</sup> *E.g.*, Ex. 164, AMZN Phono IV\_00047806,

Ex. 174, AMZN00004915,

Ex. 166, AMZN\_Phono IV\_00015062,

Ex. 169, AMZN Phono IV\_00000585,

<sup>10</sup> *E.g.*, Ex. 164, AMZN Phono IV 00047806,

Ex. 174, AMZN00004915,

Ex. 170,

AMZN Phono IV 00000678 (from -730),

Written Direct Testimony of James Duffett-Smith ¶ 234.



**A. Unlimited**

9. Customers that subscribe to a premium music service expect “on demand” access to a comprehensive music library that includes popular, niche, and even obscure songs from the Major record labels and a wide range of Independent record labels. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Each Major accounts for more than [REDACTED] % of plays on Unlimited and, collectively, the Majors account for over [REDACTED] % plays.<sup>11</sup>

10. [REDACTED] the structure of Amazon’s deals with record labels, and the rates we pay, have remained stubbornly skewed in favor of the record labels and are nearly identical for big and small record labels. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

11. Amazon’s deals with record labels for Unlimited [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

---

<sup>11</sup> Ex. 176, AMZN Phono IV\_00015256, [REDACTED]

[REDACTED]

12. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

<sup>12</sup> Ex. 164, AMZN Phono IV 00047806, [REDACTED] Ex. 168,  
 AMZN Phono IV 00015007, [REDACTED] Ex.  
 166, AMZN Phono IV 00015062, [REDACTED]  
 [REDACTED] Ex. 172, AMZN Phono IV 00000557, [REDACTED]  
 [REDACTED] Ex. 163,  
 AMZN Phono IV 00003132, [REDACTED]  
 [REDACTED] Ex. 206, AMZN Phono IV 00015566, [REDACTED]  
 [REDACTED] Ex. 205, AMZN Phono IV 00015532.001, [REDACTED]  
 [REDACTED] Ex. 170, AMZN Phono IV 00000678  
 (from -730), [REDACTED]  
 [REDACTED]

<sup>13</sup> Ex. 164, AMZN Phono IV 00047806, [REDACTED]  
 [REDACTED] Ex. 163, AMZN Phono IV 00003132, [REDACTED]  
 [REDACTED]

<sup>14</sup> Ex. 166, AMZN Phono IV 00015062, [REDACTED]  
 [REDACTED] Ex. 205, AMZN Phono IV 00015532.001, [REDACTED]  
 [REDACTED]

13. [REDACTED]

Amazon has typically paid [REDACTED] of revenues from Unlimited in sound-recording royalties. For example, during each month of 2020, Amazon paid [REDACTED] of revenues in sound-recording royalties.<sup>16</sup>

14. [REDACTED]

<sup>15</sup> Ex. 168, AMZN\_Phono IV\_00015007, [REDACTED]  
Ex. 174, AMZN00004915, [REDACTED]

Ex. 206, AMZN\_Phono IV\_00015566, [REDACTED]

<sup>16</sup> Ex. 177, AMZN\_Phono IV\_00015251, [REDACTED]

<sup>17</sup> Ex. 164, AMZN\_Phono IV\_00047806, [REDACTED]

Ex. 168, AMZN\_Phono IV\_00015007,  
Ex. 174,  
AMZN00004915, [REDACTED] Ex. 166,  
AMZN\_Phono IV\_00015062,  
Ex. 206, AMZN\_Phono IV\_00015566,  
Ex.  
205, AMZN\_Phono IV\_00015532.001,  
Ex. 170, AMZN\_Phono IV\_00000678 (from -730), [REDACTED]

15. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**B. Prime Music**

16. Since 2019, [REDACTED] for Prime Music.<sup>19</sup> [REDACTED] the unique nature of Prime Music, which has no

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<sup>18</sup> Ex. 163, AMZN\_Phono IV\_00003132, [REDACTED]  
 [REDACTED] Ex. 206, AMZN\_Phono IV\_00015566, [REDACTED]  
 [REDACTED] Ex. 205, AMZN\_Phono IV\_00015532.001, [REDACTED] Ex.  
 170, AMZN\_Phono IV\_00000678 (from -730), [REDACTED]  
 [REDACTED]

<sup>19</sup> Ex. 165, AMZN\_Phono IV\_00015280, [REDACTED]  
 [REDACTED] Ex. 168, AMZN\_Phono IV\_00015007,  
 [REDACTED] Ex. 167, AMZN\_Phono IV\_00015027, [REDACTED]  
 [REDACTED] Ex. 172, AMZN\_Phono IV\_00000557, [REDACTED]  
 [REDACTED] Ex. 163, AMZN\_Phono IV\_00003132, [REDACTED]  
 [REDACTED] Ex. 206, AMZN\_Phono  
 IV\_00015566, [REDACTED] Ex. 205,  
 AMZN\_Phono IV\_00015532.001, [REDACTED]  
 [REDACTED]  
 Ex. 170, AMZN\_Phono IV\_00000678 (from -730), [REDACTED]  
 [REDACTED]

standalone retail price because it is offered exclusively to Prime members as part of a large bundle of services, including free two-day shipping and video content, among other things.

17. [REDACTED] in Prime Music's limited catalog of approximately two million songs. [REDACTED]

[REDACTED]

[REDACTED]

18. Because Prime Music is a limited-catalog service with approximately two million songs, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

19. [REDACTED]

[REDACTED]

[REDACTED]

---

<sup>20</sup> [REDACTED]

[REDACTED]

[REDACTED]

<sup>21</sup> Ex. 165, AMZN Phono IV\_00015280, [REDACTED]

[REDACTED]

<sup>22</sup> Ex. 172, AMZN Phono IV 00000557, [REDACTED]

[REDACTED] Ex. 170, AMZN Phono IV 00000678 (from -730), [REDACTED]

[REDACTED]

20. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

21. Amazon has, historically, been successful in encouraging a substantial number of Prime Music users to upgrade to Unlimited.<sup>24</sup> Based on that track record, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

---

<sup>23</sup> Ex. 165, AMZN Phono IV 00015280, [REDACTED]  
 [REDACTED] Ex. 168, AMZN Phono  
 IV 00015007, [REDACTED]  
 [REDACTED] Ex. 167, AMZN Phono IV\_00015027, [REDACTED]  
 [REDACTED] Ex. 163, AMZN Phono IV 00003132, [REDACTED]  
 [REDACTED] Ex. 206, AMZN Phono  
 IV\_00015566, [REDACTED]  
 Ex. 205, AMZN Phono IV\_00015532.001, [REDACTED]

<sup>24</sup> Written Direct Testimony of Tami Hurwitz ¶ 20.

<sup>25</sup> Ex. 178, AMZN Phono IV\_00015005, [REDACTED]

22. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**C. Free**

23. All of Amazon's agreements [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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<sup>26</sup> *Id.*

<sup>27</sup> Ex. 165, AMZN Phono IV 00015280, [REDACTED] Ex. 168, AMZN Phono IV 00015007, [REDACTED] Ex. 167, AMZN Phono IV 00015027, [REDACTED] Ex. 172, AMZN Phono IV 00000557, [REDACTED] Ex. 163, AMZN Phono IV 00003132, [REDACTED] Ex. 206, AMZN Phono IV 00015566, [REDACTED] Ex. 205, AMZN Phono IV 00015532.001, [REDACTED] Ex. 170, AMZN Phono IV 00000678 (from -730), [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

24. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]<sup>29</sup>

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<sup>28</sup> Ex. 172, AMZN Phono IV 00000557, [REDACTED]  
 [REDACTED] Ex. 170, AMZN Phono  
 IV 00000678 (from -730), [REDACTED]  
 [REDACTED]

<sup>29</sup> Ex. 165, AMZN Phono IV 00015280, [REDACTED]  
 [REDACTED] Ex. 168,  
 AMZN Phono IV\_00015007, [REDACTED]  
 [REDACTED] Ex. 167, AMZN Phono IV\_00015027, [REDACTED]  
 [REDACTED] Ex. 163, AMZN Phono IV 00003132, [REDACTED]  
 [REDACTED] Ex. 206, AMZN Phono  
 IV\_00015566, [REDACTED]  
 Ex. 205, AMZN Phono IV\_00015532.001, [REDACTED]  
 [REDACTED]



25.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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<sup>30</sup> See Ex. 163, AMZN Phono IV 00003132, [REDACTED] Ex. 206, AMZN Phono IV\_00015566, [REDACTED] Ex. 205, AMZN\_Phono IV\_00015532.001, [REDACTED]

**Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
LIBRARY OF CONGRESS  
Washington, D.C.**

**In the Matter of:**

**DETERMINATION OF RATES  
AND TERMS FOR MAKING AND  
DISTRIBUTING PHONORECORDS  
(PHONORECORDS IV)**

**Docket No. 21-CRB-0001-PR (2023-2027)**

**DECLARATION OF KAJAL GAYADIEN**

I, Kajal Gayadien, declare under penalty of perjury that the statements contained in my Amended Written Direct Testimony in the above-captioned proceeding are true and correct to the best of my knowledge, information, and belief.

**Dated: March 8, 2022**

A handwritten signature in blue ink, consisting of a large, stylized 'K' followed by 'GAYADIEN' in a cursive script.

**Kajal Gayadien**

# Exhibit D.4

Before the  
UNITED STATES COPYRIGHT ROYALTY BOARD  
Washington, D.C.

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In the Matter of:

DETERMINATION OF RATES  
AND TERMS FOR MAKING AND  
DISTRIBUTING PHONORECORDS  
(*Phonorecords IV*)

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)  
)  
)     **Docket No. 21-CRB-0001-PR**  
)     **(2023-2027)**  
)  
)  
)

**AMENDED WRITTEN DIRECT TESTIMONY OF KAJAL GAYADIEN**

1.     My name is Kajal Gayadien and I am the Global Head of Record Label Licensing for the digital-music business of Amazon.com Services LLC (“Amazon” or “Amazon Music”). I submit this testimony in connection with Amazon’s Written Direct Statement in the above-captioned proceeding.

2.     I lead Amazon’s seven-member Label Licensing Team, which works with representatives of record labels, including the three Major record labels – Sony Music Entertainment (“SME”), Warner Music Inc. (“WMG”), and Universal Music LLC (“UMG”) – and hundreds of Independent record labels, to secure the sound-recording agreements necessary to operate all of Amazon Music’s digital-music services. By virtue of my role, I have deep familiarity with Amazon’s sound-recording agreements and Amazon’s strategy for negotiating those agreements.

3.     Over the course of my career, I have negotiated or overseen the negotiation of hundreds of agreements regarding sound-recording and musical-works rights and represented both music-streaming services and rightsholders. During the nearly four years I spent at Buma Stemra, a Dutch collecting society for composers and music publishers, I represented

rightsholders in negotiations with music-streaming services, including Spotify, Google, and Amazon.

4. My testimony describes Amazon’s agreements with record labels for each of Amazon’s three digital-music services – Amazon Music Unlimited (“Unlimited”), Amazon Prime Music (“Prime Music”), and Amazon Music Free (“Free”). In Part I.A, I explain that Amazon’s agreements with record labels [REDACTED]

[REDACTED]

[REDACTED]. The record labels [REDACTED]

[REDACTED]

[REDACTED] In Part I.B, I explain Amazon’s agreements [REDACTED]

[REDACTED] that reflects the unique nature of that service, which is a limited-catalog service offered exclusively as part of the Prime membership. [REDACTED]

[REDACTED]

[REDACTED] In Part

I.C, I explain that Amazon’s agreements with record labels [REDACTED]

[REDACTED]

[REDACTED]

5. My testimony is based on my personal knowledge, on information made available to me in the course of performing my duties at Amazon, on my work experience in the music industry, and on my review of the documents attached as exhibits to this written testimony. To the extent that the facts and matters set out below are within my knowledge, they are true. To the extent I have relied upon the information provided by others, it is true to the best of my knowledge, information, and belief.

## I. AMAZON’S RECORD LABEL DEALS

6. Amazon has sound-recording agreements with the Major record labels and hundreds of Independent record labels. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

<sup>1</sup> Ex. 163, [REDACTED]

<sup>2</sup> Ex. 205, AMZN Phono IV 00015532.001, [REDACTED]

<sup>3</sup> Ex. 163, AMZN Phono IV 00003132, [REDACTED]

[REDACTED] Ex. 206, AMZN Phono IV 00015566, [REDACTED]

<sup>4</sup> Ex. 164, AMZN Phono IV 00047806, [REDACTED]

[REDACTED] Ex. 165, AMZN Phono IV 00015280, [REDACTED]

[REDACTED] Ex. 166, AMZN Phono IV 00015062, [REDACTED]

[REDACTED] Ex. 167, AMZN Phono IV 00015027, [REDACTED]

[REDACTED] Ex. 168, AMZN Phono IV 00015007, [REDACTED]

7. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

8. Amazon's record-label deals grant Amazon all of the sound-recording rights necessary to stream the labels' recordings on Unlimited, Prime Music, and Free.<sup>8</sup> Each label

<sup>5</sup> Ex. 169, [AMZN Phono IV 00000585](#), [REDACTED]

Ex. 170, [AMZN Phono IV 00000678 \(from -730\)](#), [REDACTED]

<sup>6</sup> Ex. 171, [AMZN Phono IV 00015113](#), [REDACTED]

<sup>7</sup> Ex. 172, [AMZN Phono IV 00000557](#), [REDACTED]

Ex. 173, [AMZN Phono IV 00015113](#), [REDACTED]

<sup>8</sup> E.g., Ex. 164, [AMZN Phono IV 00047806](#), [REDACTED]

Ex. 174, [AMZN00004915](#), [REDACTED]

Ex. 166, [AMZN Phono IV 00015062](#), [REDACTED]

Ex. 205, [AMZN Phono IV 00015532.001](#), [REDACTED]

Ex. 169, [REDACTED]

identifies all recordings covered by the deals, delivers copies of those recordings to Amazon,<sup>9</sup> and assumes responsibility for making any necessary payments to “artists, producers, directors, mixers, engineers, photographers and any and all other persons” that might have rights associated with the recording, except for holders of musical-works rights.<sup>10</sup> In my experience, record labels are unwilling to take responsibility for obtaining musical-works rights, and require Amazon to separately obtain those rights, even when those rights are held (in whole or in part) by a record label’s affiliated publisher.<sup>11</sup>

AMZN Phono IV 00000585,

<sup>9</sup> E.g., Ex. 164, AMZN Phono IV 00047806,

Ex. 174, AMZN00004915,

Ex. 166, AMZN Phono IV 00015062, 2019

Ex. 169, AMZN Phono IV 00000585,

E.g., Ex. 164,

AMZN Phono IV 00047806,

Ex. 174, AMZN00004915,

Ex. 175, AMZN00004685,

Ex. 169205, AMZN Phono IV 00015532.001,

Ex. 169, AMZN Phono

IV 00000585,

<sup>10</sup> E.g., Ex. 164, AMZN Phono IV 00047806,

Ex. 174, AMZN00004915,

Ex. 166, AMZN Phono IV 00015062,

Ex. 169, AMZN Phono IV 00000585,

<sup>11</sup> E.g., Ex. 164, AMZN Phono IV 00047806,

Ex. 174, AMZN00004915,



**A. Unlimited**

9. Customers that subscribe to a premium music service expect “on demand” access to a comprehensive music library that includes popular, niche, and even obscure songs from the Major record labels and a wide range of Independent record labels. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Each Major accounts for more than [REDACTED] % of plays on Unlimited and, collectively, the Majors account for over [REDACTED] % plays.<sup>12</sup>

10. [REDACTED] the structure of Amazon’s deals with record labels, and the rates we pay, have remained stubbornly skewed in favor of the record labels and are nearly identical for big and small record labels. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Ex. 170, AMZN Phono IV 00000678 (from -730), [REDACTED]

[REDACTED]

Written Direct Testimony of James Duffett-Smith ¶ 234.

<sup>12</sup> Ex. 176, AMZN Phono IV\_00015256, [REDACTED]

[REDACTED]

11. Amazon's deals with record labels for Unlimited [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

12. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

<sup>13</sup> Ex. 164, AMZN Phono IV 00047806, [REDACTED]

[REDACTED] Ex. 168,

AMZN Phono IV 00015007, [REDACTED] Ex.

166, AMZN Phono IV 00015062, [REDACTED]

[REDACTED] Ex. 172, AMZN Phono IV 00000557, [REDACTED]

[REDACTED] Ex. 163,

AMZN Phono IV 00003132, [REDACTED]

[REDACTED] Ex. 170,206, AMZN Phono IV 00015566, [REDACTED]

[REDACTED] Ex. 205, AMZN Phono IV 00015532.001, [REDACTED]

[REDACTED] Ex. 170, AMZN Phono

IV 00000678 (from -730), [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

13. [REDACTED]

[REDACTED]

[REDACTED]

Amazon has typically paid [REDACTED] of revenues from Unlimited in sound-recording royalties. For example, during each month of 2020, Amazon paid [REDACTED] of revenues in sound-recording royalties.<sup>17</sup>

14. [REDACTED]

[REDACTED]

[REDACTED]

<sup>14</sup> Ex. 164, [AMZN Phono IV 00047806](#), [REDACTED]  
[REDACTED] [Ex. 163, AMZN Phono IV 00003132](#), [REDACTED]

<sup>15</sup> Ex. 166, [AMZN Phono IV 00015062](#), [REDACTED]  
[REDACTED] [Ex. 205, AMZN Phono IV 00015532.001](#), [REDACTED]

<sup>16</sup> Ex. 168, [AMZN Phono IV 00015007](#), [REDACTED]  
[REDACTED] [Ex. 174, AMZN00004915](#), [REDACTED]  
[REDACTED] [Ex. 206, AMZN Phono IV 00015566](#), [REDACTED]

<sup>17</sup> Ex. 177, [AMZN Phono IV 00015251](#), [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

15. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

<sup>18</sup> Ex. 164, AMZN Phono IV 00047806, [REDACTED]

[REDACTED] Ex. 168, AMZN Phono IV 00015007,

[REDACTED] Ex. 174,

AMZN00004915, [REDACTED] Ex. 166,

AMZN Phono IV 00015062, [REDACTED]

[REDACTED] Ex. 170,206, AMZN Phono

IV 00015566, [REDACTED]

[REDACTED] Ex. 205, AMZN Phono IV 00015532.001,

[REDACTED] Ex. 170, AMZN Phono IV 00000678 (from -730),

[REDACTED]

<sup>19</sup> Ex. 163, AMZN Phono IV 00003132, [REDACTED]

[REDACTED] Ex. 206, AMZN Phono IV 00015566,

[REDACTED] Ex. 205, AMZN Phono IV 00015532.001,

[REDACTED] Ex.

170, AMZN Phono IV 00000678 (from -730), [REDACTED]

[REDACTED]

## B. Prime Music

16. Since 2019, [REDACTED] for Prime Music.<sup>20</sup> [REDACTED] the unique nature of Prime Music, which has no standalone retail price because it is offered exclusively to Prime members as part of a large bundle of services, including free two-day shipping and video content, among other things.

17. [REDACTED] in Prime Music's limited catalog of approximately two million songs. [REDACTED]  
[REDACTED]  
[REDACTED]

18. Because Prime Music is a limited-catalog service with approximately two million songs, [REDACTED]  
[REDACTED]

<sup>20</sup> Ex. 165, AMZN Phono IV 00015280, [REDACTED]  
[REDACTED] Ex. 168, AMZN Phono IV 00015007, [REDACTED]  
Ex. 167, AMZN Phono IV 00015027, [REDACTED]  
[REDACTED] Ex. 172, AMZN Phono IV 00000557, [REDACTED]  
[REDACTED] Ex. 163, AMZN Phono IV 00003132, [REDACTED]  
[REDACTED] Ex. 170,206, AMZN Phono IV 00015566, [REDACTED] Ex. 205, AMZN Phono IV 00015532.001, [REDACTED]  
[REDACTED] Ex. 170, AMZN Phono IV 00000678 (from -730), [REDACTED]  
[REDACTED]

<sup>21</sup> [REDACTED]  
[REDACTED] Ex. 165, AMZN Phono IV 00015280, [REDACTED]  
[REDACTED]

<sup>22</sup> Ex. 165, AMZN Phono IV 00015280, [REDACTED]  
[REDACTED]

19. [REDACTED]

20. [REDACTED]

<sup>23</sup> Ex. 172, AMZN Phono IV 00000557, [REDACTED]

[REDACTED] Ex. 170, AMZN Phono IV 00000678 (from -730), [REDACTED]

<sup>24</sup> Ex. 165, AMZN Phono IV 00015280, [REDACTED]

[REDACTED] Ex. 168, AMZN Phono IV 00015007, [REDACTED]

[REDACTED] Ex. 167, AMZN Phono IV 00015027, [REDACTED]

[REDACTED] Ex. 163, AMZN Phono IV 00003132, [REDACTED]

[REDACTED] Ex. 206, AMZN Phono [REDACTED]

[REDACTED]

21. Amazon has, historically, been successful in encouraging a substantial number of Prime Music users to upgrade to Unlimited.<sup>25</sup> Based on that track record, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

22. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**C. Free**

23. All of Amazon's agreements [REDACTED]

[REDACTED]

IV 00015566, [REDACTED]  
Ex. 205, AMZN\_Phono IV\_00015532.001, [REDACTED]

<sup>25</sup> Written Direct Testimony of Tami Hurwitz ¶ 20.

<sup>26</sup> Ex. 178, AMZN\_Phono IV\_00015005, [REDACTED]

<sup>27</sup> *Id.*

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

24. [REDACTED]

[REDACTED]

[REDACTED]

<sup>28</sup> Ex. 165, AMZN Phono IV 00015280, [REDACTED] Ex. 168, AMZN Phono IV 00015007, [REDACTED] Ex. 167, AMZN Phono IV 00015027, [REDACTED] Ex. 172, AMZN Phono IV 00000557, [REDACTED] Ex. 163, AMZN Phono IV 00003132, [REDACTED] Ex. 206, AMZN Phono IV 00015566, [REDACTED] Ex. 205, AMZN Phono IV 00015532.001, [REDACTED] Ex. 170, AMZN Phono IV 00000678 (from -730), [REDACTED]

<sup>29</sup> Ex. 172, AMZN Phono IV 00000557, [REDACTED] Ex. 170, AMZN Phono IV 00000678 (from -730), [REDACTED]



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 30

25. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

<sup>30</sup> Ex. 165, AMZN Phono IV 00015280, [REDACTED] Ex. 168, AMZN Phono IV 00015007, [REDACTED]

[REDACTED] Ex. 167, AMZN Phono IV 00015027, [REDACTED]

[REDACTED] Ex. 163, AMZN Phono IV 00003132, [REDACTED] Ex. 206, AMZN Phono IV 00015566, [REDACTED]

Ex. 205, AMZN Phono IV 00015532.001, [REDACTED]

[REDACTED]

<sup>31</sup> See Ex. 163, AMZN Phono IV 00003132, [REDACTED] Ex. 206, AMZN Phono IV 00015566, [REDACTED]

Ex. 205, AMZN Phono IV 00015532.001, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

# Exhibit E

# Exhibit E.2

Before the  
**UNITED STATES COPYRIGHT ROYALTY BOARD**  
 Washington, D.C.

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**In the Matter of:**

**DETERMINATION OF RATES  
 AND TERMS FOR MAKING AND  
 DISTRIBUTING PHONORECORDS  
 (*Phonorecords IV*)**

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**Docket No. 21-CRB-0001-PR  
 (2023-2027)**

**AMAZON'S AMENDED WRITTEN DIRECT STATEMENT**

**Volume 3: Exhibits**

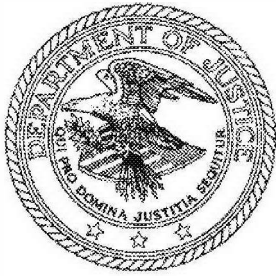
March 8, 2022

# **Exhibits 1-9**

**Restricted**

**Omitted from Public Version**

# Exhibit 10



# DEPARTMENT OF JUSTICE

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## **Statement of the Department of Justice on the Closing of the Antitrust Division's Review of the ASCAP and BMI Consent Decrees**

**Washington, D.C.**

**August 4, 2016**



The American Society of Composers, Authors and Publishers (ASCAP) and Broadcast Music, Inc. (BMI) are “performing rights organizations” (PROs). PROs provide licenses to users such as bar owners, television and radio stations, and internet music distributors that allow them to publicly perform the musical works of the PROs’ thousands of songwriter and music publisher members. These “blanket licenses” enable music users to immediately obtain access to millions of songs without resorting to individualized licensing determinations or negotiations. But because a blanket license provides at a single price the rights to play many separately owned and competing songs – a practice that risks lessening competition – ASCAP and BMI have long raised antitrust concerns.

ASCAP and BMI are subject to consent decrees that resolved antitrust lawsuits brought by the United States in 1941 alleging that each organization had unlawfully exercised market power acquired through the aggregation of public performance rights in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1. The consent decrees seek to prevent the anticompetitive exercise of market power while preserving the transformative benefits of blanket licensing. In the decades since the ASCAP and BMI consent decrees were entered, industry participants have benefited from the “unplanned, rapid and indemnified access” to the vast repertoires of songs that each PRO’s blanket licenses make available. *Broadcast Music, Inc. v. CBS, Inc.*, 441 U.S. 1, 20 (1979).

At the request of ASCAP and BMI, in 2014 the Antitrust Division of the U.S. Department of Justice opened an inquiry into the operation and effectiveness of the consent decrees. In the course of the Division’s investigation, the Division solicited two rounds of public comments regarding the consent decrees and met with dozens of industry stakeholders. The Division evaluated during its investigation whether various modifications to the consent decrees

requested by stakeholders were necessary to account for changes in how music is consumed today. During the discussions surrounding these requested modifications, it became apparent that industry participants had differing understandings of whether the PROs' licenses provide licensees the ability to publicly perform, without risk of copyright infringement, all of the works in each of the PROs' repertoires. The requests for modifications therefore required the Division to examine the question of whether the consent decrees obligate ASCAP and BMI to offer "full-work" licenses.

The Division has now concluded its investigation and has decided not to seek to modify the consent decrees. As discussed in detail below, the consent decrees, which describe the PROs' licenses as providing the ability to perform "works" or "compositions," require ASCAP and BMI to offer full-work licenses. The Division reaches this determination based not only on the language of the consent decrees and its assessment of historical practices, but also because only full-work licensing can yield the substantial procompetitive benefits associated with blanket licenses that distinguish ASCAP's and BMI's activities from other agreements among competitors that present serious issues under the antitrust laws. Moreover, the Division has determined not to support modifying the consent decrees to allow ASCAP and BMI to offer "fractional" licenses that convey only rights to fractional shares and require additional licenses to perform works. Although stakeholders on all sides have raised some concerns with the status quo, the Division's investigation confirmed that the current system has well served music creators and music users for decades and should remain intact. The Division's confirmation that the consent decrees require full-work licensing is fully consistent with preserving the significant licensing and payment benefits that the PROs have provided music creators and music users for decades.

The Division recognizes that its views of the consent decrees' requirements and the nature of the PROs' licenses are not shared or supported by all industry participants. This statement seeks to explain the bases for the Division's determination and describe why an express recognition that ASCAP and BMI do currently and must continue to offer full-work licenses should not meaningfully disrupt the status quo in the licensing of public performance rights. As discussed below, the Division encourages the industry to use the next year, during which the Division will forgo enforcement of the full-work licensing requirement, to transition to a common understanding regarding the scope of the ASCAP and BMI licenses. This period should allow stakeholders to resolve any practical challenges relating to complying with the full-work licensing requirement, including the identification of songs that can no longer be included in ASCAP's or BMI's repertoires because they cannot be offered on a full-work basis or the voluntary renegotiation of contractual agreements between co-owners to allow ASCAP or BMI to provide a full-work license to the song.

The Division has also decided that it will not at this time support other proposed decree modifications. The most significant of the proposed modifications was a proposal supported by ASCAP, BMI, and music publishers to allow music publishers to "partially withdraw" from ASCAP and BMI, thereby prohibiting the PROs from licensing the withdrawing publishers' music to digital services such as Pandora or Spotify. The lack of industry consensus as to whether the PROs offer full-work licenses creates too much uncertainty to properly evaluate the competitive impact of allowing partial withdrawal, a necessary predicate to a determination that a decree modification to allow partial withdrawal would be in the public interest.

This statement proceeds as follows. Section I outlines important features of the PROs, music licensing in the United States, and the history of antitrust enforcement with respect to the

PROs. Section II briefly describes significant areas of agreement regarding the important role ASCAP and BMI play in the U.S. music ecosystem, focusing in particular on the procompetitive benefits that industry participants recognize the PROs offer. Section III explains the Division's conclusion that the consent decrees require full-work licensing, and Section IV discusses the Division's determination that the decrees should not be modified to allow fractional licensing. Section V provides the Division's views regarding other proposed modifications to the consent decrees proposed by stakeholders. Section VI discusses the Division's decision to provide an opportunity over the next year for ASCAP, BMI, and other stakeholders to develop a shared understanding that ASCAP's and BMI's licenses provide the ability to perform all of the works in their respective repertoires. Section VII identifies practices industry participants may find useful in complying with the consent decrees' full-work licensing requirements while maintaining most current licensing practices. Finally, Section VIII concludes by addressing the possibility of broader legislative reform of public performance licensing.

## **I. Background**

*Purpose and Operations of ASCAP and BMI.* In order to publicly perform musical works, businesses must obtain permission from copyright holders. Every day, hundreds of thousands of restaurants, radio stations, online services, television stations, performance venues, and countless other establishments publicly perform musical works. These music users have historically relied in large part on PROs to provide licenses to perform these works. PROs pool the copyrights held by their composer, songwriter, and publisher members or affiliates and collectively license those rights to music users. In the United States, ASCAP and BMI are the largest PROs and are responsible for licensing an overwhelming majority of works. A third PRO, SESAC, has historically also controlled a significant but much smaller repertoire. In recent years, a fourth PRO called Global Music Rights, also controlling a collection of songs

considerably smaller than ASCAP's or BMI's, entered the marketplace. ASCAP and BMI, as well as the smaller PROs, license music predominantly through "blanket licenses," which provide access to each organization's entire repertoire without regard for what specific songs are used or how often the songs are played.

Individual songwriters, composers, and publishers that participate in a PRO execute an agreement with that PRO to do so. Today, a songwriter joins ASCAP by executing a membership agreement in which it grants to ASCAP the right to license any work that "may be written, composed, acquired, owned, published, or copyrighted by the owner, alone, jointly or in collaboration with others . . . ." ASCAP Writer Agreement, *available at* <http://www.ascap.com/~media/files/pdf/join/ascap-writer-agreement.pdf>. The ASACP writer further warrants "that there are no existing assignments or licenses, direct or indirect, of non-dramatic performing rights in my musical works, except to or with the publisher(s)" that would restrict ASCAP's ability to license under the terms of the grant of rights. *Id.* Similarly, a songwriter affiliating with BMI grants to BMI the right to license non-dramatic public performances of "all musical compositions . . . composed by [the member] alone or with one or more co-writers" and promises that "no performing rights in [these compositions] have been granted to or reserved by others except as specifically set forth therein in connection with Works heretofore written or co-written by [the author]." BMI Writer Agreement, *available at* [http://www.bmi.com/forms/affiliation/bmi\\_writer\\_kit.pdf](http://www.bmi.com/forms/affiliation/bmi_writer_kit.pdf).

*The ASCAP and BMI Consent Decrees.* The United States first brought price-fixing charges against ASCAP more than 80 years ago and, in 1941, the United States resolved its civil antitrust lawsuits when it and ASCAP agreed to a civil consent decree that has twice been significantly amended, most recently in 2001. The United States and BMI entered into a consent

decree in 1941 to resolve similar concerns, and most recently amended the decree in 1994. Both organizations have also been subject to numerous private antitrust lawsuits, one of which resulted in an important Supreme Court decision, *Broadcast Music, Inc. v. CBS, Inc.* In *BMI*, the Supreme Court acknowledged that ASCAP's and BMI's blanket licenses raised significant antitrust concerns because they pool works that in some circumstances would be substitutes (and thus competitors) for some music users. 441 U.S. at 10. The court emphasized, however, that the blanket licenses also provided valuable benefits that no individual rightsholder could match, including the "immediate use of covered compositions, without the delay of prior individual negotiations." *Id.* at 21-22. In light of these benefits, and recognizing the value of the consent decrees that restrained the ability of ASCAP and BMI to exercise their market power, the Court concluded that the PROs' blanket licensing practices did not constitute per se illegal price fixing. *Id.* at 16-24.

Consistent with the Supreme Court's guidance, the consent decrees seek to preserve the transformative benefits of blanket licensing, including the "immediate use" of the works within the PROs' repertoires. To this end, the ASCAP consent decree requires ASCAP to offer users a "license to perform *all the works in the ASCAP repertory*." ASCAP Consent Decree § VI (emphasis added). The BMI consent decree similarly requires BMI's licenses to provide music users with access to its "repertory," which includes "those compositions, the right of public performance of which [BMI] has or hereafter shall have the right to license or sublicense." BMI Consent Decree § II(C). The decrees also provide for the creation of two separate "rate courts," to which either music users or the PROs may resort if the two sides are unable to reach a mutually agreeable price for a license. *See* ASCAP Consent Decree § IX; BMI Consent Decree § XIV.

*Existence of Multi-Owner Works.* Many musical works have multiple authors. Under the copyright law, joint authors of a single work are treated as tenants-in-common, so “[e]ach co-owner may thus grant a nonexclusive license to use the entire work without the consent of other co-owners, provided that the licensor accounts for and pays over to his or her co-owners their pro-rata shares of the proceeds.” UNITED STATES COPYRIGHT OFFICE, VIEWS OF THE UNITED STATES COPYRIGHT OFFICE CONCERNING PRO LICENSING OF JOINTLY OWNED WORKS (2016), at 6, available at <http://www.copyright.gov/policy/pro-licensing.pdf>. Copyright holders may, however, depart from the default rules under the Copyright Act. *See generally id.* (“[T]he default rules are only a ‘starting point,’ with collaborators . . . free to alter this statutory allocation of rights and liabilities by contract.”) (citations and quotations omitted). There are therefore at least two possible frameworks under which PROs may license works with multiple owners belonging to multiple PROs. Under a “full-work” license, each PRO would offer non-exclusive licenses to the work entitling the user to perform the work without risk of infringement liability. Under a “fractional” license, each PRO would offer a license only to the interests it holds in a work, and require that the licensee obtain additional licenses from the PROs representing other co-owners before performing the work.

*Division Review of the Consent Decrees.* In 2014, the Antitrust Division opened an investigation into potential modifications of the consent decrees requested by various stakeholders. The Division issued a public request for comments and received more than 200 responses, primarily from industry stakeholders such as composers, publishers, and music licensees, as well as from advocacy groups. (The solicitation and responses are available here: <https://www.justice.gov/atr/ascap-bmi-decree-review>.) The PROs proposed three significant modifications: first, to allow publishers to partially withdraw works from the PROs, thereby



preventing the PROs from licensing such works to digital music users; second, to streamline the process by which fee disputes are resolved; and, third, to permit the PROs to offer licenses to rights other than the public performance right, particularly for users who also need a performance license. Music users proposed additional changes, in particular to promote increased transparency and clarify rules surrounding “licenses-in-effect,” *i.e.*, how withdrawals from a repertory affect the scope of licenses granted by the PROs.

As the Division considered the implications of these proposed changes, particularly partial withdrawal, stakeholders on all sides raised questions about the treatment of multi-owner works. Music users claimed that the PROs had always offered licenses to perform all works in their repertories, whether partially or fully owned, and urged modifications to confirm their view. Rightsholders, by contrast, claimed that the PROs had never offered full licenses to perform fractionally owned works, and also urged modifications to confirm their view. ASCAP and BMI did not concede that the existing consent decrees prohibited fractional licensing, but proposed that their consent decrees be modified to explicitly allow them to offer fractional licenses. Historically, the industry has largely avoided a definitive determination of whether ASCAP and BMI offered full-work or fractional licenses because the vast majority of music users obtain a license from ASCAP, BMI, and SESAC and pay those PROs based on fractional market shares. These practices made it unnecessary, from both the user and rightsholders perspective, to sort out whether the ASCAP and BMI licenses are full-work or fractional; users have held licenses that collectively cover all works and rightsholders have been paid for their works by their own PROs without having to worry about accounting. However, recent events, including the Division’s review, have made it necessary to confront the question.

The question of whether ASCAP and BMI licenses are or should be fractional or full-



work has significant implications for the PROs, their members, and their licensees. If PROs offer fractional licenses, a music user, before performing any multi-owner work in a PRO's repertory, would need a license to the fractional interests held by each of the work's co-owners. A full-work license from a PRO, on the other hand, would provide infringement protection to a music user seeking to perform any work in the repertory of the PRO.

In light of the industry's conflicting understandings and the implications for any potential modification, the Division solicited a second round of public comments in 2015 and received more than 130 responses. (The solicitation and responses are available here: <https://www.justice.gov/atr/antitrust-consent-decree-review-ascap-and-bmi-2015>.) The Division subsequently met and spoke with dozens of industry stakeholders.

**II. There is broad consensus that ASCAP and BMI as currently constituted fill important and procompetitive roles in the music licensing industry.**

Despite strong areas of disagreement among industry stakeholders as to issues raised in the Division's solicitations of public comments, there is broad consensus that ASCAP and BMI provide a valuable service to both music users and PRO members. The PROs allow music users to obtain immediate access through licenses that protect them from copyright infringement risk to millions of works controlled by the hundreds of thousands of songwriters, composers, and publishers that have contributed songs to the PROs.

Music creators also benefit from the PROs' licensing practices. For many songwriters and composers, affiliating with a PRO and contributing their works to the PRO's repertory provides the only practical way of licensing their works. While direct licensing to individual music users always remains available as an alternative for music creators, individual music creators would often find it infeasible to themselves enter into licenses with all of the bars, restaurants, radio stations, television stations, and other music users to which ASCAP and BMI

license. Even where direct negotiations are possible, users and creators may find PRO licenses more efficient. Moreover, the PROs have developed valuable expertise in distributing revenues among the hundreds of thousands of copyright holders, and creators generally trust that ASCAP and BMI will fairly distribute licensing proceeds.

There is also significant agreement that aspects of the manner in which ASCAP and BMI have historically fulfilled their licensing responsibilities benefit both creators and music users. Upon request, ASCAP and BMI have offered users immediate licenses to perform the works in their repertoires. (As discussed elsewhere, there is dispute about exactly what these licenses mean for partially owned works.) Most large music users have obtained licenses from ASCAP, BMI, and SESAC. ASCAP and BMI have charged fees based roughly on their respective market share accounting for partial interests in the songs in their repertoires. ASCAP and BMI have then distributed these fees to their own members, again based on the ownership each member has in particular songs. Many music creators, who often affiliate with the PRO of their choice early in their careers, value their relationship with their PRO and like receiving payments for the public performance of their works directly from their chosen PRO.

### **III. The consent decrees require full-work licensing.**

The Division's review has made clear that the consent decrees require ASCAP's and BMI's licenses to provide users with the ability to publicly perform, without risk of infringement liability, any of the songs in the respective PRO's repertoire. This determination is compelled by the language and intent of the decrees and years of interpretations by federal courts. First, the plain text of the decrees cannot be squared with an interpretation that allows fractional licensing: the consent decrees require ASCAP to offer users the ability to perform all "works" in its repertoire and BMI's licenses to offer users the ability to perform all "compositions" in its repertoire. ASCAP's and BMI's licenses have for decades purported to do exactly that. *See, e.g.,*

BMI Music License for Eating & Drinking Establishments, *available at* <http://www.bmi.com/forms/licensing/gl/ede.pdf> (“BMI grants you a non-exclusive license to publicly perform at the Licensed Premises *all of the musical works* of which BMI controls the rights to grant public performances during the terms.”) (emphasis added).

Moreover, only full-work licensing achieves the benefits that underlie the courts’ descriptions and understandings of ASCAP’s and BMI’s licenses. For example, the Supreme Court explained that the ASCAP and BMI blanket license “allows the licensee *immediate use* of covered compositions, *without the delay of prior individual negotiations*, and great flexibility in the choice of musical material.” *BMI*, 441 U.S. at 21-22 (emphasis added). In so doing, they provide “unplanned, rapid, and indemnified access” to the works in ASCAP’s and BMI’s repertoires. *Id.* at 20. If the licenses were fractional, they would not provide *immediate* use of covered compositions; users would need to obtain additional licenses before using many of the covered compositions. And such fractional licenses would *not* avoid the delay of additional negotiations, because users would need to clear rights from additional owners of fractional interests in songs before performing the works in the ASCAP and BMI repertoires. Similarly, the Second Circuit has held that ASCAP is “required to license its entire repertoire to all eligible users,” and that the repertoire includes “all works contained in the ASCAP repertoire.” *Pandora Media, Inc. v. ASCAP*, 785 F.3d 73, 77-78 (2d Cir. 2015) (emphasis removed). The Second Circuit rejected arguments that this decree requirement conflicted with copyright law, noting that “[i]ndividual copyright holders remain free to choose whether to license their works through ASCAP.” *Id.* at 78. The logic of the Second Circuit’s decision applies to BMI as well.

Accordingly, the consent decrees must be read as requiring full-work licensing. ASCAP and BMI can include in their repertoires only those songs they can license on such a basis.

These songs include works written by a single songwriter who is a member of the PRO; works written by multiple writers, all of whom are members of the PRO; and works written by multiple writers, one or more of whom are members of the PRO and possess the right under the default tenancy in common or pursuant to other arrangements among the songwriters to grant a full-work license. Moreover, nothing in this interpretation contradicts copyright law. To the extent allowed by copyright law, co-owners of a song remain free to impose limitations on one another's ability to license the song. Such an action may, however, make it impossible for ASCAP or BMI – consistent with the full-work licensing requirement of the antitrust consent decrees – to include that song in their blanket licenses.

**IV. The Division has determined that modification of the consent decrees to permit fractional licensing by ASCAP and BMI would not be in the public interest.**

The Division also considered ASCAP's and BMI's requests to modify the decrees to permit fractional licensing. Based on the public comments and meetings and communications with stakeholders, the Division has concluded that it would not be in the public interest to modify the ASCAP and BMI consent decrees to permit ASCAP and BMI to offer fractional licenses.

Modifying the consent decrees to permit fractional licensing would undermine the traditional role of the ASCAP and BMI licenses in providing protection from unintended copyright infringement liability and immediate access to the works in the organizations' repertories, which the Division and the courts have viewed as key procompetitive benefits of the PROs preserved by the consent decrees.

Allowing fractional licensing would also impair the functioning of the market for public performance licensing and potentially reduce the playing of music. If ASCAP and BMI were permitted to offer fractional licenses, music users seeking to avoid potential infringement

liability would need to meticulously track song ownership before playing music. As the experience of ASCAP and BMI themselves shows, this would be no easy task. Today, in the context of compensating song owners, ASCAP, BMI, and other PROs must track and rely on song ownership information they possess to determine to whom to distribute funds collected from music users. But even with their years of experience in finding and compensating song owners and their established relationships with music creators, the PROs often do not make distributions until weeks or months *after* a song is played, and even then do so imperfectly. The difficulties, delays, and imperfections that are tolerated in the context of PRO payments would prove fatal to the businesses of music users, who need to resolve ownership questions *before* playing music to avoid infringement exposure.

A comparison between the licensing of public performance rights and the licensing of synchronization rights further illustrates the problem faced by music users who rely on PRO licenses. Producers of movies or television programming have traditionally entered separate synchronization licenses with each owner of a fractional interest in a song the producer seeks to include in his or her television show or movie, generally on a song-by-song basis. Unlike many ASCAP and BMI licensees, the producer can identify a song before it is used and has the ability to substitute to a different song if the producer cannot reach agreements for the synchronization rights with each of the song's fractional owners. Indeed, it is not uncommon for a producer to fail to obtain synchronization licenses from all of a song's fractional owners and to turn instead to a different song. In contrast, music users publicly performing music are often using music selected by others – for example, by the producer who placed a song in a television show or the disk jockey selecting songs for the radio (which may be played in a bar or restaurant that cannot control the music chosen). These users rely on blanket licenses to allow them to perform music

without first determining whether they have cleared the rights in a work. Unlike a movie or television producer, these music users cannot switch to a different song if they lack the rights to publicly perform a song. Their only recourse under a fractional licensing regime, under which their PRO blanket licenses leave them exposed to infringement liability, might be to simply turn off the music.

The problems inherent in allowing ASCAP and BMI to engage in fractional licensing would be exacerbated by the absence of a reliable source of data on song ownership to which music users could turn to identify whether they possess rights to perform a song or from whom they could seek a license. The Division's investigation uncovered that no such authoritative information source exists today, even for existing works, and, further, that songwriting credits for new releases may not be fully established until after the songs have been released. If music users cannot rely on ASCAP and BMI blanket licenses to avoid infringement exposure, they are likely to avoid playing songs – including new releases – that they are not confident they possess the right to perform. Nor are music users positioned to lead the creation of a comprehensive and reliable database of song ownership information. To the extent such a database could be created, songwriters, music publishers, and PROs have much greater access to the information necessary to do so.

Finally, allowing fractional licensing might also impede the licensed performance of many songs by incentivizing owners of fractional interests in songs to withhold their partial interests from the PROs. A user with a license from ASCAP or BMI would then be unable to play that song unless it acceded to the hold-out owner's demands, providing the hold-out owner substantial bargaining leverage to extract significant returns. The result would be a further reduction in the benefits of the ASCAP and BMI licenses and the creation of additional

impediments to the public performance of music.

For all of these reasons, the Division believes that modifying the consent decrees to permit fractional licensing would not be in the public interest. Although PROs, songwriters, and publishers suggested there are problems associated with full-work licensing, especially the creation of works that would be unlicensable by the PROs, the Division believes that the potential costs associated with these concerns are far outweighed by the benefits of full-work licensing. In particular, the Division believes, as further detailed in Section VII below, that songwriters possess several options that would allow PROs to continue to license their works as well as allow those songwriters to continue to be paid by the PRO of their choice.

**V. The Division has also determined that other modifications to the consent decrees would not be appropriate at this time.**

Industry stakeholders also proposed to the Division that the consent decrees be modified in other ways. The most significant of the proposed modifications, and the one that received the greatest attention among industry stakeholders, was that the consent decrees be modified to allow PRO members to “partially withdraw” rights and thereby prevent the PROs from granting licenses that include those rights to certain users (in particular, digital music services) but not to other music users. The impact of such partial withdrawal by music publishers turns significantly on the question of whether the PROs offer full-work or fractional licenses. If the PROs were to offer fractional licenses, then a digital user would be unable to rely on a license from the PRO to perform any work in which a partially withdrawing publisher owned any fractional interest. If the PROs were to offer full-work licenses, the effect of the partial withdrawal would be more modest because the PRO could continue to license many songs in which members that did not partially withdraw controlled an interest (and possessed the ability to allow the PRO to license the song on a full-work basis). Although the Division interprets the consent decrees to require



full-work licensing, the Division recognizes that some rightsholders have not shared this interpretation, making a determination of the effect of partial withdrawal sufficiently speculative at this point that the Division cannot determine whether modification to permit partial withdrawal would be in the public interest.

Moreover, as discussed immediately below, the Division recognizes that the sharply conflicting views that many industry stakeholders have had on the question of whether the PROs do or must offer full-work licenses will necessitate some period of adjustment in the industry as it moves to a common understanding of the scope of the PRO licenses. The Division believes that seeking modifications to the consent decrees – to permit partial withdrawal or in other ways suggested by some in the industry – during this uncertain period could complicate the industry’s move to a shared approach with full clarity for all industry participants as to the rights conveyed by the PROs’ licenses. For this reason as well, the Division has determined that it would not be in the public interest to modify the consent decrees at this time, but remains open to considering these modifications at a later date.

**VI. Assuming ASCAP and BMI proceed in good faith, the Division will forbear for one year from any enforcement action based on any purported fractional licensing by ASCAP or BMI.**

With the clarification provided by this statement, the Division believes it is essential that the industry now move towards a shared understanding that ASCAP and BMI offer full-work licenses that entitle music users to perform, without risk of infringement, all of the works in each PRO’s repertory. In light of the different views expressed by stakeholders about existing practices, the Division is cognizant that any move to this common understanding will require adjustment by some market participants. To facilitate this adjustment and ease the transition to a common understanding, the Division will not take any enforcement action based on any purported fractional licensing by ASCAP and BMI for one year, as long as ASCAP and BMI



proceed in good faith to ensure compliance with the requirements of the consent decrees. During this year, to the extent doubt exists about the PROs' ability to license specific works, the Division expects that ASCAP and BMI will take the steps necessary to eliminate such uncertainty, including obtaining from songwriter and publisher members the assurances they need and, to the extent necessary, removing works from their licenses if they cannot be offered on a full-work basis. In order to facilitate this transition, the Division strongly urges industry stakeholders to explore means of further promoting transparency, including transparency regarding the identity of rightsholders from which music users may license any works they cannot obtain from ASCAP and BMI.

**VII. While industry participants will and should continue a long history of devising creative solutions, the Division has identified certain guidelines and practices that may be useful as the industry moves towards such a shared understanding on full-work licensing.**

The Division is confident that the transition to a common understanding need not disrupt the significant efficiencies in both licensing and payment that ASCAP and BMI have provided for years. To help ensure this result, the Division discusses below certain practices that would permit both rightsholders and users to benefit from the continued use of the licenses offered by ASCAP and BMI in a manner that is not markedly different from the status quo. However, these examples are not intended to be exhaustive, and industry participants will undoubtedly identify additional ways to accomplish this transition without meaningful disruption or movement away from current practices. The Division remains open to additional solutions and, to the extent that there is uncertainty about alternative proposals, the Division is committed to working with stakeholders to review them and provide feedback, especially during the next year of transition.

- *Co-owners of a song who are members of different PROs can continue to have their songs included in one or more PROs' full-work licenses and continue to be*

*paid based on their fractional ownership.* Co-owners can do so in at least two ways. Each co-owner can grant his or her PRO a non-exclusive right to license public performances of the song (as is the default for a joint work), but can agree that each owner will collect through his or her own PRO. For example, if an ASCAP member co-writes a song with a BMI member, each writer may continue to license the work through his or her chosen PRO and receive payments from that PRO. The Division believes this approach is consistent with historical practice. Alternatively, if co-writers have a contract that prevents each co-owner from licensing the song on a full-work basis and those co-owners are members of different PROs, the co-owners may amend their contract either to revert to the default rule or to choose a single PRO as the licensing agent for the song, and agree on a manner to distribute revenue from that work. For example, for a song co-written by one ASCAP member and one BMI member, the co-writers might designate the ASCAP member to collect all revenues from the licensing of public performance rights to the song and require that the ASCAP member distribute a share of the revenues to the BMI member. Under these circumstances, the song would not be included in BMI's repertory. Of course, the obligation under the consent decrees that ASCAP and BMI offer full-work licenses binds only the two PROs and not any individual songwriter. Co-writers of songs remain free to split up their joint rights by contract in a way that makes their songs unlicensable by ASCAP or BMI. This discussion merely seeks to illuminate what rightsholders can do if they wish to facilitate the PROs' ability to license their songs consistent with the requirements of the consent decrees. If co-owners decline to grant

ASCAP and/or BMI the right to license the song on a full-work basis, the PROs will not be able to license that song. Co-owners of such works can use the next year to determine whether they want their songs available for licensing on a full-work basis by ASCAP and BMI and, if so, whether their songwriting arrangement will need to be modified to accommodate that goal.

- *ASCAP's and BMI's full-work licenses include songs granted to them on that basis by members and those licensable by other agreement.* In the process of clarifying the works that ASCAP and BMI are able to continue to license under a full-work licensing requirement, the PROs may remind their members that the members made grants of rights to their PRO to license all works of which a member is a partial or complete owner and warranted that there were no other agreements that would prevent licensing on the basis described in the grant of rights. The PROs' members can work with co-writers over the next year to make a specific determination whether they want their works to continue to be available to music users under multiple PROs' licenses, a single PRO's license, or through other vehicles. Additionally, ASCAP and BMI may consider the possibility of entering into reciprocal agreements with each other confirming that each PRO may license on a non-exclusive basis songs jointly owned by members of the other PRO and confirming that in the ordinary course members will continue to be paid by their chosen PRO.
- *Full-work licensing and fractional payments are not incompatible.* Fractional payments within the context of full-work licensing benefit creators by removing impediments to commercial and artistic choice. The requirement to offer full-

work licenses need not require a departure from fractional payments both to and from ASCAP and BMI. For example, co-owners of a work who are members of different PROs may each offer non-exclusive licenses through their respective PROs while relying on payments from their own PRO in lieu of any obligation to account to one another. In this example, the user might be said to have multiple, full licenses to the same song, but to have paid only a portion of the full value for each of these licenses. A system of fractional payments, therefore, also benefits users by assuring they are not overpaying for buying multiple full-work licenses for co-owned songs.

- *Flexible fee structures may promote efficient licensing and payments.* Users who have historically obtained licenses from multiple PROs and who paid each of those PROs based in part on each organization's ownership-weighted market share should continue to do so. In the unlikely event that a user sought to depart from this practice by relying on a single PRO license as a basis to perform all co-owned works, the Division anticipates that the user would see an increase in the license fee corresponding to that portion of the works it is no longer paying for through a different PRO, as well as an additional administrative fee to cover the PRO's costs associated with the license (which may include the cost of contracting with other PROs to make payments to those PROs' members). ASCAP and BMI may offer pricing that explicitly adjusts based on the other PRO licenses obtained (or not obtained) by a particular user. (Existing licenses, in contrast, should generally not need to be re-priced.) Some songwriters have expressed concern about full-work licensing leading to lower payments or to

payments being made by a PRO of which they are not a member. However, the Division expects that in most if not all circumstances the higher price a user would face for a single license to play music it previously cleared through multiple PROs will deter users from deviating from current licensing practices and producing the results that concern songwriters.

**VIII. The consent decrees remain vital to an industry that has grown up in reliance on them. But the consent decrees are inherently limited in scope, and a more comprehensive legislative solution may be possible and preferable.**

During the course of its review, the Division considered whether the ASCAP and BMI consent decrees continue to serve the purposes for which they were put in place in 1941. After carefully considering the information obtained during its investigation, the Division has concluded that the industry has developed in the context of, and in reliance on, these consent decrees and that they therefore should remain in place. However, the Division recognizes the incongruity in the oversight over the licensing of performance rights and other copyrights in compositions and sound recordings and believes that the protections provided by the consent decrees could be addressed through a legislative solution that brings performance rights licensing under a similar regulatory umbrella as other rights. The Division encourages the development of a comprehensive legislative solution that ensures a competitive marketplace and obviates the need for continued Division oversight of the PROs.

# Exhibit 11

**“Selective Withdrawal” of New Media Rights from ASCAP and BMI**

**August 9, 2019**

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The National Music Publishers' Association ("NMPA") is pleased to submit these comments in response to the June 5, 2019 request for public comments by the Department of Justice ("DOJ") regarding its review of the consent decrees in *United States v. American Society of Composers, Authors and Publishers ("ASCAP")*, 41 Civ. 1395 (S.D.N.Y.) and *United States v. Broadcast Music, Inc. ("BMI")*, 64 Civ. 3787 (S.D.N.Y.). These comments focus on whether copyright owners should be permitted to "selectively withdraw" digital public performance rights from the repertoires of ASCAP and BMI. Presently, copyright owners may not selectively withdraw from ASCAP or BMI in light of judicial decisions interpreting the language of the consent decrees. However, there is no antitrust enforcement-based reason supporting this prohibition, which harms songwriters and music publishers; amounts to an anti-free market regulation that is inconsistent with DOJ policy, antitrust law, and copyright law; and is not necessary to serve any interests of the consent decrees.

The NMPA is the principal trade association representing the U.S. music publishing industry. Its mission is to promote and advance the interests of music's creators, and its members include companies and individuals of all catalog and revenue sizes. The NMPA believes that free, unregulated music licensing markets ensure that copyright owners reap the fair value of their intellectual property rights and have economic incentives to write more music.<sup>1</sup> Free markets also guarantee consumers the widest variety of music options.

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<sup>1</sup> See Federal Trade Commission and DOJ, *Excessive Prices* (Oct. 17, 2011) at ¶ 9, available at <https://www.justice.gov/sites/default/files/atr/legacy/2014/05/30/278823.pdf> ("[A] market pricing mechanism promotes the most efficient allocation of resources in a free market economy, and this same efficient allocation of resources is the bedrock of antitrust policy and enforcement in the U.S. . . .").



## **I. Summary of Argument.**

To the extent the ASCAP and BMI consent decrees continue to exist, they should be modified to permit copyright owners to withdraw digital rights from the ASCAP and BMI repertoires if they so choose. This modification, to which we refer herein as “selective withdrawal,” would empower copyright owners to decide whether to license their works directly to digital service providers (“DSPs”) or whether to continue to license to such music users through the performance rights organization (“PRO”) system. Increased direct licensing between music publishers and DSPs would be efficient and procompetitive, not to mention fair to music publishers and songwriters. Today, owners of musical works are hamstrung in their ability to reap the market value of their intellectual property because DSPs can take advantage of regulatory consent decree provisions never meant for them. There is no legitimate antitrust enforcement-based reason to continue to regulate music publishers and songwriters in this manner.

Selective withdrawal is consistent both with the fact that the right of public performance is not regulated as a matter of copyright law, and with antitrust law principles, which generally favor direct licensing over collective licensing. By contrast, the prohibition on selective withdrawal is an unfair de facto regulation that, without any countervailing antitrust enforcement justification, constrains the ability of copyright owners to exercise their property rights vis-à-vis DSPs. DSPs are much larger and more powerful than the music licensees who were the intended beneficiaries of the ASCAP and BMI consent decrees. Furthermore, the music publishers and songwriters who are today regulated by the prohibition on selective withdrawal were never alleged to have violated antitrust laws in the first place.

Until the recent emergence of digital streaming as the dominant form of music consumption, ASCAP and BMI licensed performance rights primarily to a diffuse array of “traditional” businesses that play music for profit: radio and TV stations, and brick-and-mortar businesses like clubs, concert venues, bars, and restaurants.<sup>2</sup> In this traditional licensing context, the PRO blanket licensing system generates procompetitive benefits for both rightsholders and licensees. Without PRO blanket licensing, most music publishers and songwriters would find it virtually impossible to enforce their rights against these types of users, and many of the users, especially small businesses, would find it virtually impossible to obtain the licenses needed to play music lawfully. The consent decrees, which were put in place in 1941, were designed to enable ASCAP and BMI to continue to issue blanket licenses to traditional users while reducing what the DOJ saw as a threat of anticompetitive harm posed by collectives that possessed significant market power and bargaining leverage.

But the marketplace dynamics that led to the PRO blanket licensing system are not the same with respect to DSPs, and copyright owners therefore should be permitted to choose whether to license their digital performance rights through a PRO or whether instead to license them directly to users. In the last 5-10 years, the economic and technological landscape of the music marketplace has changed dramatically such that today, a very large number of public performances of musical works occur via a small handful of digital streaming services. The music distribution market today is dominated by companies that are exponentially larger than the music publishing industry as a whole,

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<sup>2</sup> We refer to these businesses as “traditional” licensees to distinguish them from digital licensees.

including Google, Amazon, and Apple, each of which has the resources and the size to negotiate licenses directly with copyright owners and often does so. In unregulated musical copyright areas – such as, for example, relating to lyrics reproduction rights or synchronization – digital users routinely negotiate with copyright owners for full-catalog licenses without the involvement of a PRO-like middleman. It is only for public performance rights that, for purely historical reasons unrelated to present-day antitrust justifications, these same companies can take advantage of consent decree provisions and avoid having to negotiate in a free market. For instance, if one of these DSPs is unable to negotiate an ASCAP or BMI license at a price it deems favorable, it can bring ASCAP or BMI to “rate court,” forcing songwriters and publishers to foot ASCAP’s or BMI’s litigation costs. This is not the case in other, unregulated areas.

The players in the concentrated DSP market do not need the ASCAP and BMI consent decrees to protect them from music publishers and songwriters. They should have no entitlement to purchase performance licenses from regulated licensing collectives, as opposed to from rightsholders directly in the free market. The right of public performance is not regulated by copyright law, and selective withdrawal would allow music publishers, who were never subject to antitrust enforcement actions, to exercise that right.

We are aware that ASCAP and BMI have proposed to the DOJ that their consent decrees should be amended in ways that are unrelated to selective withdrawal. We are studying the other changes requested by ASCAP and BMI and consulting with industry stakeholders on them. These comments argue only for selective withdrawal, which is a

separate issue that should be considered by the DOJ regardless of what other actions it may take in respect of the ASCAP and BMI consent decrees.

## **II. Background.**

### **A. The public performance right.**

Every recorded song begins with a musical composition, the copyright in which is owned by a songwriter and/or music publisher.<sup>3</sup> United States law grants the owner of such a copyright several exclusive rights, including the right to perform the song publicly.<sup>4</sup> To lawfully perform a song in public – that is, to stream it online or play it on the radio, on television, or in a business establishment – one must first obtain a license from the copyright owner(s).

Importantly, the right of public performance is not regulated for musical compositions. This stands in contrast with regulation of other aspects of musical copyrights, including the right to “mechanically” reproduce copyrighted musical works.<sup>5</sup> Any discussion of selective withdrawal must account for the fact that Congress knows

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<sup>3</sup> 17 U.S.C. § 201.

<sup>4</sup> 17 U.S.C. § 106(4); see also *Broad. Music, Inc. v. Columbia Broad. Sys., Inc.*, 441 U.S. 1, 4 (1979) (“[s]ince 1897, the copyright laws have vested in the owner of a copyrighted musical composition the exclusive right to perform the work publicly for profit”) (“*BMI v. CBS*”).

<sup>5</sup> 17 U.S.C. § 115.

how to regulate copyright holders and has done so, but the right of music publishers and songwriters to publicly perform their music is not regulated.

**B. Performing rights organizations.**

For historical and practical reasons, the performance rights to most music performed in the United States are administered by PROs. PROs aggregate public performance rights in musical compositions and license them collectively to the thousands of users who want to play music in public. Songwriters typically join a carefully selected PRO early in their careers with the understanding that the PRO will license their interests in their songs, monitor usage to detect unauthorized performances, enforce rights, conduct surveys to estimate the frequency with which compositions are performed, and distribute payments.<sup>6</sup>

Collective licensing of public performance rights is not required by law. Rather, it developed as a voluntary solution to the inefficiencies and high transaction costs associated with licensing performance rights to the disparate array of traditional businesses that wish to use music.<sup>7</sup> By licensing works collectively, PROs expand the market for lawful musical performances and reduce transaction costs for both licensors and licensees. Without collective licensing, many copyright owners would have no

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<sup>6</sup> U.S. Copyright Office, *Views of the U.S. Copyright Office Concerning PRO Licensing of Jointly Owned Works* at 26 (Jan. 29, 2016), available at <https://www.copyright.gov/policy/pro-licensing.pdf> (“Songwriters and publishers have . . . indicat[ed] that they carefully choose the PRO with which they affiliate based on their perception of which organization will bring them the most benefit.” (footnote omitted)).

<sup>7</sup> *BMI v. CBS*, 441 U.S. at 5 (ASCAP was formed “because those who performed copyrighted music for profit were so numerous and widespread, and most performances so fleeting, that as a practical matter it was impossible for the many individual copyright owners to negotiate with and license the users and to detect unauthorized uses”).

serious prospect of licensing their works broadly in traditional contexts, and many users would have no realistic way to lawfully play music. As the Supreme Court stated in *BMI v. CBS*, “[a] middleman with a blanket license was an obvious necessity if the thousands of individual negotiations, a virtual impossibility, were to be avoided.”<sup>8</sup> The DOJ has observed that, “[i]n the United States, non-dramatic performance rights are the only copyrights in musical compositions that are typically licensed collectively, rather than on an individual basis.”<sup>9</sup>

### **C. ASCAP, BMI, and the consent decrees.**

ASCAP and BMI, founded in the early 20th century to promote and protect copyright owners, are the largest PROs in the United States.<sup>10</sup> Today, each represents hundreds of thousands of songwriters and millions of copyrights. They compete with two other PROs, SESAC and Global Music Rights (“GMR”), for songwriter business.

More than 75 years ago, the DOJ sued ASCAP and BMI, alleging that their blanket licenses were anticompetitive restraints of trade.<sup>11</sup> At the time, the radio industry was in

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<sup>8</sup> *Id.* at 20; see also *ASCAP v. Showtime/The Movie Channel, Inc.*, 912 F.2d 563, 592 (2d Cir. 1990) (noting the “major benefit” of the blanket license); U.S. Copyright Office, *Copyright and the Music Marketplace* (Feb. 2015) at 170, available at <https://copyright.gov/docs/musiclicensingstudy/copyright-and-the-music-marketplace.pdf> (“Throughout this study, the Office has heard consistent praise for the efficiencies of blanket licensing[.]”).

<sup>9</sup> Memorandum of the United States in Support of the Joint Motion to Enter Second Amended Final Judgment, *United States v. ASCAP*, No. 41-cv-1395, at 6 (Sept. 4, 2000).

<sup>10</sup> See generally *BMI v. CBS*, 441 U.S. at 4-5, 10-12 (describing history of ASCAP and BMI).

<sup>11</sup> *Id.*

its infancy, and broadcasters and other music users were believed to be small and lacking in bargaining power or the ability to negotiate directly with more powerful PROs. In 1941, the DOJ's enforcement actions were resolved via perpetual consent decrees.<sup>12</sup> The decrees, which were intended to prevent ASCAP and BMI from abusing their market power notwithstanding the significant procompetitive benefits of blanket licensing, are still in effect today. In their 78-year histories, each decree has been modified only twice. ASCAP's decree was last amended in 2001, and BMI's was last amended in 1994.<sup>13</sup> Because the decrees do not contain provisions providing for "sunset" over time or requiring regular review, there is no guarantee they will ever be changed, even though the music distribution and consumption marketplaces have changed drastically in the last 5-10 years (let alone since 1941).

By the terms of the consent decrees, ASCAP and BMI are required to provide a public performance license to anyone who requests one, and licensees may (and often do) begin using music before royalty rates are negotiated.<sup>14</sup> Although licensees may negotiate performance licenses directly with copyright owners in a free market, they normally take the more favorable, consent decree-regulated licenses from ASCAP and

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<sup>12</sup> *Id.* at 11-12 & n.20 (discussing 1941 ASCAP and BMI consent decrees).

<sup>13</sup> See Second Amended Final Judgment, *United States v. ASCAP*, No. 41-cv-1395 (S.D.N.Y. June 11, 2001) ("AFJ2"); Final Judgment, *United States v. BMI*, No. 64-cv-3787 (S.D.N.Y. Nov. 18, 1994).

<sup>14</sup> *E.g.*, AFJ2 § VI (requirement that ASCAP "grant to any music user making a written request therefor a non-exclusive license to perform all of the works in the ASCAP repertory"); § IX.E (while a license fee is being determined, "the music user shall have the right to perform any, some, or all of the works in the ASCAP repertory to which the application pertains").



BMI. If a user cannot negotiate a royalty rate with ASCAP or BMI, the decrees provide that the user may sue in United States District Court for a judicial determination of the license price.<sup>15</sup> When ASCAP or BMI is brought to “rate court,” its songwriters and publisher members bear the costs. Prospective licensees can perform music while the proceedings are pending, and they need not set money aside for the use of music before a rate has been determined.<sup>16</sup>

**D. Selective withdrawal is impermissible today.**

Beginning in 2013, certain music publishers sought to selectively withdraw from ASCAP and BMI the right to license their compositions as “New Media Transmissions” to “New Media Services,” while continuing to allow ASCAP and BMI to license such compositions to traditional public performance licensees. Broadly speaking, these publishers wanted to reclaim their right to license their works directly to digital distributors, while allowing ASCAP and BMI to retain the right to license to traditional users.<sup>17</sup>

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<sup>15</sup> *E.g.*, AFJ2 § IX. This is so even though courts routinely acknowledge that they are poorly equipped to make regulatory pricing determinations. *Pac. Bell Tel. Co. v. Linkline Commc’ns, Inc.*, 555 U.S. 438, 452 (2009) (“Courts are ill suited ‘to act as central planners, identifying the proper price, quantity, and other terms of dealing.’” (citation omitted)); *Town of Concord, Mass. v. Boston Edison Co.*, 915 F.2d 17, 25 (1st Cir. 1990) (Breyer, C.J.) (“How can the court determine this price without . . . acting like a rate-setting regulatory agency, the rate-setting proceedings of which often last for several years? . . . . [A]ntitrust courts normally avoid direct price administration . . . .”).

<sup>16</sup> *E.g.*, AFJ2 § IX.E.

<sup>17</sup> In April 2011, ASCAP amended its Compendium Rules to provide that “[a]ny ASCAP Member may modify the grant of rights made to ASCAP . . . by withdrawing from ASCAP the right to license the right of public performance of certain New [M]edia Transmissions.” See ASCAP Compendium Rule 1.12.1 (2014), available at <https://www.ascap.com/~media/files/pdf/members/governing-documents/compendium-of-ascap-rules-regulations.pdf>. “New Media Transmissions” were defined as including, among other things, digital audio transmissions. *Id.* at Rule 1.12.9. BMI published a



In rate court proceedings later that year, the federal judges responsible for overseeing the ASCAP and BMI consent decrees were asked to decide whether the selective withdrawals were consistent with the consent decrees. Both judges answered that question in the negative.

With respect to ASCAP, Judge Cote ruled that “musical compositions remain in the ASCAP repertory so long as ASCAP retains any licensing rights for them.”<sup>18</sup> Judge Cote therefore concluded that copyright owners’ purported withdrawals of digital rights from ASCAP “d[id] not affect the scope of the ASCAP repertory” subject to licensing by digital services.<sup>19</sup> Selective withdrawals were ineffective as a matter of law, and ASCAP was required to license digital rights in all the works in its repertory to anyone requesting such a license.<sup>20</sup>

Judge Stanton interpreted the BMI consent decree to mean that when music publishers withdrew their digital rights, BMI could no longer “deal in or license those compositions to anyone.”<sup>21</sup> Although the music publishers may have believed themselves

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“Digital Rights Withdrawal Addendum” that defines selective withdrawal in a similar manner.

<sup>18</sup> *Pandora Media, Inc. v. ASCAP*, No. 12-cv-8035, 2013 U.S. Dist. LEXIS 133133, at \*20 (S.D.N.Y. Sept. 17, 2013) (internal quotation marks omitted) (“*Pandora v. ASCAP*”).

<sup>19</sup> *Id.* at \*35-36.

<sup>20</sup> *Id.*

<sup>21</sup> *BMI v. Pandora Media, Inc.*, No. 13-cv-4037, 2013 U.S. Dist. LEXIS 178414, at \*11 (S.D.N.Y. Dec. 19, 2013)

to be selectively withdrawing digital rights, they in fact withdrew such compositions from BMI's repertory for all purposes.<sup>22</sup>

These decisions were based on principles of consent decree interpretation, not antitrust or copyright law, and the NMPA takes no position on whether Judges Cote and Stanton interpreted the decrees correctly. Regardless, as argued herein, prohibiting selective withdrawal is wrong and unfair as a matter of antitrust and copyright law and public policy, and the decrees should be modified to expressly permit selective withdrawal.

**III. The consent decrees should be amended to permit selective withdrawal.**

**A. The prohibition on selective withdrawal improperly regulates copyright owners, who were never alleged to have violated antitrust law, while enlarging ASCAP and BMI.**

The consent decrees' prohibition on selective withdrawal is a regulation on copyright owners themselves, which lacks any countervailing justification needed to address any anticompetitive threat posed by ASCAP and BMI. The prohibition hinders the ability of music publishers and songwriters to license their public performance rights in a free market and reap the fair value of such rights, but it does not stop or prevent anticompetitive practices by ASCAP and/or BMI. If anything, the prohibition on selective withdrawal enlarges ASCAP and BMI by expanding the scope of rights in their repertories.

Regulating copyright owners in this manner is improper and is inconsistent with the fact that antitrust law is an enforcement mechanism, not a regulatory one.<sup>23</sup> The

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<sup>22</sup> *Id.* at \*15.

<sup>23</sup> See, e.g., Assistant Attorney General Makan Delrahim, Remarks at the Am. Bar Ass'n's Antitrust Fall Forum (Nov. 16, 2017), *available at* <https://www.justice.gov/>

antitrust lawsuits that led to the consent decrees were brought against ASCAP and BMI, not any individual music publisher or songwriter. Therefore, the consent decrees should serve, if anything, as a check on ASCAP and BMI, not as regulations on music publishers, songwriters, and others who were not alleged to have violated the antitrust laws. A consent decree is a contract between the parties to a lawsuit, but music publishers and songwriters were not defendants in the suits against ASCAP and BMI that gave rise to the decrees, they are not parties to the consent decrees, and they should not be regulated by those decrees.<sup>24</sup> To the NMPA's knowledge, the DOJ has never brought any antitrust enforcement action against any music publisher or songwriter relating to public performance rights licensing.

Because the prohibition on selective withdrawal is a regulation on music publishers and songwriters who were never alleged to have violated antitrust law, it is contrary to DOJ policy. The DOJ Antitrust Division Manual states that consent decrees are an appropriate means of resolving enforcement actions to the extent that they "(1) stop . . . illegal practices . . . , (2) prevent their renewal, and (3) restore competition to the state that would have existed had the violation not occurred."<sup>25</sup> The prohibition on selective withdrawal runs afoul of these guidelines. It does not curtail potential harm to competition

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opa/speech/assistant-attorney-general-makan-delrahim-delivers-keynote-address-american-bar ("[A]ntitrust law is law enforcement, it's not regulation. At its best, it supports reducing regulation . . . ."); *Excessive Prices* at ¶ 9 ("market pricing . . . is the bedrock of antitrust policy and enforcement in the U.S.").

<sup>24</sup> *Pandora v. ASCAP* at \*11 ("[c]onsent decrees 'reflect a contract between the parties (as well as a judicial pronouncement), and ordinary rules of contract interpretation are generally applicable'" (quoting *Doe v. Pataki*, 481 F.3d 69, 75 (2d Cir. 2007))).

<sup>25</sup> Department of Justice, *Antitrust Division Manual* at IV-50 (5th Ed.).

by ASCAP and BMI; it only serves to constrain the behavior of rightsholders who were not alleged to have committed “illegal practices” or other “violation[s]” in the first place. Selective withdrawal should be permitted for this reason alone.

**B. Selective withdrawal encourages procompetitive direct licensing while preserving the core efficiencies of the PRO blanket licensing system.**

Because of the prohibition on selective withdrawal, music publishers today face an unfair choice when it comes to licensing digital performance rights. On one hand, a copyright owner can withdraw a musical composition from ASCAP or BMI entirely and lose the ability to license such composition through the blanket licenses altogether. This option severely harms the copyright owner’s ability to license to traditional licensees at all. On the other, a copyright owner can choose to license all performance rights through a PRO, in which case DSPs can take advantage of World War II-era consent decree provisions never intended for them, such as the provisions concerning rate court proceedings, which the DSPs can use to drain the resources of music publishers and songwriters to obtain better deal terms, all the while using music while such proceedings are pending.

As a practical matter, music publishers did not withdraw from ASCAP and BMI after the 2013 decisions prohibiting selective withdrawal, and it is not clear if they would do so if the prohibition were to continue. However, forcing music publishers into this unfair dilemma is inconsistent with both antitrust and copyright law, each of which favors selective withdrawal. Selective withdrawal both encourages direct licensing where it is efficient to do so (i.e., in the digital streaming market) and maintains the core benefit of the PRO system by continuing to allow ASCAP and BMI to provide performance licenses

to traditional music users, many of which would have no realistic way to play music lawfully without PRO blanket licenses.

**1. Selective withdrawal encourages direct licensing of digital performance rights, which is procompetitive and efficient.**

If rightsholders were permitted to selectively withdrawal digital rights from ASCAP and BMI, the NMPA believes that there would be an increase in direct licensing between music publishers and DSPs. Direct licensing of public performance rights is generally procompetitive. As the DOJ explained in 2010, “[d]irect licensing between rights holders and users establishes the most effective market-based constraint on BMI’s pricing because it places an upper limit on the price that BMI can charge for the blanket license.”<sup>26</sup> Today, the ASCAP and BMI decrees ensure that publishers can license directly precisely because direct licensing is a competitive check on the market power of ASCAP and BMI.<sup>27</sup>

Direct licensing between music publishers and DSPs would be efficient. The PRO system was set up in the early 20th century to provide a solution to the practical challenges posed by a licensee market comprised of many thousands of geographically disparate music users. But the DSP market bears no resemblance to that market, and no such practical challenges exist with respect to direct licensing.

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<sup>26</sup> See Memorandum of the United States on Decree Construction Issues, No. 1:08-cv-216, Dkt. No. 24, at 2 (S.D.N.Y. Apr. 13, 2010) *available at* <https://www.justice.gov/atr/case-document/file/489856/download>.

<sup>27</sup> See, e.g., *CBS v. ASCAP*, 620 F.2d 930, 935-36 (2d Cir. 1980) (“[T]he opportunity to acquire a pool of rights does not restrain trade if an alternative opportunity to acquire individual rights is fully available.”); *United States v. ASCAP (In re Salem Media of Cal., Inc.)*, 902 F. Supp. 411, 422 (S.D.N.Y. 1995) (“The availability of source or direct licensing has been recognized as a counterweight to ASCAP’s bargaining power.”).

Streaming dominates the music marketplace today, accounting for 75 percent of music industry revenues as reported by the Recording Industry Association of America.<sup>28</sup> The vast majority of music streamed in the United States is consumed via one of five very large companies – Apple, Amazon, Google/YouTube, Spotify, and Pandora – that individually and collectively dwarf not only every individual music publisher, but the music publishing and songwriting industries as a whole. By some estimates, these five DSPs account for more than 90 percent of music streamed in the United States today.<sup>29</sup> They bring in hundreds of billions in yearly revenue and have a combined market capitalization

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<sup>28</sup> Recording Indus. Ass'n of Am., *Mid-Year 2018 RIAA Music Revenues Report*, available at <https://www.riaa.com/wp-content/uploads/2018/09/RIAA-Mid-Year-2018-Revenue-Report.pdf>. Although the NMPA does not maintain data regarding the extent to which streaming accounts for music publishing revenues, the figure is likely less than 75 percent. See Ed Christman, *NMPA Announces 11.8% Member Revenue Growth to \$3.3B at Annual Meeting* (June 12, 2019), available at <https://www.billboard.com/articles/business/8515757/nmpa-member-revenue-growth-david-israelite-annual-meeting>. The NMPA estimates that approximately 55 percent of music publishing revenues in 2018 were attributable to performance royalties, about 33 percent of which were attributable to digital sources. *Id.* However, streaming also generates non-performance royalties, including mechanical royalties.

<sup>29</sup> *2017 Streaming Price Bible! Spotify per Stream Rates Drop 9%, Apple Music Gains Marketshare of Both Plays and Overall Revenue*, The Trichordist (Jan. 15, 2018), available at <https://thetrichordist.com/2018/01/15/2017-streaming-price-bible-spotify-per-stream-rates-drop-9-apple-music-gains-marketshare-of-both-plays-and-overall-revenue/>; see also Russ Crupnick, *While World Awaits iPhone 8, Apple Music Gains Traction with iOS Users*, Music Watch (Sept. 6, 2017), available at <https://www.musicwatchinc.com/blog/while-world-awaits-iphone-8-apple-music-gains-traction-with-ios-users/>; *On the Rise: Steady Growth for Podcasts, Rapid Growth for Smart Speakers*, Edison Research (Mar. 8, 2018), available at <https://www.edisonresearch.com/infinite-dial-2018/>.



that exceeds \$2 trillion.<sup>30</sup> By contrast, the *entire music publishing and songwriting industries* brought in revenues of \$3.33 billion in 2018.<sup>31</sup>

There can be no serious dispute that, unlike the traditional public performance licensees that have been served for decades by ASCAP and BMI, the DSP market is highly concentrated, and each DSP has significant bargaining power and the resources to procure direct licenses from a broad range of rightsholders, as each does today in other unregulated areas. All in all, the drastic shift in market power as between music's creators and its licensees means that certain risks of anticompetitive harm that may have justified the consent decrees in 1941 are not present in 2018 with respect to DSPs, and that the equities squarely favor permitting rightsholders to selectively withdraw their digital rights.

PROs do not generate the same efficiencies with respect to enforcement and monitoring functions in the digital world. The collective enforcement and monitoring services performed by PROs are critical with respect to traditional licensees, as individual music publishers would have little prospect of enforcing their rights against the thousands of businesses across the United States that play music. With respect to digital performance rights, however, a music publisher can enforce its own rights simply by logging in and searching for uses of its works. In 2000, the DOJ foresaw technological developments that would improve the efficiency of direct performance rights licensing and

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<sup>30</sup> In 2018, per their annual reports filed with the SEC, Apple's revenues exceeded \$265 billion, Amazon's \$232 billion, Google's \$136 billion, and Spotify's \$5 billion. These companies are presently valued at approximately \$905 billion (Apple), \$895 billion (Amazon), \$820 billion (Google), and \$28 billion (Spotify). Earlier this year Sirius XM completed its \$3.5 billion acquisition of Pandora.

<sup>31</sup> This estimate is based on revenue figures reported to the NMPA by its members, which include every commercially significant music publisher in the United States. See Christman, *supra* n. 28.

obviate the need for collective licensing. In a statement that predated online streaming and the inception of Spotify, YouTube, and so forth, it wrote:

Technologies that allow rights holders and music users to easily and inexpensively monitor and track music usage are evolving rapidly. Eventually, as it becomes less and less costly to identify and report performances of compositions and to obtain licenses for individual works or collections of works, these technologies may erode many of the justifications for collective licensing of performance rights by PROs.<sup>32</sup>

Technologies developed in the intervening 19 years do, in fact, permit rightsholders to engage in efficient, direct licensing with DSPs. The consent decrees should be tailored to reflect the current state of technology by removing the prohibition on selective withdrawal.

If there were any doubt that direct public performance licensing between music publishers and DSPs would be efficient, the fact that there exist today well-functioning, direct licensing marketplaces for other, unregulated aspects of copyrights removes it. Today, music publishers routinely license their unregulated rights – such as the rights to synchronize music with video, reproduce lyrics, and produce sheet music – to DSPs on a full-catalog basis, without the involvement of a PRO-like middleman.<sup>33</sup> To be certain, these include the same DSPs – Google/YouTube, Amazon, Apple, Spotify, and Pandora

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<sup>32</sup> Memorandum of the United States in Support of the Joint Motion to Enter Second Amended Final Judgment, *supra* note 9, at 9 n.10.

<sup>33</sup> See, e.g., *Facebook and Sony/ATV Music Publishing Announce Licensing Agreement*, Variety (Jan. 8, 2018), available at <https://variety.com/2018/biz/news/facebook-and-sony-atv-music-publishing-announce-licensing-agreement-1202656832/>; Roy Trakin, *Rap Genius Signs Deal with Warner/Chappell*, The Hollywood Reporter (July 7, 2014), available at <https://www.hollywoodreporter.com/news/rap-genius-signs-deal-warner-717005>; Adi Robinson, *YouTube Signs Music Licensing Deal with BMG and Eight Other Publishers*, (Jun. 6, 2012), available at <https://www.theverge.com/2012/6/6/3067636/youtube-music-licensing-deal-bmg>.



– that take advantage of the consent decrees in securing rights from ASCAP and BMI in the performance rights space. In the experience of NMPA and its members, direct, free market licensing works well in markets for unregulated aspects of music copyrights and does not pose antitrust concerns. There is no reason to believe that free market licensing of the right of public performance for digital uses would be any different.

Similarly, in the market for recorded music, record labels negotiate licenses directly and in a free market with interactive streaming services. If antitrust consent decrees are not required to regulate the licensing of rights by record labels to DSPs, they likewise should not be required to regulate licensing between music publishers and DSPs. In the United States today, record companies and artists make exponentially more than music publishers and songwriters.<sup>34</sup> The NMPA believes that this disparity is caused by the burdensome regulations, including the prohibition on selective withdrawal, that music publishers and songwriters, but not recording companies and artists, face in the United States. The NMPA believes that if there is to be any disparity between artist pay and songwriter pay, that result should be dictated by the free market and not artificial regulations.

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<sup>34</sup> About 12 cents of every dollar of Spotify's revenues go to music publishers and songwriters via mechanical and performance royalties, while about 59 cents go to sound recording owners. See Jordan Bromley, *How Does Music Streaming Generate Money?* (Oct. 12, 2016), available at <https://www.manatt.com/Insights/News/2016/How-Does-Music-Streaming-Generate-Money>. The breakdown is similar with respect to Apple Music, with about 14 cents going to music publishers and songwriters, and 58 cents going to sound recording owners. *Id.* In contrast with the music publishing industry, which, per NMPA data, brought in approximately \$2.9 billion in revenue in 2017, the recorded music industry brought in \$8.7 billion that year. See Joshua Friedlander, *News and Notes on 2017 RIAA Revenue Statistics*, <http://www.riaa.com/wp-content/uploads/2018/03/RIAA-Year-End-2017-News-and-Notes.pdf>.

Understandably, DSPs would like to be able to continue to rely on the consent decrees, presumably because they believe that free market negotiations will lead to higher prices for digital performance rights. But the prospect of prices negotiated in a free market that properly reflect supply and demand conditions is not a reason to retain the prohibition on selective withdrawal. The antitrust laws exist to protect free markets, not create artificial price controls or otherwise regulate them. As the previous Antitrust AAG, Bill Baer, said: “We don’t use antitrust enforcement to regulate royalties. That notion of price controls interferes with free market competition and blunts incentives to innovate.”<sup>35</sup> Indeed, the DOJ should approach the question of selective withdrawal from a law enforcement perspective. Unless there is reason to believe that the DOJ could obtain a judgment today that would, as a matter of antitrust law, force copyright owners to license their public performance rights to digital services via ASCAP and BMI – and the NMPA believes that there is none – the prohibition on selective withdrawal should be lifted.<sup>36</sup>

Similarly, the DOJ should reject arguments that the prohibition on selective withdrawal should remain in place because DSPs have built a reliance interest on the ASCAP and BMI consent decrees. The consent decrees were not and could not have

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<sup>35</sup> Assistant Attorney General William Baer, Reflections on the Role of Competition Agencies When Patents Become Essential, Remarks at the 19th Annual International Bar Association Competition Conference at 10 (Sept. 11, 2015), *available at* <http://www.justice.gov/opa/file/782356/download>.

<sup>36</sup> See generally Douglas H. Ginsburg & Joshua D. Wright, *Antitrust Settlements: The Culture of Consent*, William E. Kovacic: An Antitrust Tribute – Liber Amicorum (Vol. 1) (2013) (discussing “regulatory” consent decrees that “place the agency in the position of monitoring or supervising the firm’s compliance with remedial obligations or imposing conditions that extend beyond what the agency would likely be able to obtain after successful litigation”) *available at* [https://www.law.gmu.edu/assets/files/publications/working\\_papers/1318AntitrustSettlements.pdf](https://www.law.gmu.edu/assets/files/publications/working_papers/1318AntitrustSettlements.pdf).

been written with DSPs in mind. The consent decrees came into existence in an entirely different music marketplace, and DSPs have existed for only small fraction of their history. Although DSPs today are able to take advantage of provisions from the analog radio era, this is purely a fortuity: it has nothing to do with present-day marketplace dynamics or a need for antitrust policing in the digital performance rights space, and is not a reason to leave the prohibition in place.

To the extent that a music publisher or songwriter wishes to selectively withdraw its digital rights and license such rights directly to DSPs, public policy, and antitrust law specifically, supports that course of action.<sup>37</sup> To be certain, copyright owners who do not wish to license directly should not be required to withdraw their digital rights from ASCAP and BMI. But regulations should not prohibit copyright owners' selective withdrawal and allow digital services to exploit the ASCAP and BMI consent decrees, which were developed in the context of an entirely different market, to further their own financial and competitive interests.

## **2. Selective withdrawal preserves the procompetitive benefits of blanket licensing.**

Finally, selective withdrawal maintains the core procompetitive benefit of the PRO system: the collective licensing of public performance rights to traditional licensees. PROs came into existence to collectivize copyright licensing and enforcement functions

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<sup>37</sup> Selective withdrawal does not mean that a copyright owner can discriminate between digital licensees. For example, a copyright owner could not withdraw its digital rights from ASCAP for purposes of licensing to Pandora, but not withdraw such rights with respect to Spotify. Selective withdrawal means the withdrawal of a class of rights, and that such rights would have to be licensed directly by any licensee seeking a license for such class.

so that rightsholders could reach a vast assortment of radio stations, clubs, bars, concert venues, and so forth while minimizing transaction costs. PRO blanket licensing remains an efficient way to license public performance rights to traditional licensees; selective withdrawal would not disturb ASCAP and BMI's continuing ability to serve what has been their core function since the early twentieth century, nor would it affect the ability of traditional businesses to procure ASCAP and BMI blanket licenses.

By contrast, if music publishers and songwriters were forced to withdraw their works outright from ASCAP and BMI to guarantee themselves the ability to license digital rights directly to DSPs, these benefits would be lost. Complete withdrawal from ASCAP and BMI would hurt music publishers and songwriters, who would no longer realistically be able to issue licenses to the full scope of traditional licensees. Further, complete withdrawal would also cause substantial harm to large numbers of traditional licensees who have relied on PRO blanket licensing for decades and would no longer be able to freely and lawfully play music without incurring substantial transaction costs.

#### **IV. Conclusion.**

We thank the DOJ for thoughtfully revisiting these issues, which are of great importance to the NMPA and its members. For the reasons stated herein, the DOJ should seek to modify the ASCAP and BMI consent decrees to permit selective withdrawal. We would welcome the opportunity to discuss these issues in greater depth in a follow-up meeting with you.

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# **Exhibits 12-92**

**Restricted**

**Omitted from Public Version**

# Exhibit 93



975 F Street, NW  
Suite 375  
Washington, DC 20004  
Tel: 202-393-NMPA (6672)

August 27, 2019

Stephen Worth, Esq.  
Associate General Counsel, Digital Music  
Amazon  
2111 7th Ave  
Seattle, WA 98121

Re: Royalty Accounting for Prime Music

Dear Stephen:

A number of our music publisher members have expressed concern regarding the manner in which Amazon appears to be calculating royalties under the Section 115 statutory mechanical license for its Prime Music offering. These members have asked that, prior to their taking further action, we reach out to you to request detailed information regarding your method of calculation, as it does not on its face appear to them (or to us) to comply with Section 115 and its implementing regulations.

As you are aware, NMPA, on behalf of its members and all other owners of rights in musical works, sought and obtained modifications to the rates and terms for interactive streaming in the most recent *Phonorecords III* proceeding, and the revised rates and terms are now in effect. These modifications included changes in the manner in which a digital service is to calculate royalties for a bundled subscription offering (“BSO”).

Prime Music is a BSO under the regulations, as it is “a Subscription Offering . . . that is made available to End Users with one or more other products or services... 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 . . . .” 37 CFR 385.2.

For BSOs, the service revenue prong is calculated as the lesser of total revenues for the bundle and the standalone price for the BSO (or of the most closely comparable offering(s)):

[T]he revenue from End Users deemed to be recognized by the Service for the [BSO]... shall be the lesser of the revenue recognized from End Users for the bundle and the aggregate standalone published prices for End Users for each of the component(s) of the bundle that are Licensed Activities; provided that, if there is no standalone published price for a component of the bundle, then the Service shall use the average standalone published price for End Users for the most closely comparable product or service in the U.S. or, if more than one comparable exists, the average of standalone prices for comparables. 37 CFR 385.2.



Here, the standalone price of Prime Music (or the most closely comparable offering(s)) is, we would assume, less than total Prime revenues, and there is no standalone published price for Prime Music, which cannot be purchased separately from Prime. Thus, the revenue prong for Prime Music must be “the average standalone published price for End Users for the most closely comparable product or service in the U.S. or, if more than one comparable exists, the average of standalone prices for comparables.”

It is our understanding, based on non-confidential royalty accounting statements delivered by Amazon to statutory compulsory licensors for the use of their musical works on the Prime Music Service, that Amazon is calculating service revenue using a \$2.99 comparable price. We are not aware of any offering anywhere in the marketplace priced at \$2.99, let alone any offering that can be said to be “the most closely comparable” to Prime Music. We therefore request that you provide detailed information as to how you are calculating Service Revenue for the Prime Music BSO, and what is the basis for such calculations under the controlling regulations, including:

- a list of all offerings that exist in the marketplace that are priced at \$2.99/month (or priced at any other rate that Amazon used in calculating Service Revenue for Prime Music);
- whether you used an “average of standalone prices for comparables” and, if so, identify which offerings were used in your average along with their standalone prices;
- the nature of all offerings you used as a comparable (including in any average calculated), including whether the offering is interactive or non-interactive, whether it offers a full catalog or a limited catalog (and, if limited, how is it limited), whether it is a paid subscription offering or an ad-supported offering, etc.;
- the basis for your determination that such offering(s) are “the most closely comparable” to Prime Music.

Further, based on our review of the royalty accounting statements referenced above, it appears that Amazon is not using a mechanical floor prong in its calculations of Prime Music royalties. In connection with instituting the above bundle revenue provision in the Amended Order Granting in Part and Denying in Part Motions for Rehearing dated January 14, 2019 (“Rehearing Order”), the judges explained a connected change to the mechanical floor for BSOs:

As a consequence of the Judges’ adoption of the foregoing approach, the Judges will also dispense with the separate royalty floor for [BSOs] [formerly 25 cents per user]. Because the applicable revenue will be the same as though the bundle were a standalone music offering, the royalty floor will be the royalty floor that would apply to the music component of the bundle if it were offered on a standalone basis. (Rehearing Order at 19)

37 CFR 385.22 thus provides:



In the case of a [BSO], the royalty floor... is the royalty floor that would apply to the music component of the bundle if it were offered on a standalone basis...

Prime Music is available from portable devices, and thus, on a standalone basis, it falls under the Standalone portable Subscription Offering mechanical floor (the "Portable Floor"), which is 50 cents per subscriber per month. (37 CFR 385.22(a)(3)). Yet, Amazon does not appear to have used the Portable Floor in performing its royalty calculations in its Prime Music accountings. Please let us know if this was purely an oversight. If it is not, then please explain Amazon's basis for omitting the Portable Floor in its Prime Music accounting.

We remind that 37 CFR 210.16 requires that, for offerings subject to a percentage rate royalty structure, the monthly statement of account "include a detailed and step-by-step accounting of the calculation of royalties under [the applicable provisions of part 385 of title 37], sufficient to allow the copyright owner to assess the manner in which the licensee determined the royalty owed and the accuracy of the royalty calculations . . . ." As discussed herein, it is our understanding that Amazon's current accountings under this regulation do not satisfy its requirements, as the monthly statements do not allow copyright owners to assess "the manner in which Amazon determined the royalty owed and the accuracy of the royalty calculations." We further remind that the monthly statements under the compulsory license be certified under oath that calculations are "true, complete, and correct" to the best of knowledge, information, and belief, and are made in good faith.

We believe that it is important that all digital services calculate statutory mechanical royalties not only accurately and in accordance with the regulations, but also in a transparent manner and in a manner that is uniformly applied to all copyright owners whose works are licensed on a compulsory basis. We trust that Amazon shares this belief, and thus will have no issue with providing the information requested in this letter, which information will provide copyright owners with the requisite transparency into Amazon's Prime Music royalty calculations. We also trust that Amazon will correct any errors in its calculations or methodology that are identified and will promptly reimburse copyright owners if any underpayments have been made to date.

We respectfully request that you provide the information requested herein by September 9, 2019.

Very truly yours,



Danielle M. Aguirre  
Executive Vice President & General Counsel  
National Music Publishers' Association

cc: David Israelite, President & CEO, National Music Publishers' Association  
NMPA Board of Directors

# **Exhibits 94-108**

**Restricted**

**Omitted from Public Version**

# Exhibit 109

Exhibit Intentionally Omitted

# Exhibit 110

Exhibit Intentionally Omitted

# Exhibit 111

Exhibit Intentionally Omitted

# Exhibit 112

Exhibit Intentionally Omitted

# Exhibit 113

Exhibit Intentionally Omitted

# **Exhibits 114-124**

Restricted

Omitted from Public Version



# Exhibit 125

Exhibit Intentionally Omitted

# **Exhibits 126-134**

Restricted

Omitted from Public Version

# Exhibit 135

Exhibit Intentionally Omitted

# **Exhibits 136-204**

**Restricted**

**Omitted from Public Version**

# Exhibit F

# Exhibit F.2

# Exhibit 205

*Restricted – Subject to Protective Order in  
Docket No. 21-CRB-0001-PR (2023-2027)  
(Phonorecords IV)*

Omitted from Public Version

# Exhibit G



# Exhibit G.2

# Exhibit 206

*Restricted – Subject to Protective Order in  
Docket No. 21-CRB-0001-PR (2023-2027)  
(Phonorecords IV)*

Omitted from Public Version

# Exhibit H

**Before the  
UNITED STATES COPYRIGHT ROYALTY BOARD  
Washington, D.C.**

**In the Matter of:**

**DETERMINATION OF RATES  
AND TERMS FOR MAKING AND  
DISTRIBUTING PHONORECORDS  
(*Phonorecords IV*)**

**Docket No. 21-CRB-0001-PR  
(2023-2027)**

**DECLARATION AND CERTIFICATION OF JOSHUA D. BRANSON  
REGARDING RESTRICTED MATERIALS**

**(On behalf of Amazon.com Services LLC)**

1. I am counsel for Amazon.com Services LLC (“Amazon”) in the above-captioned case. I respectfully submit this declaration and certification pursuant to the terms of the Protective Order dated July 20, 2021 (“Protective Order”). I am authorized by Amazon to submit this declaration on Amazon’s behalf.

2. I am familiar with Amazon’s Amended Written Direct Statement, which includes a cover page briefly summarizing the new material; Amended Proposed Rates and Terms; Amended Index of Exhibits; the Amended Written Direct Testimonies of Kajal Gayadien and Leslie M. Marx, Ph.D.; amended exhibits; and Exhibits 205 and 206. I have also reviewed the definitions and terms provided in the Protective Order. After consultation with my client, I have determined to the best of my knowledge, information, and belief that Amazon’s Written Direct Statement contains information that Amazon has designated as “confidential information” as defined by the Protective Order (“Amazon Protected Material”).

3. Such Amazon Protected Material includes, but is not limited to, highly confidential internal business information, financial projections, financial data, and competitive strategies that are proprietary, not available to the public, and commercially sensitive.

4. If this highly confidential business and financial information were to become public, it would place Amazon at a commercial and competitive disadvantage, unfairly advantage other parties to the detriment of Amazon, and jeopardize its business interests.

5. In addition to the Amazon Protected Material, Amazon is bound under the Protective Order to treat as “Restricted” information designated “Confidential Information” by other participants in the proceedings. The Amended Written Direct Statement also contains information that the Copyright Owners have designated as “Confidential Information.” Amazon is treating that information as “Restricted” and redacting such information in accordance with the terms of the Protective Order. Amazon reserves all rights and arguments as to whether such information is, in fact, “Confidential Information.”

6. The highly confidential business and financial information described in the paragraphs above must be treated as Restricted Protected Material in order to prevent business and competitive harm that would result from the disclosure of such information while, at the same time, enabling Amazon to provide the Copyright Royalty Judges with the most complete record possible on which to base their determination in this proceeding.

Pursuant to 28 U.S.C. § 1746, I hereby declare under the penalty of perjury that, to the best of my knowledge, information, and belief, the foregoing is true and correct.

Dated: March 8, 2022  
Washington, D.C.

/s/ Joshua D. Branson

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*Counsel for Amazon.com Services LLC*

# Proof of Delivery

I hereby certify that on Tuesday, March 08, 2022, I provided a true and correct copy of the Amazon's Amended Written Direct Statement (PUBLIC) to the following:

Google LLC, represented by Gary R Greenstein, served via ESERVICE at  
ggreenstein@wsgr.com

Apple Inc., represented by Mary C Mazzello, served via ESERVICE at  
mary.mazzello@kirkland.com

Johnson, George, represented by George D Johnson, served via ESERVICE at  
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Spotify USA Inc., represented by Joseph Wetzel, served via ESERVICE at  
joe.wetzel@lw.com

Powell, David, represented by David Powell, served via ESERVICE at  
davidpowell008@yahoo.com

Joint Record Company Participants, represented by Susan Chertkof, served via ESERVICE  
at susan.chertkof@riaa.com

Copyright Owners, represented by Benjamin K Semel, served via ESERVICE at  
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Pandora Media, LLC, represented by Benjamin E. Marks, served via ESERVICE at  
benjamin.marks@weil.com

Zisk, Brian, represented by Brian Zisk, served via ESERVICE at brianzisk@gmail.com

Signed: /s/ Joshua D Branson