

Before the
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LIBRARY OF CONGRESS
Washington, D.C.

In the Matter of:

Digital Performance Right in Sound
Recordings and Ephemeral Recordings
For a New Subscription Service

DOCKET NO. 2005-5 CRB DTNSRA

DIRECT TESTIMONY OF DR. TASNEEM CHIPTY
(ON BEHALF OF SIRIUS SATELLITE RADIO INC.
AND XM SATELLITE RADIO INC.)

I. Introduction and Qualifications

1. My name is Tasneem Chipty. I am a vice president of CRA International ("CRA"), an economic and business consulting firm headquartered in Boston, Massachusetts. My fields of specialization within economics are industrial organization and econometrics. I have served on the faculties of The Ohio State University, Brandeis University, and the Massachusetts Institute of Technology, where I taught courses in microeconomics, industrial organization, antitrust and regulation policy, and econometrics. I have published several articles in peer-reviewed professional journals, and have made numerous invited presentations to various government and academic institutions. I received my Ph.D. in Economics from the Massachusetts Institute of Technology in 1993 and my Bachelor of Arts degree in Economics and Mathematics from Wellesley College in 1989.

2. In the course of my academic research and consulting work, I have studied economic issues in cable television, terrestrial radio, music performance rights, concert promotion, and sports. I have examined questions of market definition and abuse of market power and am familiar with the Department of Justice and Federal Trade Commission's joint *Horizontal Merger Guidelines*. I have served as a consultant to a

variety of businesses in the entertainment industry, including cable television operators, content providers, terrestrial and satellite radio companies, and sports leagues, as well as the Federal Communications Commission (“FCC”). I have assisted businesses involved in licensing negotiations as well as rate setting hearings. A copy of my resume, which describes my background, including education and publications, is attached as Exhibit 1.

3. I have been retained by counsel for Sirius Satellite Radio Inc. (“Sirius”) and XM Satellite Radio Inc. (“XM”) to determine a reasonable royalty rate for the use of sound recording performance rights on digital audio channels transmitted as part of a bundled package of channels provided by a Multichannel Video Programming Distributor (“MVPD”) to its residential consumers.¹ I understand that the statutory standard for determining rates in this proceeding is the “willing buyer – willing seller” standard for new subscription services. This statutory standard does not involve consideration of the 801(b) factors, which play a role in the pre-existing services proceeding. Beginning on May 20, 2004, Sirius partnered with the DISH Network (“DISH”) satellite television service² to bring 63 commercial-free music channels and 1 kids’ channel³ to DISH’s more than 12 million subscribers.⁴ Similarly, beginning on November 15, 2005, XM partnered with the DirecTV satellite television⁵ service to bring 70 commercial-free music channels (including the channel “Special X”), 2 kids’ channels, and 1 talk channel⁶

¹ An MVPD is a term defined by the FCC to include cable system operators, such as Comcast Cable Communications or Time Warner Cable, as well as Direct Broadcast Satellite (“DBS”) services, such as DISH and DirecTV.

² Sirius.com – News Releases, “Sirius Satellite Radio Now Offered to Millions of Dish Network Homes,” <http://investor.sirius.com/releasedetail.cfm?ReleaseID=152259&Cat=&newsroom=> (accessed October 22, 2006); and Memorandum of Agreement between EchoStar Satellite L.L.C. and Sirius Satellite Radio Inc., February 11, 2004 (hereafter “Sirius-DISH Agreement”).

³ Sirius offers fewer channels on DISH than it does on its satellite radio service. Reported channel counts were compiled by CRA and are based upon a complete listing of Sirius channels on DISH, obtained from the DISH website, as of the last week of September 2006. See Appendix 1 for the actual listing.

⁴ EchoStar Communications Corporation 10-K, 2005 (hereafter “Echostar 10-K, 2005”), pp. 1-2.

⁵ XMradio.com – Press Releases, “XM Satellite Radio Channels Now Available on DIRECTV,” <http://www.xmradio.com/newsroom/screen/pr.2005.11.15.html> (accessed October 22, 2006); and Letter Agreement between DirecTV, Inc. and XM Satellite Radio Inc., August 18, 2005 (hereafter “XM-DirecTV Agreement”).

⁶ XM offers fewer channels on DirecTV than it does on its satellite radio service. “Special X” does not appear on XM’s satellite radio lineup. Reported channel counts were compiled by CRA and are based upon a complete listing of XM channels on DirecTV, obtained from the DirecTV website, as of the last week of September 2006. See Appendix 2 for the actual listing.

to DirecTV's more than 15 million subscribers.⁷ I understand that all of these Sirius and XM channels use commercially released music. For convenience, I use the term "music channels" to refer to all of these channels.

4. In forming my opinions I have reviewed a variety of materials, most of which are referenced in this report. In particular, I have reviewed the contracts between Sirius and DISH and XM and DirecTV, Sirius and XM's financial statements, as well as various analyst reports. I have interviewed XM's Mr. Stephen Cook, Executive Vice President, Automotive, and Sirius' Mr. Douglas Kaplan, Senior Vice President for Business Affairs, Entertainment, and Sports, to understand XM's and Sirius' businesses and their motivation for partnering with an MVPD. I have also reviewed previous decisions relating to the determination of reasonable fees paid by Music Choice to Broadcast Music, Inc. ("BMI") and to the Recording Industry Association of America ("RIAA"), by webcasters to RIAA, and by Showtime to the American Society of Composers, Authors and Publishers ("ASCAP"). I have reviewed publicly available information on Music Choice, including its revenues and subscriber base, and as Music Choice is available only through third parties, the number of Music Choice channels offered by Comcast, Time Warner, and Cox Communications to their cable television subscribers. (See Appendix 3 for a list of materials reviewed.) In addition, I have relied upon my training and experience as an economist specializing in industrial organization. The analyses that I present in this report have been performed by me or under my direction. As additional evidence becomes available prior to trial, I reserve the right to refine my analyses.

II. Summary of Opinions

5. To determine the appropriate license terms for the public performance of sound recordings on digital audio channels carried by an MVPD, I begin with a consideration of the relevant economic framework and the "willing buyer – willing seller" standard for new subscription services. In applying this standard, I have looked to a variety of benchmarks to evaluate both the appropriate rate as well as the appropriate base to which this rate should be applied. As a practical matter in rate-setting

⁷ DirecTV Group Inc.10-K, 2005 (hereafter "DirecTV 10-K, 2005"), pp. 2-3.

proceedings, royalties for use of intellectual property are typically established by reference to comparables or “benchmarks” rather than derived explicitly from fundamentals of cost or value considerations.

6. There are a number of potential benchmarks available for determining the rate in this proceeding, including ASCAP and BMI’s recent proposals to Sirius for use of musical works rights in public performances on DISH, Music Choice’s rate with BMI, and the pre-existing digital audio radio subscription services (“PSS”) rate for Music Choice, DMX, and Muzak with SoundExchange. Benchmark analysis begins with consideration of the comparability of the potential benchmark rate to the new subscription service and the nature of the specific rights at issue. These considerations can result in adjustments to account for material differences between the benchmarks and the new service. I have considered the importance of potential cost and value differences, including the effect of secondary benefits from other streams of revenue for sound recording performance rights holders, as well as to Sirius and XM, on the reasonable rate. The following points summarize my main conclusions:

- Sirius and XM’s core business is subscription satellite radio delivered direct-to-the-consumer.
- The significance to Sirius and XM of carriage by an MVPD stems from its subscriber acquisition value – that is, the value in attracting new subscribers to their core line of business. Royalties associated with this value will be determined in the upcoming satellite digital audio radio (“SDARS”) proceeding. Accordingly, the rate which I focus on in this proceeding is a through-to-the listener/viewer rate for the standalone use of sound recording rights for public performances on Sirius and XM’s digital audio channels carried by an MVPD.
- Upon consideration of available benchmarks, it is my opinion that a competitive rate under the willing buyer – willing seller standard would range between [] percent and [] percent of revenues that appropriately reflect the standalone value associated with the carriage agreements.
- Consideration of the terms of Sirius and XM’s agreements with DISH and DirecTV suggests that the actual value associated with the agreements is difficult

to interpret. Indeed, these terms conflate the direct value of providing music content through an MVPD with the promotional value of this carriage to Sirius and XM's satellite radio services. In the case of Sirius, for example, the terms involve a two way stream of payments that result in no net payment. Accordingly, the individual components of the stated flow of payment from DISH to Sirius, or vice versa, may not be easily interpretable.

- I estimate a revenue base for Sirius and XM based on the revenues earned by Music Choice, one of the pre-existing services, from cable operators for provision of a bundle of audio music channels to be sold as part of a larger package of video programming. The estimated revenues based on Music Choice (referred to hereafter as "attributed revenues") provide an upper bound on a reasonable revenue base for Sirius on the DISH Network and XM on DirecTV.
- A Music Choice equivalent service would generate about \$0.28 per subscriber in 2006 (or \$0.0233 per subscriber per month) for a bundle of audio music channels for distribution to residential subscribers. Accordingly, the attributable revenues for Sirius and XM, to which a reasonable royalty rate can be applied, are calculated by multiplying the estimated revenue per subscriber and the number of MVPD subscribers receiving the Sirius and XM music channels. Based on current subscriber counts, attributed revenues for Sirius are at most []

]. Similarly, attributed revenues for XM are at most [] .

- To the extent that Sirius and XM would have a higher revenue base because they provide more music channels to DISH and DirecTV than Music Choice provides to cable operators, I have also estimated attributed revenues on a per subscriber, per channel basis. However, there is no evidence to suggest that the incremental value of additional music channels is proportional to the number of channels.

7. The remainder of this report discusses each of these points in detail. In particular, the next section describes the economic framework and the statutory standard. Section IV provides relevant industry background. Section V discusses the significance to Sirius and XM of carriage by an MVPD. Section VI describes the Sirius-DISH and XM-DirecTV agreements. Section VII contains a discussion of the potential benchmarks

for determining the appropriate rate in this proceeding. Section VIII describes the calculation of an appropriate revenue base. Section IX presents a calculation of the implied SoundExchange fees as well as a discussion of extending the methodology forward to cover the term of the license. Section X concludes.

III. Economic Framework and the Statutory Standard

8. In a competitive marketplace, buyers and sellers of sound recording rights for use in public performances over digital audio channels carried by MVPDs would negotiate directly over an appropriate sound recording performance rate. In such a setting, the market mechanism would inherently balance buyers' value, sellers' costs, and other factors such as risk and secondary benefits from the transaction not captured elsewhere. Accordingly, the market price would appropriately reflect the marginal value and the marginal cost associated with the transaction, provide a competitive return to sellers, and generate the socially efficient outcome.

A. Buyers' Value

9. In this context, the buyers are Sirius and XM, who use sound recording performance rights as inputs into the production of their product, which in this matter is a bundle of digital audio entertainment channels provided to DISH and DirecTV. These MVPD services, in turn, sell different packages of channels to their subscribers that may include the digital audio entertainment channels. The inherent value of the sound recording performance rights for this use derives from two potential sources. The first is the direct value to the consumers or listeners of the music on an MVPD service. The second is the promotional value associated with the effect of listening to music over an MVPD service on the sale of additional subscriptions to the satellite radio services of Sirius and XM.

10. This promotional value plays two important roles. First, Sirius and XM are willing to accept less from DISH and DirecTV, respectively, than would a content provider like Music Choice. In this way, DISH and DirecTV also benefit from the promotional value realized by Sirius and XM. Second, to the extent that listening to music on these MVPDs leads to increased sales of subscription satellite radio (Sirius and XM's core business), Sirius and XM would receive additional subscription revenue.

Recording rights owners would receive additional payments from Sirius and XM for the sound recording performance rights associated with this additional subscription revenue (at an appropriate rate determined in the SDARS proceeding). Accordingly, this secondary effect would benefit Sirius and XM, as well as sound recording performance rights owners. This benefit to sound recording performance rights owners should, if anything, place downward pressure on the arms-length rate in this proceeding.

B. Sellers' Costs

11. The sellers are the record companies. According to the RIAA, record companies spend substantial amounts of money creating new sound recordings, which ultimately enable the public performance of recorded music. Record company costs cover everything from recording, producing and manufacturing, to marketing and promotion of new music; these costs also include the cost of failed creations.⁸ While some of these functions, such as recording and producing, are required to create the sound recording itself, others are required for the creation and sale of a physical CD. The costs associated with the creation of pre-existing sound recordings that enable public performances are sunk costs, that is, these costs have been incurred and are not recoverable. Accordingly, these costs would not affect the market price for sound recordings rights in public performances over digital audio channels carried by an MVPD. Costs of creating new sound records over the term of the license agreement have not yet been incurred and as such, may place some upward pressure on the competitive price. According to Warner Music Group, the third largest record company and part owner of Music Choice, nearly half of its recorded music sales stem from its catalog of existing music and the other half from the sale of its new album releases.⁹

12. Whether and by how much the cost of new albums not yet incurred by the record companies would influence the price in a well-functioning market for sound recording performance rights depends upon the degree to which these costs are

⁸ RIAA.com – Press Room, “Cost of a CD,” <http://www.riaa.com/news/marketingdata/cost.asp>, (accessed October 16, 2006).

⁹ According to Warner Music Group, 83 percent of total revenues are from the sale of recorded music, and 43 percent of total revenues are from the new album releases. Accordingly, I estimate that 48 percent of revenues from the sale of recorded music derive from the sale of pre-existing, catalog music (i.e. 1 – 43/83). (See Warner Music Group, 2005 Annual Report, p. 6 of Introduction.)

incremental to the sale of the rights at issue. To understand this point, consider two polar examples. On the one hand, suppose that none of the additional albums would be developed without an agreement with Sirius and XM for the use of sound recording performance rights over digital audio channels carried by an MVPD. In this case, all of these new album costs would be relevant to the negotiation, and they would place substantial upward pressure on the transaction price. On the other hand, suppose that all of the additional albums would be developed regardless of whether an agreement with Sirius and XM were reached. In this case, none of these new album costs would be relevant to the negotiation, and they would have no effect on the transaction price, even though these costs were not sunk. The answer to the question of whether and by how much new album costs affect the transaction price lies somewhere in between these two extremes, but is likely much closer to the second scenario.

13. Indeed, it is difficult to imagine that but-for the sale of sound recording rights for public performances over digital audio channels on an MVPD's service, record companies would forgo their worldwide revenues from new recorded music. Record companies earned a total of \$24.4 billion from worldwide sales in 2005.¹⁰ Based on my calculations, I estimate that sound recording performance rights owners would receive about [[]], calculated as [[]] percent of attributed revenues of no more than approximately [[]], though as I explain below, even this amount is too high. Even if these companies received ten times this amount, sound recording rights fees would be less than [[]] of the total revenues earned from the retail sale of recorded music. Accordingly, it is unreasonable to believe that the decision to license recording rights for public performances over an MVPD's service would have any material effect on the record companies' decision to create new music. Thus, it is my opinion that the costs borne by the record companies, whether or not they are sunk, are, for all practical purposes, irrelevant to the negotiations for the rights at issue in this proceeding.

¹⁰ I estimate worldwide record company sales of \$24.4 billion by dividing Warner Music Group's \$2.924 billion in worldwide recorded music sales by its 12 percent shares of retail record sales. (Warner Music Group, 2005 Annual Report, p. 2; and *Market Share Reporter*, 2007, Volume 1, "Top Music Firms Worldwide, 2006," p. 446.)

C. SoundExchange and the Statutory Standard

14. Because the transactions costs for licensing recording rights can be extremely high, rights holders are permitted to centralize or coordinate sale of their rights, through SoundExchange, in order to reduce these costs. At the same time, out of concern that this centralization itself may allow rights holders to exercise market power, the compulsory licensing and regulatory regime established by policymakers requires that the licensing terms satisfy a “willing buyer – willing seller” that reflects relevant “economic, competitive, and programming information.”¹¹ Given the policy goal of mitigating market power created by the centralization of the sale of recording rights coupled with the socially desirable aspects of the perfect competition paradigm, it is reasonable to interpret the willing buyer – willing seller standard to mean the rates that would have prevailed in a competitive marketplace. From an economist’s perspective, a benchmark stemming from a more competitive marketplace is preferred to one from a less competitive marketplace. Consistent with this interpretation, I am not aware of any regulatory body that uses another paradigm as a backdrop to generate the appropriate regulatory benchmark. Furthermore, both the Librarian of Congress in determining sound recording performance rights fees as well as the Federal Courts in enforcing the ASCAP Consent Decrees have held this interpretation.^{12,13}

15. As a matter of economic analysis, it is typically not possible to determine explicitly the rates that would prevail in a competitive marketplace based on a ground-up analysis of costs and values. The difficulties here stem both from the fact that the marginal cost associated with the use of intellectual property is essentially zero or near zero and from the fact that the value to the user of the sound recording performance right is commingled with the value of other inputs to production, including value the use of musical works. For these reasons, it is more customary to rely on comparable rates set in

¹¹ 17 U.S.C. Sec 112(e)(4), Title 17 – Copyrights, Chapter 1 – Subject Matter and Scope of Copyright, Section 112. Limitations on Exclusive Rights: Ephemeral Recordings, p. 3 of 9.

¹² 2002 Librarian’s Decision, Library of Congress, Copyright Office 37 CFR Part 261, Docket No. 2000-9 CARP DTRA1&2, Determination of Reasonable Rates and Terms for the Digital Performance of Sound Recordings and Ephemeral Recordings, *Federal Register*, Volume 67, No. 130, 912 F.2d 563, July 8, 2002, pp. 45244-5.

¹³ *ASCAP v. Showtime/The Movie Channel*, No. 90-6034, United States Court of Appeals for the Second Circuit, 912 F. 2d 563, 1990, pp. 1, 4.

a marketplace similar to the marketplace at issue, rather than to determine these rates based on a ground-up analysis. Because benchmark analysis requires careful understanding of the market environment, I turn next to a description of the relevant industry background.

IV. Industry Background

16. Sirius and XM are licensed in the United States by the Federal Communications Commission as digital audio radio satellite (“DARS”) services. Their core business is to sell nationwide subscription radio services that include a wide array of commercial-free music, comedy, talk shows, news programs, and sports entertainment.¹⁴ In addition to buying a subscription plan, subscribers must also purchase a radio either through a retail outlet or through automobile manufacturers, which offer Sirius and XM radios in new models. Both companies engage in a variety of activities designed to attract new subscribers to their subscription radio service.

17. As of end of fiscal year 2005, Sirius had gross revenues of \$242.2 million and net losses of \$863.0 million. XM had gross revenues of \$558.3 million and net losses of \$666.7 million. Subscription radio fees accounted for about 95 and 90 percent of Sirius and XM revenues, respectively.¹⁵ The balance of their revenue was accounted for by advertisements, activation fees, radio equipment sales, and revenues from carriage on satellite television services, the last of which is relatively small compared to the other components, particularly for XM. The significant losses for both companies reflect the substantial past and on-going investments in programming, delivery infrastructure, radio technology, and other subscriber-acquisition activities required to produce and sell a competitive subscription satellite radio service.¹⁶

18. Sirius and XM have carriage agreements with Dish and DirecTV, pursuant to which DISH and DirecTV provide certain digital audio channels to their subscribers. (See Appendices 1 and 2.) DISH and DirecTV are Direct Broadcast Satellites that

¹⁴ Both companies offer a short menu of prices, including a discounted fee for additional radios and monthly, annual, and multi-year subscription plans. “Satellite Radio Outlook,” Kagan Publishing, 2005, p. 71.

¹⁵ Sirius 10-K, 2005, pp. 33, F-4; and XM 10-K, 2005, pp. 30-32 and F-13.

¹⁶ Sirius 10-K, 2005, pp. 17-22, 43; and XM 10-K, 2005, p. 20-25.

provide MVPD services to households and businesses in the United States. DISH distributes over 180 television program channels through various subscription packages to its more than 12 million subscribers.¹⁷ Beginning in May 2004, DISH also offers a total of 64 music channels from Sirius, across its various tiers of services offerings. Similarly, DirecTV distributes over 250 television program channels to its over 15 million subscribers.¹⁸ Beginning in November 2005, DirecTV also offers a total of 73 channels from XM, across its various tiers of service offerings. MVPD subscribers get different numbers of music channels depending on which tier of service they choose. (See Exhibit 2.)

19. Other companies that provide digital audio channels over satellite or cable television include DMX, Muzak, and Music Choice. DMX and Muzak provide their services primarily to commercial customers,¹⁹ while Music Choice's service focuses primarily on residential customers. Specifically, Music Choice sells a bundle of digital audio music channels for distribution to cable television households, and as such is likely most functionally similar to Sirius and XM, relative to DMX and Muzak.²⁰ Music Choice is a partnership between Microsoft Corporation, Motorola Inc., Sony Corporation of America, Warner Music Group Inc., EMI Music, Adelphia Cable Communications, Comcast Cable Communications, Cox Communications and Time Warner Cable.^{21,22} Music Choice offers 58 commercial-free music channels, music videos, artist interviews, and performances on-demand and reaches approximately 38 million cable television subscribers.²³ Of the three PSS providers, Music Choice has a comparable product

¹⁷ See, for example, DishHD Platinum, http://www.allamericandish.com/dishhd_platinum.htm (accessed October 22, 2006). See also EchoStar 10-K, 2005, p. 1-2.

¹⁸ See, for example, DirecTV – Total Choice Premier, <http://www.directv.com/DTVAPP/packProg/channelChart1.jsp?assetId=900041> (accessed October 22, 2006). See also DirecTV 10-K, 2005, p. 3.

¹⁹ Dmxmusic.com – DMX Corporate Profile, http://www.dmxmusic.com/dmx_profile.htm (accessed October 22, 2006). Muzak.com, <http://muzak.com/muzak.html> (accessed October 22, 2006). See also Pacific Business News, “That Background Music Is a Big Business,” July 11, 2003.

²⁰ Before November 2005, Music Choice was also available on DirecTV. Satellite News, “DirecTV Takes First Step Into Music Business with XM Deal,” October 3, 2005.

²¹ Music Choice Company Blurb, <http://company.monster.com/w17419174w/> (accessed August 28, 2006).

²² Several of these companies are represented by SoundExchange in this proceeding.

²³ Hoover's Company Record – Basic Record, Music Choice, August 22, 2006; Music Choice Company Blurb, <http://company.monster.com/w17419174w/> (accessed August 28, 2006). See also Music Choice

offering to both the Sirius – DISH service and the XM – DirecTV service in terms of their channel offerings and their distribution, as well as the value placed on their programming by residential consumers who listen to their programming on satellite or cable television.

20. There are some notable differences between Sirius and XM, on the one hand, and Music Choice, on the other. First, Music Choice does not operate a subscription radio service, so its revenues from provision of its music programming to cable operators are not affected by the incentive to promote its radio subscription service via satellite or cable television. Second, Music Choice also sells its content through mobile services and video on demand, revenues which are not subject to the PSS rate.²⁴ Finally, there are fewer Music Choice channels on cable television than there are Sirius and XM channels on DISH or DirecTV, respectively. I consider each of these differences in using Music Choice as a benchmark to calculate both an appropriate rate as well as revenue bases for Sirius and XM.

V. Significance to Sirius and XM of Carriage on DISH and DirecTV

21. It is my understanding, based on the testimonies of Mr. Douglas Kaplan and Mr. Stephen Cook, Sirius' Senior Vice President for Business Affairs, Entertainment, and Sports and XM's Executive Vice President, Automotive, respectively, that Sirius and XM provide their services to DISH and DirecTV for the potential subscriber acquisition value, that is, as a way of exposing consumers to their satellite radio services.²⁵

Channel Descriptions, http://www.musicchoice.com/what_we_are/channel_descriptions.html (accessed October 20, 2006).

²⁴ MusicChoice – FAQs, http://www.musicchoice.com/what_we_are/faqs.html (accessed October 22, 2006).

²⁵ Sirius and XM also engage in a number of different subscriber acquisition activities that are designed to attract subscribers to their subscription radio service. Both companies offer factory installed radios through their automaker partners which in some cases include prepaid trial subscriptions to the satellite radio service. Both companies have strategic partnerships with car rental companies to provide satellite radio service in the rental fleet: XM has partnership agreements with AVIS, Alamo, and National, while Sirius has partnered with Hertz. In addition, XM has strategic partnerships with United Airlines, AirTran, and JetBlue that make XM audio channels available in-flight, an agreement with Hyatt to provide XM service in guest rooms, and has partnered with Bally's Total Fitness, giving new Bally's members a free XM satellite radio device, with free car kit and waived activation fee. Each company has engaged in various subscriber acquisition activities through its sports broadcasting partners (including Major League Baseball, the PGA Tour, and the Indy Racing League for XM and the National Football League, NASCAR, and the National Basketball Association for Sirius). Finally, both companies engage in more traditional forms of advertising, such as radio, television, and billboard. (See Sirius 10-K, 2005, pp. 2-4; and XM 10-K, 2005,

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VI. Sirius and XM's Agreements with DISH and DirecTV

22. The Sirius and XM agreements with DISH and DirecTV conflate the promotional value of carriage by an MVPD for satellite radio and the direct value of the suite of audio music channels provided through an MVPD. Accordingly, the individual components of the stated flow of revenues from DISH to Sirius (or DirecTV to XM), or vice versa, may not be directly interpretable. As such, I do not rely on the actual terms of the agreements themselves, but rather I estimate the standalone value of the use of sound recording performance rights over digital audio music channels carried on an MVPD's service - recognizing that this approach is likely to overstate the appropriate revenue base. Nonetheless, I provide here an overview of both agreements.

23. In February 2004, Sirius and EchoStar, the parent company of DISH, signed an agreement under which Sirius would provide Sirius' music channels on a non-exclusive basis to DISH. The terms of the agreement through December 31, 2005 were as follows:

pp. 1, 2, and 5. United.com – Press Release Archive, “United Airlines Goes Beyond AM, Beyond FMTM with In-Flight Music Programming by XM Satellite Radio,” March 2, 2006, <http://www.united.com/press/detail/0,6862,53718-1,00.html> (accessed October 29, 2006). XMradio.com – Bally Total Fitness, “Tune-In and Tone-Up with Bally and XM,” <http://www.xmradio.com/bally/index.jsp> (accessed October 29, 2006)).

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²⁶ Sirius-DISH Agreement, [[

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²⁷ Sirius-DISH Agreement, [[

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²⁸ Sirius-DISH Agreement, [[

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²⁹ Sirius-DISH Agreement [[

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³⁰ Sirius-DISH Agreement [[

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25. In August 2005, XM and DirecTV signed an agreement under which XM would provide XM music channels [[]] to DirecTV [[]]

]]³¹ Under the agreement:

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27. It is my understanding that Sirius and XM would not have entered into these agreements absent the promotional value of attracting subscribers to subscription radio. Accordingly, the terms of the contractual agreement conflate the value of music on satellite television (i.e., on Dish and DirecTV) and the promotion value of the agreement to Sirius and XM. If the promotional value is large enough, the stated payments

³¹ In particular, XM agreed not to provide its channels to DISH and DirecTV agreed not to carry Sirius channels. See XM-DirecTV Agreement, Section 3b, p. 2.

³² XM-DirecTV Agreement, [[]]

³³ XM-DirecTV Agreement, [[]]

³⁴ XM-DirecTV Agreement, [[]]

associated with the deals could well be zero. In such a situation, it is possible for the parties to structure the terms of their agreements to result in any level of payments. ||

|| It is conceivable that the parties could restate these terms to have no payments in either direction. As this example highlights, the stated revenues may not be interpretable and as such, reliance on the actual terms to assess reasonable royalties for the public performance of sound recordings may not be appropriate. For this reason, I do not rely on the stated revenues associated with these deals themselves. Instead, I rely upon an imputed revenue base, which I describe in more detail below.

VII. Potential Benchmark Rates

28. In determining an appropriate rate for the license of recording rights for public performances over digital audio channels carried by an MVPD, I rely upon three different benchmarks. These benchmarks include: (i) recent offers from ASCAP and BMI to Sirius for the use of musical works on channels sold through DISH; (ii) the recently decided Music Choice – BMI rate; and (iii) the PSS – SoundExchange rates from 1998 and 2003. I discuss each in turn.

A. On the Use of Musical Works Benchmark for Sound Recording Rights

29. All of the proposed benchmarks, either directly or indirectly involve the use of a musical works benchmark for sound recording public performance rights. I note as an initial matter that there is precedent in using a musical works rate as a benchmark for determining the appropriate sound recording rights fee.³⁵ I also understand that the musical works rates are set under the Consent Decrees under a standard equivalent to the

³⁵ For example, the 1998 CARP Decision was based on a musical works benchmark. See Library of Congress, Copyright Office, “In re: Determination of Statutory License Terms and Rates for Certain Digital Subscription Transmissions of Sound Recordings,” Docket No. 96-5 CARP DSTRA, Report of the Copyright Arbitration Royalty Panel, ¶¶ 167-169, 201-202. See also the 1998 Librarian’s Decision, Library of Congress, Copyright Office, “Determination of Reasonable Rates and Terms for the Digital Performance of Sound Recordings,” Docket No. 96-5 CARP DSTRA, *Federal Register*, Vol. 63, Number 89, May 8, 1998, p. 25403.

willing buyer- willing seller standard required in this proceeding. Nonetheless, in evaluating the issue, it is useful to consider both the value generated by and the costs associated with each of the music works and sound recording rights. On the value side, the musical works and the sound recording performance rights are inextricably linked in producing the value of a public performance. Even if one were to believe that the sound recording rights on a particular song were not worth the same as the musical work rights for that song, I am aware of no evidence that there is a difference in the value of these rights across an entire library of songs. Further, I am aware of no evidence to suggest that consumers of public performances tend to value renditions/recordings more than the musical works/lyrics themselves.

30. On the cost side, there is also no reason to suppose any systematic differences between musical works performance rights and sound recording performance rights. As I have explained earlier, the sunk costs and the future incremental costs associated with the creation of music are immaterial to the willing buyer – willing seller dynamic for licensing rights for the use of music carried by an MVPD. The only relevant costs are those that are likely to influence the hypothetical negotiation between a willing buyer and a willing seller. In this context, the relevant incremental costs associated with the public performance of both musical works and sound recordings are zero or near zero.

31. Finally, to the extent that there are material differences in other fundamentals of the payment for musical works performance rights relative to the payment for sound recording performance rights, reliance on a musical works benchmark is likely to be conservative. First, to the extent that ASCAP, BMI, and SESAC have some market power, the musical works benchmark would likely result in a higher implied rate for Sirius and XM than a competitive benchmark.³⁶ Second, to the extent that listening to music on an MVPD's service stimulates sales of recorded music, owners of sound recordings would benefit significantly more than owners of the musical works

³⁶ Though ASCAP and BMI are constrained by the courts, as a result of the Consent Decrees, they may still be able to charge supracompetitive rates, at least to the extent that litigation risks and transactions costs prevent users from involving the courts. In addition, SESAC rates are not subject to rate court review.

copyrights.³⁷ This additional promotional value would likely place downward pressure on the transaction price, i.e. the price at which a willing buyer and willing seller of sound recording performance rights for use over an MVPD's service would trade. Third, fees for the use of musical works in public performances cover all copyrighted music in the libraries of ASCAP, BMI, and SESAC, whereas users of sound recordings in public performances do not need to pay for the use of pre-1972 sound recordings. In addition, the public performance of sound recordings for the use over an MVPD's service is limited by the "Complement" rule, that is Sirius and XM cannot play in any three-hour period, without explicit permission from the record companies, more than three songs from a particular album, including no more than two consecutively, or four songs by a particular artist or from a boxed set, including no more than three consecutively.³⁸ The use of musical works is not subject to the same restriction. Finally, the musical work rate is typically expressed as a percentage of adjusted revenues – adjusting, for example, for a percentage of subscriber acquisition costs. The effect of these adjustments is to reduce the revenue base, so that an equivalent rate stated as a percent of total revenues would be somewhat lower. Accordingly, for all of these reasons, a sound recording performance rights rate based on a musical works benchmark is likely to be too high.

B. Sirius – DISH – Musical Works Rate

32. It is my understanding that ASCAP and BMI have each recently proposed to Sirius a rate of [[]], based on the recently decided Music Choice – BMI decision, for the use of musical works rights for public performances on DISH. This is an appealing benchmark for three important reasons. First, the proposal represents an offer by willing sellers to a potentially willing buyer and, as such, directly satisfies the statutory standard. Second, given that the rate is a proposal from the seller, not the buyer, it is likely to represent the upper bound of the rate that may ultimately be agreed upon. Third, there is no issue of comparability in terms of the value of the

³⁷ I understand, for example, that record companies expend a great deal of effort arranging for "airplay" and that the owners of musical works rights do not do the same. This behavior by itself suggests that record companies benefit disproportionately from the sale of recorded music, relative to owners of musical works.

³⁸ See *Federal Register*, Vol. 62, No. 121, June 24, 1997, p. 34035, <http://www.copyright.gov/fedreg/1997/62fr34035.html> (accessed October 30, 2006).

services offered or the cost of distribution, because the proposal is specifically for Sirius on DISH, which is the service under review in this proceeding.

33. Thus, I use this musical works rate to calculate the corresponding rate for the use of sound recording performance rights over DISH and DirecTV. My calculation assumes that the BMI rate would be equal to the ASCAP rate. I understand that historically, payments to ASCAP were somewhat higher than the payments to BMI;³⁹ however, more recent evidence suggests that the two are now equal.⁴⁰ My calculation also assumes that the SESAC rate would be approximately [[]] of the combined ASCAP and BMI rates. The SESAC portion is calculated based on Sirius and XM's actual payments to ASCAP, BMI, and SESAC for the use of musical works performance rights on satellite radio.⁴¹ The implied fee for the use of sound recording performance rights on DISH and DirecTV is [[]] percent of revenues.⁴²

C. Music Choice – BMI Rate

34. It is also my understanding that the Music Choice – BMI rate was recently set at 2.75 percent for past payments and 2.5 percent for on-going payments. Like the Sirius – DISH – musical work rate, this is an appealing benchmark for a number of reasons, chief among which is the functional similarity between Music Choice on cable systems and Sirius and XM on satellite television. It also has the advantage that the musical works rate was set under the willing buyer-willing seller standard, the same standard required in this proceeding. Assuming, as before, that the ASCAP rate would

³⁹ 1998 Librarian's Decision, p. 25403.

⁴⁰ For example, terrestrial radio payments from 2004 to 2006 to ASCAP are the same as its payments to BMI. (ASCAP – FAQ, See http://www.radiomlc.com/ascap_faq.html (accessed October 29, 2006) and BMI – FAQ, <http://www.radiomlc.com/faq.html> (accessed October 29, 2006).) In addition, Music Choice and ASCAP reached an agreement in 2002 for a rate of 1.75 percent, based on the Music Choice I decision of 1.75 percent. (See Music Choice III, United States of America, Music Choice, v. Broadcast Music, Inc., No. 64 Civ. 3787 (LLS), p. 2.)

⁴¹ Based on actual payments by XM and Sirius for SDARS over 2005 and 2006, payments to SESAC equal approximately [[]] of the combined payments to ASCAP and BMI. Given both that XM and Sirius payments to ASCAP during this time were actual, not interim, payments, and that the BMI payments were equal to the ASCAP payments, this relationship between SESAC and combined ASCAP BMI payments provides a reasonable indication of what SESAC would receive, relative to the others, for use of musical works on satellite television.

⁴² The [[]] percent rate is calculated as the sum of [[]] percent for BMI, [[]] percent for ASCAP, and [[]] percent for SESAC.

equal the BMI rate, and that the SESAC rate would be approximately [] percent of the combined ASCAP and BMI rates, the implied fee, based on the 2.5 percent going forward rate, for the use of sound recording performance rights on DISH and DirecTV is [] percent of revenues.⁴³

D. PSS – SoundExchange Rate

35. Finally, I consider the rate paid by Music Choice, DMX, and Muzak, the three pre-existing satellite services, to SoundExchange for sound recording performance rights over an MVPD's service as a potential benchmark for the determination of the rate for XM and Sirius in this proceeding. The similarities between Music Choice's content and distribution over cable television (Music Choice has also provided its programming to satellite television operators in the past) and the Sirius – DISH and XM – DirecTV arrangements suggest that this is an obvious benchmark, but there are at least two complications in the use of this benchmark that need to be addressed.

36. First, the PSS – Soundexchange rate of 6.5 percent of gross revenues, set in 1998, was based on a Music Choice – ASCAP rate that was being adjudicated at the time.⁴⁴ Recognizing that this benchmark rate itself was still being decided, both the Librarian and the CARP based the PSS rate on “an upper limit on the value of the performance right for the musical compositions.”⁴⁵ The benchmark rate, however, was ultimately decided at a rate below this upper limit.⁴⁶ Had the CARP and the Librarian known the actual benchmark rate at the time of their decision, they would have likely chosen a lower rate.

37. To see this, consider the effect of the benchmark rate on the determination of the final rate. While the actual “upper limit” considered by the Librarian and the

⁴³ As before, the [] percent rate is calculated as the sum of [] percent for BMI, [] percent for ASCAP, and [] percent for SESAC.

⁴⁴ 1998 Librarian's Decision, pp. 25404. 25414.

⁴⁵ 1998 Librarian's Decision, p. 25403.

⁴⁶ In 2002, following the Music Choice I decision of a 1.75 percent rate, Music Choice and ASCAP reached a settlement agreement for 1.75 percent. The Music Choice – BMI decision, however, was appealed successfully twice, before Music Choice and BMI was decided at a rate of 2.75 percent for the past time period. (See Music Choice I, United States of America v. Broadcast Music, Inc., No. 64 Civ. 3787(LLS), Memorandum and Order, July 23, 2001, p. 1).

CARP is not available in the public decisions, it is reasonable to assume (at least in principle) that the upper bound would reflect an offer from ASCAP (the seller) to Music Choice (the buyer). In the Music Choice – BMI proceeding, which was taking place simultaneously, BMI offered Music Choice a rate of 3.75 percent.⁴⁷ To the extent that this offer was similar to the offer made by ASCAP to Music Choice, the rate of 3.75 percent may reflect the “upper limit” the Music Choice – RIAA decision was based on. Thus, it is reasonable to assume that the starting point for the PSS rate, based on this benchmark rate, would have been [[]] percent – the sum of 3.75 for ASCAP, 3.75 for BMI, and [[]] percent for SESAC. This rate was then lowered to 6.5 percent, upon consideration of the 801(b) statutory factors used to evaluate the rate in the pre-existing services proceeding.⁴⁸ Had the CARP and the Librarian started with a benchmark rate of 2.75 percent, instead of 3.75 percent for BMI-ASCAP, they would have imputed a total PRO benchmark rate of [[]] percent,⁴⁹ instead of [[]] percent. Accordingly, they would have ultimately decided on a lower Music Choice – RIAA rate than 6.5 percent.

38. Putting aside this substantive complication, there is also the issue that the PSS – SoundExchange rate was established in the context of 801(b) factors, which are not applicable to new subscription services. The appropriate use of the PSS benchmark for the new subscription services proceeding requires consideration not of the final rate, but rather the initial rate before the consideration of the 801(b) factors – which in this case would have been [[]] percent. Accordingly, [[]] percent serves as a useful upper bound for an appropriate rate in this proceeding. A caveat is that [[]] percent is likely too high even as an upper bound because it is a rate based on adjusted revenues, not total revenues. The equivalent rate stated as a percent of total revenues would be somewhat lower.

⁴⁷ See Music Choice I, pp. 5-6.

⁴⁸ The four statutory objectives are: (a) To maximize the availability of creative works to the public; (b) To afford the copyright owner a fair return for his creative work and the copyright user a fair income under existing economic conditions; (c) 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 the contribution to the opening of new markets for creative expression a media for their communication; and (D) To minimize any disruptive impact on the structure of the industries involved and on generally prevailing industry practices. (See 17 U.S.C. 801(b)(1).)

⁴⁹ The rate of [[]] percent is calculated as the sum of [[]] percent for ASCAP, [[]] percent for BMI, and [[]] percent for SESAC.

VIII. Using Music Choice to Impute the Appropriate Revenue Base for Sirius on DISH and XM on DirecTV

39. Each of the benchmark rates considered above is applied against revenues associated with the provision of music services over an MVPD's service. However, as I have explained, the revenues associated with the Sirius – DISH and the XM – DirecTV agreements conflate the direct value of music provided through an MVPD with the promotional value of the agreements, and as such, the actual terms of the agreements may not be interpretable.

40. I estimate the appropriate revenue base using a benchmark analysis based on Music Choice's revenues. Other possible candidates for this analysis include DMX and Muzak. However, data limitations restrict their use; in particular, publicly available revenue numbers do not identify revenues from residential subscribers to cable television. As I have explained, DMX and Muzak's focus is on commercial, not residential subscribers, accordingly their revenues are likely to substantially differ from the relevant revenues that Sirius on DISH and XM on DirecTV may earn, even putting aside the promotional value issue. By contrast, Music Choice focuses primarily on residential subscribers and as such is more comparable to Sirius and XM in the services they provide to satellite and cable television operators.

41. A significant difference between the services is that the revenues of Music Choice are not affected by the promotional value of attracting subscribers to its core business. Indeed, MVPD service is Music Choice's core business. This difference has the advantage, on the one hand, in that it makes Music Choice a useful benchmark for estimating Sirius and XM's true revenue potential in deals that reflect the standalone value of the use of sound recording performance rights on an MVPD's service. On the other hand, I recognize that the standalone value of providing music over satellite radio is likely greater than the actual value of the service when the principal motivation of providing the service in the first instance is promotional. As such, reliance on attributed revenues based on this standalone value is conservative.

42. Another potential difference is that Sirius and XM use a variety of talent, including personalities and programmers with genre-specific expertise, to develop music programming in order to make their music channels more attractive to listeners. By

contrast, Music Choice offers continuous music generated primarily by computer-generated playlists. To the extent that enhanced music programming generates more listening over television, revenues based on Music Choice's experience may be too low. However, there is no evidence to suggest that enhanced music programming generates more listening over television. Accordingly, the available evidence suggests that Music Choice's ability to generate revenues serves as an appropriate benchmark to estimate the standalone revenues XM and Sirius would earn in the absence of the subscriber acquisition value.

43. Based on publicly available information, Music Choice earned total revenues of \$10.3 million in fiscal year 2005.⁵⁰ I use these revenues as a starting point in valuing the Sirius and XM agreements. It is noteworthy, however, that these revenues likely include total revenues from all of Music Choice's lines of business, including cable television, mobile services,⁵¹ as well as video-on-demand.⁵² At the present time, I do not have information on Music Choice revenues from cable television only. Thus, my reliance on total revenues is conservative, in that it will result in an overestimate of the appropriate revenue base.

44. My analysis adjusts for the fact that Music Choice reaches substantially more subscribers than do either Sirius on DISH or XM on DirecTV. In particular, Music Choice reaches about 38 million subscribers,⁵³ while Sirius on DISH reaches 8.26 million subscribers,⁵⁴ and XM on DirecTV reaches an estimated 10.3 million subscribers.⁵⁵ On a per subscriber basis, a Music Choice-like service would have earned \$0.27 per subscriber

⁵⁰ Hoover's Company Record – Basic Record, Music Choice, (accessed August 22, 2006).

⁵¹ Music Choice provides a bundle of music channels to Sprint PCS, Cingular Wireless and MobiRadio customers. (See MusicChoice – FAQs, http://www.musicchoice.com/what_we_are/faqs.html (accessed October 22, 2006). MusicChoice – Mobile, http://www.musicchoice.com/what_we_are/mobile.html (accessed October 22, 2006). Market Wire, "Music Choice Tapped By MobiTV," November 2005.)

⁵² Between November 2004 and August 2006, more than 400 million video on-demand orders were placed, and more than 7 million orders were placed per week on average during the first three weeks of July 2006. (See Market Wire, "Music Choice On-Demand Remains the Leading Video-on-Demand Music Service in the Country, Surpassing 400 Million Orders," August 2, 2006.)

⁵³ Music Choice: Hoover's Company Record – Basic Record, Music Choice, (accessed August 22, 2006).

⁵⁴ Communication from Sirius. Approximately 66 percent of DISH's 12.46 million subscribers receive Sirius' music channels.

⁵⁵ Using information on Sirius' penetration on DISH, I estimate that 10.27 million DirecTV's 15.5 million subscribers receive XM music channels.

per year, or equivalently \$0.0225 per subscriber per month in 2005. Based on the increase from 2005 to 2006 in the “Cable Networks” producer price index (“PPI”), published by the Bureau of Labor Statistics (“BLS”),⁵⁶ I estimate that a Music Choice-like service should earn slightly more, about \$0.28 per subscriber per year or equivalently \$0.0233 per subscriber per month in 2006. Further, based on current subscriber counts, I estimate attributed revenues associated with a comparable Sirius-DISH contract are at most [[]] for Sirius. Similarly, the attributed revenues associated with a comparable XM-DirecTV contract are at most [[]] for XM. (See Exhibit 4.)

45. For the purpose of illustration, I have also calculated revenues on a per subscriber basis assuming that about 5 percent of Music Choice’s \$10.3 million in gross revenues is attributable to other lines of business. This adjustment lowers the revenue per subscriber for a Music Choice-like service from \$0.28 per subscriber per year to \$0.26 per subscriber per year in 2006. Based on current subscriber counts, attributed revenues for a comparable Sirius-DISH contract are at most [[]] for Sirius. Similarly, attributed revenues for a comparable XM-DirecTV contract are at most [[]] for XM. (See Exhibit 4.)

46. Finally, while there is no evidence to suggest that increases in music offerings are associated with a proportional increase in revenue, I have considered calculations that adjust for differences in both the number of television subscribers reached as well as the number of music channels offered. The number of channels offered by Music Choice varies somewhat by cable operator as well as by the operator’s tiers of service offerings. Based on a systematic review of the carriage practices of Comcast, the largest of all cable operators in the country, I found that of Comcast programming packages that offer Music Choice channels, the average number of channels offered by a cable operator is about 46 and that there was little variation in the

⁵⁶ The BLS’ PPIs are based upon the North American Industrial Classification System codes (“NAICS codes”), which are developed by the Economic Classification Policy Committee on behalf of the Office of Management and Budget. Prior to 2002, NAICS code 513210 was called “Cable Networks.” After 2002, the NAICS code description was updated to “Cable and Other Subscription Programming,” although the BLS maintained its original name. See the discussion below, in Section IX, for a full description of this NAICS category.

number of Music Choice channels offered by tier of service.^{57,58} (See Exhibit 5)

Accordingly, on a per subscriber, per channel basis, a Music Choice-like service would have earned \$0.0060 per subscriber, per channel per year in 2006. (See Exhibit 6.)

47. Calculation of the attributed revenues for Sirius and XM based on this approach requires more detailed information on the number of Sirius and XM channels offered on DISH and DirecTV, respectively. DISH offers 59 Sirius channels on its America's Top 120, America's Top 180, America's Everything Pak, and DishLatino packages, and it offers 64 Sirius channels on its high definition packages. I understand that about [] of DISH's 12.46 million subscribers actually receive Sirius music channels and of these, 700,315 subscribers receive the channels through DISH's Latino packages. Further, I understand that about 4 percent of DirecTV's subscribers actually subscribe to its high definition packages. Assuming that DISH achieves the same penetration for its high definition packages, I estimate that about 96 percent of DISH subscribers that receive Sirius music channels receive 59 channels and the remaining receive 64 channels. Accordingly, the attributed revenues associated with a comparable Sirius-DISH contract are at most [] for Sirius. (See Exhibit 6.)

⁵⁷ My analysis of Comcast's carriage of Music Choice channels involves a four-step process. First, I identified 717 principal communities served by Comcast, using the 2006 Television and Cable Factbook ("*Factbook*"), the on-line edition. Next, I imputed homes passed for 133 of the 193 principal communities that were missing this information, using Comcast's average penetration rate across all Designated Market Areas ("DMAs"). I then identified the top 20 Comcast DMAs, as measured by the number of homes passed. Finally, I examined the carriage of Music Choice channels for the largest principal communities within each DMA, surveying sufficient principal communities to account for the majority of Comcast homes passed within each DMA. This procedure identified a total of 55 Comcast communities across 20 DMAs.

Information on channel offerings was obtained from the Comcast website, which provides a detailed listing of channels by zipcode. For each principal community surveyed, I used the zipcode given in the *Factbook* (when available) or the US Postal Service's main post office. I obtained the channel counts for at least three digital tiers of service (where available), including an introductory, midsize, and full digital package. In a handful of instances, where the information on the website was ambiguous, I relied on information provided by a Comcast customer service representative, obtained by telephone. (See Exhibit 5.)

⁵⁸ A similar pattern is observed in an initial review of Time Warner and Cox service offerings. See e.g. their websites (<http://www.timewarnercable.com/CustomerService/CLU/TWCCLU.s.ashx?ChangeCLU=true> (accessed October 29, 2006)), (<http://www.cox.com/gocox/digitalcable/musicchoice.asp> (accessed October 29, 2006)).

48. DirecTV offers only 2 XM channels on its Family Choice package, 7 XM channels on its Seleccion Extra package, 49 XM channels on its Total Choice package, 56 XM channels on its Seleccion Mas, 67 XM channels in its Total Choice Plus and Total Choice Premier packages, 70 XM channels on its Titanium package and 72 XM channels in its Seleccion Premier and Seleccion Ultra packages. (See Exhibit 2.) At present, I do not have information on the distribution of subscribers across the different tiers of DirecTV service offerings. Assuming that all DirecTV subscribers who receive XM music channels receive the *same* number of channels and that this is the maximum number of channels offered, I estimate attributed revenues associated with a comparable XM-DirecTV contract would be at most [] for XM. (See Exhibit 7.) However, it is unreasonable to suppose that all subscribers buy packages with the largest number of channel offerings. For the purpose of illustration, I have recalculated the implied revenues using a per subscriber, per channel approach based on a hypothetical distribution of subscribers. Based on this distribution, I estimate attributed revenues for XM would equal at most [] for XM. (See Exhibit 7.)

IX. Calculation of SoundExchange Fees

49. Based on this analysis, I find that the reasonable range of rates for sound recording public performance rights for use over digital audio channels carried on an MVPD's service is [] percent, though the upper bound is likely too high. I also estimate that a Music Choice-like service should currently earn gross revenues of about \$0.28 per subscriber per year or \$0.006 per subscriber per channel (per year). Finally, I estimate attributed revenues associated with the Sirius-DISH contract to be no more than [] for Sirius and attributed revenues associated with the XM-DirecTV contract to be no more than [] million for XM.

50. Going forward over the term of the license, SoundExchange fees can be calculated by multiplying the royalty rate, the number of subscribers to DISH or DirecTV that receive Sirius and XM's music services, and the imputed revenues per subscriber per year. In thinking about applying this methodology to future years, I consider increases in both the number of DISH and DirecTV subscribers that receive Sirius and XM's music channels as well as the revenue per subscriber estimate. Growth in Sirius and XM's penetration of MVPD homes over the term of the license will automatically be reflected

in the going-forward number of subscribers, which Sirius and XM should be able to provide.

51. In practice, growth in revenues per subscriber can be handled in a number of different ways. For example, revenues might be recalculated in each year based on the then Music Choice experience. Not only is this option cumbersome, but it requires Music Choice to remain like Sirius and XM, at least in terms of their services over television, over the term of the license.⁵⁹ Another, more reasonable alternative is to allow revenues per subscriber to grow with inflation. In particular, it makes sense to grow these revenues using the Cable Networks PPI.⁶⁰ As described by the BLS, this index covers “establishments primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis. The broadcasting programming is typically narrowcast in nature (e.g. limited format, such as news, sports, education, or youth-oriented). These establishments produce programming in their own facilities or acquire programming from external sources. The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers.”⁶¹

52. It is my understanding that the BLS generates this PPI (along with a long list of others) on a monthly basis. It also forecasts forward for several months. A review of the historical cable and other subscription programming PPI shows that this index has been increasing slightly over time. (See Exhibit 8.) Accordingly, I expect that this adjustment will result in slight increases in the revenue per subscriber estimate over time.

X. Conclusion

53. I have assessed a reasonable royalty rate and revenue base for Sirius and XM’s use of recording rights for public performances over digital audio channels on an MVPD’s service. Upon consideration of available benchmarks, it is my opinion that a

⁵⁹ As I have explained, Music Choice also provides mobile content and video on demand services. To the extent that these business lines develop into the future, it will become more difficult to use Music Choice as a benchmark for the revenue analysis.

⁶⁰ The BLS’ cable networks PPI reflects price general inflation for the “cable and other subscription programming” industry, a North American Industry Classification System (“NAICS”) classification.

⁶¹ “2002 NAICS Definitions: 515 Broadcasting (except Internet),” <http://www.census.gov/epcd/naics02/def/NDEF515.HTM> (accessed October 28, 2006).

reasonable rate under the willing buyer – willing seller standard would range between [[]] percent and [[]] percent of revenues.

54. Further, it is my opinion that this rate should be applied to attributed revenues, not the stated revenues associated with the Sirius and XM agreements. As I have explained, the actual terms of Sirius and XM's agreements with DISH and DirecTV conflate the direct value of carriage on an MVPD's service with the promotional value associated with attracting subscribers to satellite radio. Indeed, I understand that carriage on satellite television in and of itself is of no importance to Sirius and XM and that their core business is satellite radio sold directly to final consumers. For these reasons, it is possible that the agreements are structured to have no actual payments. To be conservative, I estimated revenues attributable to these agreements based on Music Choice. Music Choice provides a bundle of audio music channels to be sold as part of a larger package of video programming to cable operators. Given this functional similarity, its revenues provide a meaningful benchmark for determining a reasonable revenue base for Sirius on the DISH Network and XM on DirecTV. However, Music Choice does not benefit from any secondary promotional value from carriage on an MVPD's service. Accordingly, estimated revenues using this approach provide an upper bound on a reasonable revenue base for Sirius on the DISH Network and XM on DirecTV. In particular, I estimate attributed revenues associated with the Sirius and XM agreements of no more than \$0.28 per subscriber per year or ¢2.33 per subscriber per month for the bundle of audio music channels they provide to DISH and DirecTV.

55. I understand that Sirius and XM are proposing a rate of ¢0.1235 per subscriber per month, calculated by multiplying the rate of 5.30 percent and attributed revenues of ¢2.33 per subscriber per month. Such a rate is consistent with my analysis. This per subscriber rate can be adjusted for inflation going forward based on the BLS' Cable Networks PPI.

56. Finally, I note that my analysis of both the sound recording performance rights rate as well as the rate base is generally conservative. All of my rate benchmarks, either directly or indirectly, involve a musical works rate. As I have explained, there are a number of reasons why a musical works rate is likely higher than the corresponding performance rights rate. These include the potential market power of ASCAP, BMI, and SESAC; the fact that owners of sound recordings would benefit significantly more from

additional sales of recorded music (that might result from listening to music on an MVPD's service), relative to owners of the musical works copyrights; the fact that fees for the use of musical works in public performances cover all copyrighted music, whereas users of sound recordings in public performances do not need to pay for the use of pre-1972 sound recordings; the "Complement" rule, which limits the use of public performances of sound recordings, but not musical works; and the fact that the musical works rate is stated as a percent of adjusted revenues. Accordingly, for all of these reasons, a rate based on a musical works benchmark is likely to be too high.

57. In addition, I have estimated attributed revenues, based on Music Choice's ability to generate revenues. Sound recording performance rights fees are then calculated by applying the relevant rate to these revenues. However, as I have explained, Sirius and XM would accept lower payments from DISH and DirecTV than would another content provider, like Music Choice, for whom there is no promotional value. Further, Music Choice's revenues themselves are likely too high, as they likely include revenues from Music Choice's other lines of business (like mobile and video on demand). As such, reliance on attributed revenues based on this standalone value is too high, and thus, conservative.

58. For all of these reasons, it is my opinion that (while there may be assumptions embedded within my analysis that could result in an understatement of the appropriate sound recording performance right fees) my analysis on balance overstates the appropriate fees, and as such is conservative.

Certification

I have personal knowledge of the facts in this testimony and the forgoing is true and correct to the best of my understanding.

Dated: Boston, MA

October 30, 2006



Tasneem Chipty
Vice President