

# DIGITAL MUSIC INTEROPERABILITY AND AVAILABILITY

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## HEARING BEFORE THE SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY OF THE COMMITTEE ON THE JUDICIARY HOUSE OF REPRESENTATIVES ONE HUNDRED NINTH CONGRESS FIRST SESSION

APRIL 6, 2005

**Serial No. 109-9**

Printed for the use of the Committee on the Judiciary



Available via the World Wide Web: <http://www.house.gov/judiciary>

U.S. GOVERNMENT PRINTING OFFICE

20-389 PDF

WASHINGTON : 2005

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## DIGITAL MUSIC INTEROPERABILITY AND AVAILABILITY

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WEDNESDAY, APRIL 6, 2005

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON COURTS, THE INTERNET,  
AND INTELLECTUAL PROPERTY,  
COMMITTEE ON THE JUDICIARY,  
*Washington, DC.*

The Subcommittee met, pursuant to notice, at 10:37 a.m., in Room 2141, Rayburn House Office Building, the Honorable Lamar Smith, (Chairman of the Subcommittee) presiding.

Mr. SMITH. The Subcommittee on Courts, the Internet, and Intellectual Property will come to order. I am going to recognize myself for an opening statement, and then recognize other Members, and then we will proceed to introduce the witnesses, and we will look forward to hearing from them.

Today, this Subcommittee continues its work to update music licensing for the digital era. New technologies are providing numerous and competing methods for delivering music content to consumers. Consumers can buy music on-line for immediate download, subscribe to unlimited amounts of music that can be downloaded to a portable device, listen to webcasts of their favorite radio stations on the Internet, and subscribe to music broadcasts from satellites in space.

Each of these different types of music services is a new and unique business model that brings different values and opportunities for consumers. Consumers have multiple choices for how they can purchase and listen to legal music. Unfortunately, just as the number of legal options has increased, so has the number of illegal ones.

Legitimate questions have been raised regarding the impact of digital interoperability on consumers. In the physical world, consumers didn't expect that music audio cassettes were interoperable with CD players. Consumers switching from music cassettes to CDs bought the same music for \$10 to \$20 per CD that they already owned. Consumers accepted this, since they felt they were getting something new with more value, a digital format that made every reproduction sound as good as the first playback.

Music is quickly becoming an on-line business with no connection to the physical world, except for the Internet connection. Even that connection is increasingly becoming wireless. Some of the same interoperability issues that occur in the physical world are now appearing here. Consumers who want to switch from one digital music service to another must often purchase new music files and

sometimes new music players. For example, music purchased from the iTunes Music Store will only work on Apple's iPod music player. Music purchased from RealNetworks cannot be accessed on the iPod.

Last year, both companies became involved in a dispute over Real's attempt to offer software called "Harmony," that would have allowed legal copies of music purchased from Real's on-line music store to be playable on Apple's iPod music player. Apple objected to this effort, calling it "hacker-like," and invoking the DMCA. Apple blocked Real software from working a short time afterwards.

This interoperability issue is of concern, since consumers who bought legal copies of music from Real could not play them on the iPod. I suppose this is a good thing for Apple, but perhaps not for consumers. Apple was invited to testify today, but they chose not to appear. Generally speaking, companies with 75-percent market share of any business, in this case, the digital download market, need to step up to the plate when it comes to testifying on policy issues that impact their industry. Failure to do so is a mistake.

As a result of disputes like the one between Apple and Real, some have suggested that efforts to boost digital music interoperability should be encouraged by regulation or legislation. Others have urged Congress to leave the issue to the marketplace and let consumers decide what is best for them.

Just last week, the Supreme Court heard a copyright case dealing with the 1984 decision in the Sony-Betamax case. Consumers ultimately chose the VHS format over their Betamax as their preferred technology in their homes without any intervention by Congress. At the same time, broadcasters chose the Betamax standard for their internal broadcast operations. If anything, this example demonstrates not only how consumers will decide for themselves what standard best meets their needs, but also that multiple standards can survive in the marketplace.

The digital music interoperability issue is of interest to more than consumers. Performers and songwriters are affected by the decisions made about how their music is made available. Music that is made available on only one digital music service will limit the options for artists to earn royalties. Many of the licenses and rights in the music industry stem from compulsory licenses and exclusive contracts. Since one of these licenses, the compulsory section 115 mechanical license, is now being updated for the digital era, the time is appropriate for the Subcommittee to learn more about the impact of digital interoperability on consumers and artists.

That concludes my opening statement, and the gentleman from California, the Ranking Member, Mr. Berman, is recognized for his.

Mr. BERMAN. Thank you very much, Mr. Chairman, for scheduling this hearing on digital music interoperability. The explosion of technologies that enable consumers to digitally download music has provided many new opportunities to the music lover. The ultimate goal is to provide consumers with their choice of music any time, anywhere, in any format. However, this new environment has come at a great cost; that of rampant piracy on peer-to-peer networks. What is considered free music available on the Internet comes at the expense of numerous people involved in the develop-

ment of the sound recording, the artists, songwriters, musicians, sound engineers and others.

The consequences of piracy are felt throughout our economy, but they are especially harmful in my district, as well as several other Members on this Committee, where many jobs depend on the lawful sale of music. The proliferation of legitimate music distributors in the marketplace has helped stem the tide of piracy. The number of available digital music delivery alternatives has increased, enabling technology companies to help copyright owners make inroads against unauthorized downloading and sharing of music files. However, music companies will always have to compete with free music, and analysts claim that it will take a number of years before download services can provide a significant sales boost for the content creators.

One of the major impediments to achieving a more level playing field according to analysis is the bewildering array of competing technologies. As with any nascent industry, the development of new business models have unintended results. In the case of digital music, there are concerns that interoperability barriers between the various suppliers could actually hinder growth in the market.

Brandenburg, the father of the MP3, has warned that rival technologies will baffle consumer and risk alienating fans, driving them to unsanctioned file-sharing networks, where the songs are free and encoded in the unprotected MP3 format.

The International Federation of Phonographic Industry has noted that "one important problem that hinders growth of the on-line music business is the lack of interoperability between services and devices. The danger is of wide-scale consumer confusion and wasted opportunities in a market which has an extraordinary growth potential." They observe that there is no easy solution, that all players in the on-line market need to work harder to solve the interoperability difficulties in 2005. Yet the market continues to develop. The portable player market already presents consumers with an array of choices.

Now, we see the convergence of music devices and mobile handsets. The goal of making music easier to buy than to steal is becoming a reality, and therefore these innovative services deserve our thanks. However, anti-piracy efforts must remain a focus for technology company industries as they develop their products. A legitimate distribution business model must be one that is based on payment and permission of the rights holder.

With digital music moving into the mainstream of consumer life, I believe it will be helpful to further this conversation by just guessing what, if any, impediments are facing companies that are now distributing digital music and how they are addressing consumers' needs for legitimate music. In an ideal world, we would all have the major players in the digital music market at the table to hear their opinions about this issue. The Chairman made reference to at least one party not at the table, but I do look forward from hearing these witnesses to help define some of the issues.

Thank you very much, Mr. Chairman.

Mr. SMITH. Thank you, Mr. Berman.

I understand that the Ranking Member of the Judiciary Committee, Mr. Conyers, you have a statement?

Mr. CONYERS. Only a comment or two, sir.

Mr. SMITH. The gentleman is recognized.

Mr. CONYERS. I will ask unanimous consent that my statement be put in the record.

Mr. SMITH. Without objection.

Mr. CONYERS. First of all, I welcome this panel, and I think this is an important discussion. I want to say that I commend the Ranking Member, Mr. Berman, on his very thoughtful presentation, which leads me to put mine in the record and let it go at that.

A couple of things have been said by witnesses that I just want to repeat; that market forces will continue to drive innovation and new ways to enjoy music and pricing and will eventually resolve the interoperability problem and that Government intervention can probably inhibit innovation.

Finally, I join with those who believe that consumers will ultimately choose the interoperable systems over closed platforms.

With that, I would return my time and thank the Chairman for his courtesy.

Mr. SMITH. Thank you, Mr. Conyers.

I would, also, like to thank the gentlewoman from California, Ms. Lofgren, and the gentleman from California, Mr. Schiff, for their attendance here today as well.

Before I introduce the witnesses, I would like you all to stand so I can swear you in.

[Witnesses sworn en masse.]

Mr. SMITH. Thank you. Please be seated.

Our first witness is Mark Cooper—oh, excuse me, in recognizing other Members who are present, I didn't look far enough or long enough to my right to see Bob English, the gentleman from South Carolina. We appreciate his presence as well.

Our first witness is Mark Cooper, the director of Research at the Consumer Federation of America, where he has responsibility for energy, telecommunications and economic policy analysis. Dr. Cooper is a fellow of both the Stanford Law School Center for Internet and Society and the Donald McGannon Communications Center at Fordham University. He is the author of five books and has published numerous chapters and edited works and journal articles focusing on digital society issues. Dr. Cooper holds a Ph.D. from Yale University and is a former Yale University and Fulbright Fellow.

Our next witness is Ray Gifford, president of the Progress & Freedom Foundation and a member of its board. Before joining the foundation in 2003, Mr. Gifford served as chairman of the Colorado Public Utilities Commission for 4 years. Mr. Gifford earned his law degree from the University of Chicago, where he served as president of the Federalist Society and chairman of the Edmund Burke Society. He earned a bachelor's degree in philosophy from St. John's College in Annapolis, Maryland.

Later on, you can tell us the difference between the Federalist Society and the Edmund Burke Society, if you will.

Our next witness is Dr. William Pence, chief technology officer of Napster. In 2000, Dr. Pence joined Universal Music Group as lead technologist for its on-line music initiative. In 2001, he became chief technology officer of Pressplay, a joint venture between Sony



and Vivendi Universal, designed to offer an on-line music subscription service. In 2002, Roxio acquired Pressplay and rebranded that service with the Napster name. Dr. Pence led the effort to build a legitimate service on the Pressplay technology infrastructure, culminating in the relaunch of Napster in October 2003. Most recently, he led the effort which resulted in the world's first portable music subscription service—Napster To Go.

Dr. Pence holds several U.S. patents, he received a B.S. degree in physics from the University of Virginia in 1984 and a Ph.D. degree in electrical engineering from Cornell University.

Our final witness is Michael Bracy, co-founder of the Future of Music Coalition, where he currently serves as a board member and its policy director. He, also, co-owns Misra, an independent record label based in Austin, Texas, which, as one would expect, is a city I have a particular interest in.

The Future of Music Coalition is a not-for-profit collaboration between members of the music, technology, public policy and intellectual property law communities. The Coalition seeks to educate about music technology issues and to bring together diverse voices in an effort to come up with creative solutions. The Coalition, also, aims to identify and promote innovative business models that will help musicians and citizens to benefit from new technologies. Mr. Bracy graduated from Georgetown University.

By unanimous consent, as I think you all know, your complete testimonies will be made a part of the record, and we look forward to hearing your testimony now.

Dr. Cooper, we will begin with you.

**TESTIMONY OF MARK COOPER, PH.D., DIRECTOR OF RESEARCH, CONSUMER FEDERATION OF AMERICA, ON BEHALF OF THE CONSUMER FEDERATION OF AMERICA AND CONSUMER UNION**

Mr. COOPER. Thank you, Mr. Chairman.

Interoperability is an extremely valuable and important trait in the digital economy. Digital products are inherently networked, which means that they are made up of complimentary components or the current terminology is they are layers of a platform. These layers must interoperate if the product is to function properly.

Over the past three decades, we have learned what I call the Internet lesson. The more open the interfaces within the platform, the more dynamic the development. Open platforms create large network effects and an innovation-friendly environment. Economists call them positive externalities created by these open platforms.

However, it is extremely important to recognize that interoperability plays different roles and needs different policies at different points in this platform. The communications network at the core of the digital economy must be open and interoperable as a matter of obligation. Closed proprietary platforms in the core destroy the vast array of positive externalities that can develop above. Refusals to deal, discrimination in functionalities, foreclosure, anticompetitive bundling simply cannot be tolerated at the core of the communications network, and that is why the Communications Act re-

quires just, reasonable, and nondiscriminatory terms for interconnection and carriage.

But as we move above from that core or from the lower layers to the upper layers, the basis for interoperability changes. At the periphery of the digital platform, at the applications layer it is called, interoperability is very consumer friendly, but it needs to be enforced or created by market forces. Applications are the widgets of the digital age, the things that people make and sell directly to the public. In the digital content and distribution of applications, like music formats, the failure to interoperate affects the direct consumer. It hurts the music consumer if you don't interoperate, but only the music consumer. It doesn't damage the rest of the economy.

If an applications developer fails to interoperate, we believe that developer will ultimately pay the price because consumers will migrate to interoperable offerings. We believe consumers demand interoperability, will pick interoperability if they have information, and they have a fair choice.

Disclosure and expectations play a key role. Consumers must be aware that if they buy a certain product that will not interoperate, they will be locked in and cut off. Once they know that, they will exercise, they will vote with their feet.

Similarly, a refusal to interoperate should not be a lever for anti-competitive strategies. If we see lots of exclusive deals and only a very few widget manufacturers, antitrust authorities should become concerned because we expect the applications layer, the widget manufacturers, to be plentiful and competitive. If they don't behave in that fashion, if there aren't a lot of choices, then there is a legitimate antitrust concern.

As several Members have noted, last year, the recording industry finally accepted the inevitability of digital distribution of music. They sold more singles last year than any time in the previous 20 years, and consumers saved a great deal of money. The transition to digital distribution is inevitable because it reduces the cost of production marketing and distribution and may transform promotion as well. The cost of delivering music to the public will decline, and the nature of sales will shift from CDs and bundles to singles, and that is a good thing for consumers and artists who can make more money by selling lots of singles.

Now, those who had the foresight to see this digital transformation coming and to put digital distribution in the world, they have got a lead. They have, one, a first-mover advantage. But as the entirety of the industry moves toward digital distribution, there are no guarantees that that advantage will persist, especially if they make a mistake on interoperability.

It is not surprising to find that the very company that has a lead today also had a lead 25 years ago in the PC market. They were the dominant PC provider about a quarter of a century ago. They refused to interoperate. They refused to open their platform, and they were blown away. They are a niche market player today, with a market share around 5 or 6 percent of the market. Interoperability is consumer friendly, and it will prevail in the marketplace.

I thank the Committee for giving me this opportunity, for recognizing how important interoperability is in the digital industries,

and I look forward to working with the Committee to find the right mix of public obligations at the core of the digital economy and private incentives at the periphery and in the widget manufacturers so that we can create competitive, dynamic platforms that serve consumers, the economy and artists.

Thank you.

[The prepared statement of Mr. Cooper follows:]

PREPARED STATEMENT OF DR. MARK COOPER

Mr. Chairman and Members of the Committee,

My name is Dr. Mark Cooper. I am Director of Research at the Consumer Federation of America. I appreciate the opportunity to testify on the subject of interoperability and commend the Committee for having the foresight to hold hearings to explore the implications of this important topic.

Interoperability is a critically important issue, not only for consumers, but also for producers and the economy. However, it is important for the Committee to appreciate that the role of interoperability and public policies to promote it vary greatly depending on the nature of the economic activity that is being analyzed.

INTEROPERABILITY SHOULD BE REQUIRED AS A MATTER OF  
PUBLIC POLICY IN CORE NETWORKS

Ensuring interoperability is a critical and pressing public policy concern when it affects the critical functions of a vital network in our economy. For example, we demand interoperability in the communications network, as a public obligation, because it is a vital infrastructure at the core of our economy.<sup>1</sup> Telephone networks have interoperated for almost 100 years. The advent of the Internet has brought with it amazing new opportunities for communication-WiFi-enabled telephones can connect with computers. E-mail users can connect to Blackberries. Macintosh users can send and receive files to and from Windows users. Interoperability supports a vast array of other activities and the failure to interoperate would chill innovation and distort economic activity.

Over the past quarter of a century, as the digital economy has grown and influenced the broader economy, the importance of interoperability has grown because “platforms” play an increasingly important role. “A platform is a common arrangement of components and activities, usually unified by a set of technical standards and procedural norms round which users organize their activities. Platforms have a known interface with respect to particular technologies and are usually ‘open’ in some sense.”<sup>2</sup>

Interoperability to maximize the availability of functionality has been the hallmark of digital platforms for a simple reason. By keeping interfaces open and making the functionality available, the entire platform is driven forward, expanding the opportunities for all who build to and take from (use) the platform. “Interfaces exist to entice other firms to use them to build product that conform to the defined standards and therefore work efficiently with the platform.”<sup>3</sup>

The superior value of interoperability of critical networks through open interfaces was recognized by the National Research Council of the National Academy of Sciences in a 1994 analysis of the Internet, just before it exploded into wide popular use in America. “The telephone system is an example of an open network, and it is clear to most people that this kind of system is vastly more useful than a system in which the users are portioned into closed groups based, for example, on service provider or the user’s employer.”<sup>4</sup>

In contrast, interoperability in the digital content and consumer goods industries, like video games or music formats, is a consumer-friendly way to do business. The failure of interoperability in the music industry affects the music industry and the consumers who purchase digital music. The failure of interoperability in the communications industry affects the entire economy.

<sup>1</sup>Mark Cooper, *Open Architecture as Communications Policy* (Stanford Law School Center for Internet and Society, 2004), available for download under a Creative Commons License at <http://Cyberlaw.Stanford.edu/blogs.cooper/openarchitecture.pdf>.

<sup>2</sup>Shane Greenstein, “The Evolving Structure of the Internet Market” in *Understanding the Digital Economy* (Erik Brynjolfson and Brian Kahin (Eds) (2000), p. 155.

<sup>3</sup>Anabelle Gawer and Michael A. Cusumano, *Platform Leadership* (2002), p. 56.

<sup>4</sup>National Research Council, *Realizing the Information Age* (1994), p. 43.

## INTEROPERABILITY SHOULD BE PROMOTED IN CONSUMER APPLICATIONS

We believe that interoperability best serves the interest of consumers and producers throughout the digital platform, but as the question moves from the interoperability of the network, to how that network is used for music it becomes important for the marketplace to provide better clarity. If an application developer refuses to interoperate, we believe that developer will ultimately pay the price, because consumers will migrate to interoperable offerings. Applications developers should be allowed to discover the consequences of their bad decisions in the marketplace.

We believe consumers demand interoperability, and will pick it when given the choice. However, the development of converged or open platforms takes time, and it requires that consumers understand their options. Disclosure and consumer expectations should be taken into consideration. Sellers of closed platforms need to better inform consumers that their platforms are closed, and that consumers might be locking themselves into future hardware and software purchases in that platform.

Consumers have certain expectations that they could pop a record onto a turntable or a compact disc into a CD player and music would come out. If digital formats are not going to replicate that interoperability, retailers of digital music and digital music players have a special obligation to inform consumers who have built up expectations of interoperability over years, even decades of experience. Given good information—such as where and how things will work, and where it won't—we are confident consumers will choose the interoperable systems over closed platforms,

## WHEN THE FAILURE TO INTEROPERATE RAISES CONCERNS

An industry's refusal to interoperate should also not become a lever for anti-competitive strategies. This is a special concern in platform industries where a company may come to dominate one critically important component (layer) of a platform and seeks to use that dominance to frustrate competition in other components.<sup>5</sup> This is a problem of vertical leverage in antitrust analysis and it grows in significance in platform industries precisely because of the heightened importance of interfaces between components (layers) in these platforms. Closing interfaces takes on special importance. Unfortunately, antitrust practice has drifted away from concerns about vertical leverage, at precisely the moment it demands greater scrutiny and attention.

We believe that music, movies and other digital content could quickly grow to become that anti-competitive lever, if it is not already. For the consumer who purchased any digital music player other than an iPod, there's no simple recourse when R.E.M. releases a series of songs exclusively on iTunes Music Store.<sup>6</sup> Nor is there any recourse at all for a Mariah Carey fan with an iPod on a Macintosh when she releases an exclusive song on MSN Music—a platform that simply won't work with Macintosh or iPods.<sup>7</sup>

Consumers who run up against these problems with music, movies or other digital content will increasingly turn to methods that potentially infringe copyright to get the song they want, including searching the Internet for a copy of the song converted to an open format. This is a less-than-adequate solution, and one that all parties should be wary of inadvertently promoting. Both the content and device industries surely recognize that every time they drive a consumer to infringe copyright because of their support for a closed platform, they create new incentive to create and deliver an open platform.

DIGITAL DISTRIBUTION OF MUSIC HAS JUST BEGUN:  
INTEROPERABILITY WILL LIKELY PREVAIL

Last year, when the recording industry finally accepted the inevitability of digital distribution of music, the industry sold more singles than at any time in the past two decades. The transition to digital distribution has begun in earnest. This transi-

<sup>5</sup>Mark Cooper, "Antitrust as Consumer Protection in the New Economy: Lessons from the Microsoft Case," *Hastings Law Journal*, 52:4, 2001. Available at <http://www.consumerfed.org/cooper-hastings-law-review-200106.pdf>

<sup>6</sup>While iTunes allows consumers to burn purchased protected digital music to a CD—an open platform—it must be pointed out that a consumer would need to install a new program, purchase the song, burn the song to CD, rip the burned CD into a format their current player will understand and then enter all the song information manually—a cumbersome process digital music stores were supposed to make automatic.

<sup>7</sup>A consumer with an iPod and Windows might have more luck if they followed the steps in Footnote 6, but users with a Mac are out of luck—and won't be able to download that song legally.

tion is inevitable. Digital distribution reduces the costs of production, marketing, and distribution. It may also radically alter the approach to promotion. The cost of delivering music to the public will decline by 50 percent or more and the selling of music will shift from bundles of songs to singles.

Major record labels—whose artists account for over 80% of the music purchased in America—are belatedly considering alternative business models for digital distribution. This lead to subscription services like Real Rhapsody and Napster 2.0 or a la carte services like those two companies offer, iTunes Music Store, and others.

The music industry is not facing a format war, like the battle they are currently fighting over high-definition music—where some labels exclusively sell content on SuperAudio CD while others only release premium music on the DVD-Audio format. A format war clearly would have impeded the adoption of digital music. But as the amount music exclusively available on one format increases, and as consumers discover they've purchased thousands of dollars of music to fill up their digital music devices, locking themselves to one type of player forever, they are more likely to get confused and frustrated. To alleviate both, record labels and device manufacturers should proactively inform consumers about the limitations of their closed systems, and work to develop open standards.

Those who had foresight and created a digital music platform with portable digital music players and digital music download stores now have a lead, winning a first-mover advantage. But as the entirety of the music industry makes the inevitable transition to digital distribution, there are no guarantees that the initial advantage will persist, especially if mistakes are made with regard to interoperability. A quarter of a century ago a closed platform dominated the computer desktop market. A more open platform quickly replaced it, forcing all platforms to improve compatibility. Given a choice that is not distorted by anticompetitive practices and good information consumers will prefer and migrate to the interoperable platforms.

#### CONCLUSION

Last week oral argument in two critical cases (*National Cable and Telecommunications Association et al. v. Brand X Internet Services et. al* and *Metro-Goldwyn Mayer Studios Inc. et al v. Grokster*) that will determine the future of the Internet made it clear that technology policy requires a careful balance between the public and private interests. Interoperability in core infrastructure industries has been a key ingredient in this nation's economic success since the railroad track was standardized and the telecommunications network was obligated to provide interconnection and carriage on just, reasonable and nondiscriminatory rates, terms and conditions.

I thank the Committee for recognizing that in the digital economy interoperability has even broader implications and I look forward to working with the committee to find the right mix of public obligations and private incentives to achieve open, competitive platforms that provide a dynamic, consumer-friendly economy.

Mr. SMITH. Thank you, Dr. Cooper.  
Mr. Gifford?

#### **TESTIMONY OF RAYMOND L. GIFFORD, PRESIDENT, THE PROGRESS & FREEDOM FOUNDATION**

Mr. GIFFORD. Thank you, Mr. Chairman.

When I begin to agree with my friend, and sometimes nemesis, Mark Cooper I start to doubt myself, but I appreciate the opportunity to speak with you today and the Members of the Subcommittee.

In seizing on this topic, the Committee has hit upon one of the key conundrums of the digital age, namely, the role of standard-setting and the subsidiary goal of interoperability. Interoperability is a key challenge to firms and network industries. The success of a given platform depends on its attractiveness to consumers, and a key value for consumers is the platform's ability to interoperate with a variety of applications. Interoperability, to be sure, is a value to consumers and firms, but it is not an absolute value.

The Progress and Freedom Foundation recently hosted a series of events in Europe on standard-setting and interoperability. My conclusions from those events will serve as my introduction here.

First, standard-setting is hard. We do not know, before the fact, the optimal method or amount of standards or interoperability. For public policy, this should inspire a great deal of caution from mandating any given outcome or particular standard. Because there are undeniable tradeoffs from any standard-setting or interoperability decision Governments should be wary of thinking they have sufficient foresight to make proper interoperability decisions and deferential to private attempts to achieve interoperability.

Finally, for public policymakers, we can never forget the lessons of public choice theory, which predict that firms and interest groups will seek Government favor in promoting their interoperability solution and in handicapping their rivals.

I have three specific theses:

First, protect the Schumpeterian incentives to innovate and compete for not just in the market;

Second, allow open and closed platform business models to compete;

And, third, permit the freedom to use digital rights management.

First, much of the brow-furrowing over interoperability and digital music stems from the success of the Apple iPod platform. I urge this Subcommittee not to give into the politics of platform envy. Joseph Schumpeter, you may recall, was the economist who described capitalism as a process of creative destruction, with new firms and new products spurring innovation and creating new markets. Digital music is a new market, and the iPod platform and its remarkable success is the harbinger of those types of markets and what they can be. The law, intellectual property and antitrust law, specifically, should encourage this dynamism.

Second, a related question to the types of competition that is occurring in this market is the platform models that firms choose to compete in the market. This gets to the heart of interoperability as different firms opt for platforms of varying degrees of openness on the one hand or closed integration on the other.

From a business standpoint, you can see the tradeoffs and strategic decisions the companies are making. By opting for a more open platform, the firm hopes to attract more users to its platform and increase the number of applications compatible with its platform. The tradeoff involves sharing more of the profits from that platform and, also, perhaps some of the quality control over the whole consumer experience. In contrast, a more closed platform rather audaciously attempts to gather all of the rents from production, but perhaps at a cost of interoperability.

Should public policy be concerned with these business decisions? Probably not. If you start looking for standards to scrutinize, you will see them everywhere, from razors and blades, to PSPs and disk drives, to MP3 Players and iPods. Because we cannot know in advance what consumers will prefer or what is truly superior, we should forbear from interfering.

A final value of public policy should be to ratify the acceptability and use of digital rights management or DRM technologies. DRM allows content providers a reasonable degree of confidence in bring-

ing digital music to market and consumers the ability to purchase digital music. DRM will be integral to consumers' access to digital content and, hence, must be allowed its place as a valid market mechanism.

Standards are hard. Interoperability is a good thing, but not an absolutely good thing. Consumers' tastes for the most part will drive toward interoperable platforms, but not necessarily. Intellectual property law, antitrust and administrative regulation point in slightly different directions on these issues, but are up to the task of confronting the policy challenges presented by digital technologies. From Congress's point of view, the best course would be to resist calls for mandates or technology limitations in this dynamic space.

I thank the Committee for the opportunity to testify today and look forward to your questions.

[The prepared statement of Mr. Gifford follows:]

PREPARED STATEMENT OF RAYMOND GIFFORD

Good morning, Mr. Chairman, Mr. Berman and members of the subcommittee. Thank you for the opportunity to speak to you today on digital music interoperability and availability. In seizing on this topic, the Committee has hit upon one of the key conundrums of the digital age; namely, the role of standard setting and the subsidiary goal of interoperability. As you know, markets for digital music are nascent and emerging. Different platforms, different file formats and different digital rights management systems are competing for dominance. Indeed, even different business models are duking it out, with Napster To Go's subscription model taking on iTunes and Wal Mart's (among others) pay-per-song model. All of this indicates a competitive, functioning market working within the bounds of copyright and patent law, with a backstop of antitrust should unlawful monopoly concerns arise.

Interoperability is a key challenge to firms in network industries. The success of a given platform depends on its attractiveness to consumers, and a key value for consumers is the platform's ability to interoperate with a variety of applications. Interoperability, to be sure, is a value to consumers and firms, but it is not an *absolute* value. Standards and interoperability can be achieved through a variety of institutions: within single firms, within private consortia, with government blessing and with government mandate. Standards can be open and non-proprietary, or closed and proprietary, and gradations in between these extremes. In digital music markets we see all of these models, to varying degrees. There is the relatively more closed and integrated iPod platform; there are the relatively more open MP3 platforms. There are different file formats; there are different DRM solutions.

I appreciate the opportunity to speak to you on this topic because I have been thinking about it so much myself. The Progress & Freedom Foundation recently hosted a series of events in Europe. My conclusions from those events serve as my introduction here:

First, standard setting is hard. We do not know *ex ante* the optimal method for standard setting, or the optimal model. Are open standards preferable? In some cases, yes; in others, no—you are making a trade-off. Are proprietary or non-proprietary standards going to give the greatest amount of innovation? We cannot be sure. Do we prefer competition for a standard or competition within a standard? Depends on the quality of the standard you start with, and also requires recognition of the (unknown and unknowable) costs of the standard foregone.

For public policy, all this should inspire a great deal of caution for mandating any given outcome or specific standard. Because there are undeniable trade-offs from any standard-setting decision, governments should be: a) wary of thinking they have sufficient foresight to make proper standard-setting decisions; and b) deferential to private attempts at standard setting. Different business models will emerge, different appetites for risk will be revealed—some firms will hedge risk and cooperate with others in standard setting; others will audaciously seek to “win” the standard with a fully closed, vertically integrated model (large parts of the iPod business model come to mind here). Only where the collective

action problem seems overwhelming should government deign to enter the standard setting sphere.

Finally, for public policy makers, we can never forget the lessons of public choice theory, which predicts that firms and interest groups will seek government favor in promoting their standards solution and handicapping their rivals. Any call for government to prefer one standard or model over another must be subject to the most exacting skepticism given what we know about the propensity for the public policy process to be perverted toward private ends.

With that, let me address three issues relating to digital music interoperability that occasioned this hearing today. I have three specific theses: first, protect the Schumpeterian incentives to innovate and compete for, not just in, the market; second, allow open and closed platform business models to compete; and, third, permit the freedom to use digital rights management technology so digital music will be brought to market.

#### PROTECT THE SCHUMPETERIAN INCENTIVE TO INNOVATE AND CREATE NEW PLATFORMS

Much of the brow-furrowing over interoperability in digital music stems from the success of Apple's iPod platform. I urge this Subcommittee not to give in to the politics of platform envy, however. Instead of being concerned with the business decisions of a firm, and the preferences of consumers, the Committee should celebrate the triumph of the iPod platform as Schumpeterian competition at its best.

Joseph Schumpeter, you may recall, was the economist who described capitalism as a process of "creative destruction," with new firms and new products spurring innovation and creating new markets. Digital music is a new market, and the iPod platform and its remarkable success is the harbinger of that market and what it can be. In turn, this competition for the market has spurred other innovation, other platforms and other business models to emerge to challenge the iPod platform. This is a type of competition that benefits consumers immeasurably. It is the type of dynamic competition that is making digital music a reality to millions of American consumers. The law—intellectual property and antitrust law, specifically—should encourage this dynamism.

There are at least three benefits to this Schumpeterian competition: firms compete to build a valuable customer base, firms bring new products to market more quickly for fear of being displaced, and companies are driven to develop superior technologies. All of these are benefits we are now seeing from inter-platform competition for digital music markets. To be sure, this competition may create some hiccups and difficulties for interoperability as it goes on, but the innovation benefits are worth it. Furthermore, these markets usually trend toward interoperability, as that is usually where consumer preference directs them.

By contrast, government-mandated interoperability sacrifices the dynamic competition for the standard for competition within the standard. This mandate would appropriate the value that the platform innovator has created, and allow others to interoperate on the platform. Long-term, such mandated unbundling of digital music platforms in the name of interoperability will quell innovation and investment in the platform. Furthermore, this call for mandated interoperability is, by definition, going to be opportunistic. No one calls for access to failed platforms, say the Betamax, the Commodore 64, or the Digital Audio Tape.

One of the questions here is how law will treat cases of reverse engineering, such as Real Networks has attempted to do with the iPod, and various hackers have done with the Fairplay DRM system and the Napster To Go DRM. Interestingly, copyright law tends to be more solicitous of reverse engineering, while patent law tends to be hostile toward reverse engineering attempts. On balance, it seems to me that IP law should encourage this inter-platform competition such as we see happening in digital music, and thus be suspicious of attempts to reverse engineer and de facto "unbundle" the successful platform.

So, my first advice is: don't give into platform envy and mandate some sort of interoperability. Antitrust law and the common law-like doctrines of intellectual property law are adequately suited to address the challenges from new digital music platforms.

#### (RELATIVELY) MORE OPEN AND MORE CLOSED PLATFORM MODELS WILL COMPETE FOR DOMINANCE

A related question to the type of competition that is occurring in this market is the platform models that firms choose to compete in the market. This gets to the heart of interoperability, as different firms opt for platforms of varying degrees of "openness," on the one hand, or closed integration, on the other. For Congress, I do



not think this should be of particular concern because the market will sort out what is superior, or at the very least make a better judgment about the inevitable trade-offs involved.

From a business standpoint, you can see the trade-offs and strategic decisions that companies are making. By opting for a more “open” platform, the firm hopes to attract more users to its platform and increase the number of applications compatible with its platform. The trade-off involves sharing more of the profits from that platform, and also perhaps some of the quality control over the whole consumer experience. In contrast, a more closed platform rather audaciously attempts to garner all of the “rents” from production, but at a cost (perhaps) of interoperability. We saw this very dynamic in the competition for the personal computer standard with the lower-cost, modular Wintel platform competing with the higher-cost, more tightly integrated Apple MacIntosh platform. We see reflections of that same business strategy difference now with digital music players.

Recently, *The Wall Street Journal* had a story about a new trend toward “closed” non-interoperable platforms—in coffee makers. Yes, coffee makers, which have traditionally been “open-architected” devices with standard filter basket design and open to any brand or grind of coffee. Now, companies such as Nestle with a Nespresso, Sara Lee with Senseo and Kraft with a Tassimo, are making closed-platformed coffee makers that use special filters and coffees that work just with the specific maker. And just last week a new, relatively closed standard emerged on the consumer electronics scene, the Sony PSP. I know this because my 10 year old son is bugging me for one. The PSP uses a disk size that is proprietary to Sony. As a consumer, I may fear “lock in” on these closed platforms, but I can make the decisions whether to buy or not.

Should public policy be concerned with this turn in the annals of coffee maker platform design or video game devices? Probably not. If you start looking for standards to scrutinize, you will see them everywhere—from razors and blades, to PSPs and disk drives, to MP3 Players and iPods. Because we cannot know in advance what consumers will prefer or what is truly superior, we should forbear from interfering.

#### FREEDOM TO USE DIGITAL RIGHTS MANAGEMENT

A final value for public policy should be to ratify the acceptability and use of digital rights management or DRM technologies. DRM allows content providers a reasonable degree of confidence in bringing digital music to market, and consumers the ability to purchase digital music. DRM will be integral to consumers’ access to digital content and hence must be allowed its place as a valid market mechanism to bring digital music to market.

Some argue that DRM is a limitation on consumers’ freedom and its used should be circumscribed. This is wrong on two fronts. First, the price system in a functioning market takes this into account and reduces consumers’ costs correspondingly. If I purchase a song with DRM attached that limits its platform compatibility, those limits are in the price I pay. Because the nature of digital technologies allows perfect, costless copying, my consent as a consumer to purchase a DRM-restricted song may be the only way I can enjoy digital music. If the choice is between digital music with DRM and no digital music, I will take the former.

The argument that DRM—and its associated technological arms races to break it—is socially wasteful proves too much. By this logic, my investment of locks on my home is socially wasteful because a determined burglar will be able to break in anyway. DRM does, as we see, inspire a hack and counter-hack arms race, and this is indeed not salutary for the mass of consumers who want to properly use licensed digital music. And indeed, DRM can be overrestrictive to consumers’ desires for interoperability. But right now, I do not have a better idea. More important, the market opportunity for more-tailored DRM should provide the opportunity for it to become better and more accommodating of consumers’ wishes.

Indeed, HR 1201, pending in another committee, would in effect remove DRM as a marketplace option. By permitting consumers to circumvent copy-protection mechanisms, currently a violation of the Digital Millennium Copyright Act, any contract between a consumer and a content provider involving a fixed payment for a fixed set of rights could be unilaterally voided by the consumer.

We are constantly hearing calls for more flexible business models in digital content. If HR 1201 were to pass, I could approach the existing smorgasbord of digital music offerings, for example, and purchase the most affordable option, which likely involves limitations on platforms and devices, enforced through DRM technology. I could then legally hack through those protections and use the content however I may see fit, gaining the same flexibility of use as a consumer who paid full price

for that use. It's not hard to imagine that in a world where DRM hacking is legal, there would be little incentive for content providers to compete with various rights models, as we see now with Napster To Go. That would mean less content with fewer price options, and thus a loss for consumers.

CONCLUSION

Standards are hard. Interoperability is a good thing, but not an absolutely good thing. Consumers' tastes, for the most part, will drive toward interoperable platforms, but not necessarily.

Intellectual property law, antitrust and administrative regulation point in slightly different directions on these issues, but are up to the task of confronting the policy challenges presented by digital technologies. From Congress' point of view, the best course would be to resist calls for mandates or technology limitations in this dynamic space.

I thank the Committee for this opportunity and ask that my written remarks be made part of the record. I am happy to answer any questions you may have.

Mr. SMITH. Thank you, Mr. Gifford.  
Dr. Pence.

**TESTIMONY OF WILLIAM E. PENCE, PH.D.,  
CHIEF TECHNOLOGY OFFICER, NAPSTER**

Mr. PENCE. Thank you, Mr. Chairman, Mr. Berman, Members of the Subcommittee for inviting me here today. Thank you, also, for the leadership that you have exercised in the fight against piracy and for recognizing the importance of the legitimate on-line music marketplace.

Like our colleagues in the on-line music industry, Napster has a vision for what consumers want in a service: great music, deep catalog, easy-to-use technology, high-quality files without spyware, pornography or viruses, and flexibility and portability all at a fair price.

Recently, as you may be aware, Napster introduced the first portable music subscription service, Napster To Go, that allows consumers to enjoy our large catalog of music on a variety of portable devices for a flat price of only \$15 a month. Combined with unlimited downloading and streaming, we believe this service provides consumers with all of the key elements they want in a digital music service: freedom to discover music on an unlimited basis and the ability to take that music with them wherever they go.

For many users, this is a more attractive option than buying individual tracks for 99 cents. We support an ala

carte download store as well, and we strive to offer as many choices to consumers as possible. All of these choices, and more to come, are enabled through our underlying digital rights management platform which is based on Microsoft software components.

I have been asked to testify today specifically about digital music interoperability, about the value of interoperability to consumers, creators, and legitimate on-line music marketplace and about when full digital music interoperability may be available. In particular, some have asked whether Congress should help jump-start the legitimate marketplace by mandating digital music interoperability so that consumers will no longer be confused, so that they will know for sure that every digital song they acquire lawfully will play on any portable music player and on any PC.

We have been asked whether digital interoperability might be the magic bullet that enables legitimate on-line music to win the battle against piracy and black-market networks.

As a technologist, it seems important to appreciate that each digital song file has two essential components, the audio compression software and the digital rights management software and that each can be a source of interoperability confusion. You may be familiar with audio compression software or codecs that have been developed by Real Networks and Microsoft, as well as the MP3 format developed by Fraunhofer and the AAC format utilized by Apple. But there were literally dozens of audio codecs offered in the late 1990's.

Historically, codecs were incompatible, and if one downloaded a song in the MP3 format, it would not play if your PC utilized a different format. Today, however, this is less of an issue, generally, because audio codecs have been in the marketplace for several years, and traditional marketplace forces have evaluated the qualities and sustainability of each. As a result, only two or three codecs are relevant in the on-line marketplace today, and interoperability is considered essential and made possible by licenses that are easily available and economically reasonable.

For consumers, the generally successful outcome is that PCs and portable music devices today support more than one of the surviving codecs, minimizing, although not eliminating, dysfunction for end users. Today, for example, users can copy their CD collection onto their PC in the MP3 format and combine those music files with songs purchased from Napster in the Microsoft WMA format and seamlessly transfer all to portable devices without ever knowing that two separate formats were involved.

In contrast, DRM interoperability has remained at the center of debate in the on-line music industry. In the last several years, high-quality DRM technologies have been developed and offered by dozens of companies. While the market has narrowed the field from dozens of DRM technologies to less than a handful today that are commercially meaningful, the DRM market is still significantly less mature than the codec market, and the competing offerings are not fully rationalized or stabilized.

More importantly, DRM technology is still in a stage of rapid innovation. This is best demonstrated by the pace of new business models being introduced in the market, including our own Napster To Go service. As consumers' on-line services and copyright owners have become more sophisticated, technology innovators have responded rapidly and brought improved products to market, but DRMs are still being developed, tested, challenged and upgraded, and I encourage Congress to welcome and promote this innovation and the improved music offerings that result.

It is my belief, and the essential point of my participation today, that marketplace forces will continue to drive innovation in the DRM arena with the tenant consumer benefits, new ways to enjoy digital music at a variety of different price points, while also gradually solving the interoperability problem.

The solutions will be evident through a combination of consumer devices that support multiple DRM formats and services that will translate from one DRM format to another, as content flows legitimately between devices, always maintaining the user rules as defined by the service that originally makes the content available. Al-

ready we see evidence of DRM market forces in action, as companies coalesce around platforms.

Historically, the Government has not been a participant in competition between early-stage consumer technologies. Government intervention in the innovation business can lead to politicizing and inhibiting such innovations rather than allowing the marketplace, based on actual demand, to select winners that must continue to provide viable solutions.

In contrast, Napster wholeheartedly endorses the conclusions of Chairman Smith and Representative Berman that were offered in a recent Subcommittee hearing about our music licensing laws. Congress has a critical role to play in facilitating the legitimate online music marketplace by modernizing the Copyright Act.

Thank you, again, for providing the opportunity for Napster to address the issues that continue to hamper industry and for your continuing support in helping royalty-paying, on-line music services defeat piracy.

[The prepared statement of Mr. Pence follows:]

PREPARED STATEMENT OF WILLIAM E. PENCE

Mr. Chairman, Mr. Berman, and Members of the Subcommittee:

Thank you for inviting me, on behalf of Napster, to testify at today's hearing at which the Subcommittee is considering the importance of digital music interoperability. Thank you also for the leadership that you and the Members of the Subcommittee have exercised in the fight against piracy, and for recognizing the importance of the legitimate online music marketplace, both for its independent value as an opportunity for creators and consumers to distribute and enjoy more and different types of music, and for the value of royalty-paying online music as the marketplace solution to piracy.

Napster is also particularly appreciative of the Subcommittee's leadership with regard to the education and youth market. Napster, as you know, is working closely with the recording industry and a number of universities to bring legal music to the campuses of America in a manner that encourages this important consumer group to respect the legitimate marketplace while recognizing its hunger for a full-featured digital music service at a reasonable price.

Like our colleagues in the online music industry Napster has a vision of what consumers want in an online music service: great music, deep catalog, easy-to-use technology, high-quality files without spyware, pornography, or viruses, and flexibility and portability, all at a fair price. Moreover, our company story demonstrates that consumers are willing to pay for this: from a standing start four years ago as PressPlay to today's Napster, we now have more than 400,000 paying subscribers worldwide, including more than 50,000 subscribers on college campuses.

Recently, as you may be aware, Napster introduced the first portable music subscription service, Napster-to-Go, that allows consumers to enjoy our large catalog of music on a variety of portable devices for a flat price of only \$15 a month. Combined with unlimited downloading and streaming, we believe this service provides consumers with all the key elements they want in a digital music service—freedom to discover music on an unlimited basis, and the ability to take that music with them wherever they go. For many users, this is a more attractive value than buying individual tracks for \$0.99, though we support an a la carte download store as well, and we strive to offer as many choices to consumers as possible. All of these choices, and more to come, are enabled through our underlying digital rights management platform, which is based on Microsoft software components.

I have been asked to testify today specifically about digital music interoperability—about the value of interoperability to consumers, creators, and the legitimate online music marketplace—and about when full digital music interoperability may be available. In particular, some have asked whether Congress should help jump-start the legitimate marketplace by mandating digital music interoperability so that consumers will no longer be confused, and rather they will know for sure that every digital song they acquire lawfully will play on any portable music player, on any PC, and if burned to a compact disc that it will play on every CD player. We have been asked whether digital interoperability might be the magic bullet that

enables legitimate online music to win the battle against black market networks that enable music theft and generate no royalties to artists.

As a technologist, it seems important to appreciate that each digital song file has two essential components—the audio format software and the digital rights management software—that can each be a source of incompatibility. You may be familiar with audio format softwares, or codecs, that have been developed by RealNetworks and Microsoft, as well as the MP3 format developed by Fraunhofer and the AAC format utilized by Apple. But there were literally dozens of audio codecs offered in the late 1990s, including software developed by AT&T Labs and Universal Music.

Historically codecs were incompatible, and if one downloaded a song in the MP3 format it would not play if your PC utilized Liquid Audio software, and vice-versa. Today, however, this is less of an issue, generally because audio codecs have been in the marketplace for several years and traditional marketplace forces have evaluated the qualities and sustainability of each. As a result only two or three codecs are relevant in the online music industry today, and interoperability is considered essential and is made possible by licenses that are easily available and economically reasonable. And for consumers, the generally successful outcome is that PCs and portable music devices today support more than one of the surviving codecs, minimizing (although not eliminating) dysfunction for end users. Today, for example, users can copy their CD collection onto their PC in the MP3 format and combine those music files with songs purchased from Napster in the Microsoft WMA format, and seamlessly transfer all to portable devices without ever knowing that two separate formats were being integrated.

In contrast, DRM interoperability has emerged recently as the center of debate in the online music industry. In the last several years high-quality DRM technologies have been developed and offered by dozens of companies, including Liquid Audio, AT&T Labs, Universal Music, RealNetworks, IBM, Microsoft, Contentguard, Intertrust, Verance and Macrovision. While the market has narrowed the field from dozens of DRM softwares to less than a handful today that are commercially meaningful, the DRM market is significantly less mature than the codec market, so the competing offerings are not fully rationalized or stabilized.

Importantly, the market's immaturity is driven by the technology's immaturity, as DRM technology is still in a stage of rapid innovation. This is best demonstrated by the pace of new business models being introduced in the market, including our own Napster to Go service, based on the just released DRM10 technology from Microsoft. As consumers, online services and copyright owners have become more sophisticated, technology innovators have responded rapidly and brought improved products to market, but DRMs are still being developed, tested, challenged, and upgraded—and I encourage Congress to welcome and promote this innovation and the improved music offerings that result.

It is my belief, and the essential point of my participation today, that marketplace forces will continue to drive innovation in the DRM arena with attendant consumer benefits—new ways to enjoy digital music at a variety of different price points—while also gradually “solving” the interoperability problem. The solutions will be evident through a combination of consumer devices that support multiple DRM formats, and services that will translate from one DRM format to another as content flows legitimately between devices, always maintaining the user rules as defined by the service that originally makes the content available.

Already we see evidence of DRM market forces in action as companies coalesce around platforms. A good example of this is the many online services and device manufacturers that have licensed and deployed the Microsoft DRM. Others, such as Apple, have chosen not to license their technology platform under any terms to services and manufacturers eager to offer innovative business models to consumers. Perhaps Apple is confident that its market-leading position is best maintained by promoting a closed environment, and that is a legitimate business decision that some endorse and others may question. Napster believes that allowing the iPod to work with multiple service offerings would benefit consumers. Nevertheless, I do not see Government intervention as the solution, as it would stifle competition and innovation that will benefit consumers and copyright owners at a very early stage of the market's development.

Historically the Government has not been a participant in competition between early-stage consumer technologies, such as between the VHS and the Betamax, the cassette and the 8-track tape, USB and Firewire, or the current competition between DVD Audio and Super Audio CD. Similarly, it does not seem prudent for Government to pick a winner in the continuing (but still quite early-stage) marketplace battle between Apple's Fairplay DRM and its competitors. Government intervention in the innovation business can lead to politicizing and inhibiting such innovation, rather than allowing the marketplace, based on actual demand, to select “winners”

that must continue to provide viable solutions or lose their market—deservedly—to the next great offering that someone develops in his or her garage or corporate lab.

In contrast, Napster wholeheartedly endorses the conclusions of Chairman Smith and Representative Berman that were offered in the recent Subcommittee hearing about our music licensing laws. Congress has a critical role to play in facilitating the legitimate online music marketplace, by modernizing the Copyright Act—in particular, Sections 115 and 112 as they relate to music publishing rights and royalties. Napster and our legitimate online music competitors compete with pirate services, and it is critical to creators and all who support them that royalty-paying services win the day.

If this Subcommittee helps legal services to secure blanket licenses for music publishing rights, we will offer the full catalog of music that, ironically, only the black market networks players can currently provide to consumers. Once we are actually functioning on an equal music playing field, Napster believes that our then-significantly larger number of consumers who realize that our features and functionality are so much more robust and appealing than the virus-ridden free option, will speak out on the subject of interoperability and encourage the market to adapt.

Thank you again for providing the opportunity for Napster to address the issues that continue to hamper our industry, and for your continuing support in helping royalty-paying online services defeat piracy.

Mr. SMITH. Thank you, Dr. Pence.

Mr. Bracy?

**TESTIMONY OF MICHAEL BRACY, POLICY DIRECTOR,  
FUTURE OF MUSIC COALITION**

Mr. BRACY. Thank you, Mr. Chairman, Mr. Berman, Mr. Conyers, for being here today, and the rest of the Subcommittee. We appreciate the opportunity to present some testimony, some thoughts.

You have our written statement, so I am just going to kind of give some reflections off that if that is okay with the Committee.

As we are preparing for this hearing, it occurred to us that this is actually the 5-year anniversary of the formation of Future Music Coalition, and it gave us an opportunity to reflect on sort of what we have seen over the last 5 years and some kind of larger themes.

I think one of the things that is important to recognize is that a lot of what we are dealing with in the music community is the idea that new technologies have dropped the cost of actually getting involved in the music community, that technology creates more musicians because more people have access to capital to create music and to distribute music, to promote themselves, and to build that one-on-one relationship with friends.

The challenge that you see, as more and more people come into the community, is that the existing music structures, the historic music structures don't really support the amount of content that comes into the marketplace, and, frankly, didn't support in the traditional models the way and the ability for consumers to then to access that content.

And while there is a lot of disagreement and a lot of different sort of visions as far as how you get to the end game, as far as the legitimate digital marketplace for music, there are some themes that we think cut across all aspects of the music community of musicians an songwriters; the first being that whenever possible artists need to maintain control over their copyright and their career decisions.

Second is that artists, as independent entrepreneurs, need the ability to compete in the marketplace, meaning they need access to

the basic networks, they need the ability to be compensated for their work, and they need the ability to access consumers.

The third is something that you have done a great job throughout this process with the Committee is that artists need to be seen by policymakers as valued participants in this process, that is, the new systems are designed, new structures are designed that artists need to be at the table, and we certainly appreciate your leadership.

Now, this transition, as we said, is necessary and it is welcome, and it is important, and that as more people get into this marketplace, you are starting to see the type of experimentation that really leads to this development of a legitimate marketplace. Five years ago, we said the only way to compete with Napster, an unlicensed Napster, was with a legal Napster, that you have to really try to create incentives in the marketplace to grow the market, to create legitimate models.

And in the music community and among musicians, you really see an embracing of those technologies. We recently published a study with the Pew Internet and American Life project that really had two major conclusions:

The first is that, on a universal basis, artists are embracing the Internet. They are embracing technology. They are trying to integrate that into their careers as a way to reach their fans directly and to promote their work.

Of course, at the same time, there is this wide diversity of opinions as far as where we are today. There are a lot of different opinions in terms of peer-to-peer. You see that emerging artists embrace peer-to-peer, to a certain degree, because it gives them exposure. It is a way to get their name out there. Existing artists, established artists, they are concerned about what is happening to their revenue streams. They are skeptical about what is happening with the new models, and they are eager to see revenue flow into them directly. They see what is going on with their checks.

Now, as the other witnesses have talked about, you are starting to really see this digital marketplace emerging. It is remarkable, 5 years on, to think about the growth of satellite radio, digital subscription services, music blogs, e-zines, Internet radio, webcasting, podcasting, iTunes.

Consumers are demonstrating their willingness to adopt legitimate digital services. The marketplace is beginning to take hold. The question is can we continue to see a legitimate marketplace that really will benefit musicians and music fans. In fact, the point is not that this industry is perfect or that there even is a "solution" in place. It is a complicated process. It includes multiple competing markets which are dependent on evolving, technological innovation and regulatory policy decisions. The future music marketplace will be driven, to a large degree, by consumer adoption of broadband and high-speed services to the home, which has its own regulatory and technological uncertainty. Spectrum policy and the transition to digital radio are going to play a big part of this as well.

So vigilant congressional oversight to date has been critical to this process. We are making a lot of inroads. We are seeing the growth of the market. Now, there are a lot of other sort of issues that are involved here that some don't have the jurisdiction of this

Committee, some do, but that help sort of inform the growth of this digital marketplace.

They include looking at issues of consolidation of the existing commercial radio industry, accusations of structural payola that limit the amount of songs or the type of songs they can get on the public airwaves, expanding community-based low-power radio networks into urban markets, looking at the digital audio broadcasting question to make sure that DAB is implemented in a way that addresses the fundamental concerns about localism, competition and diversity that we have raised as far as what is happening in the commercial radio marketplace, and bringing digital radio in line with other noninteractive digital transmission services that are required to pay an additional performance royalty to performers for the use of the music.

Finally, I want to echo Mark Cooper's point, which is that, as independent entrepreneurs, it is absolutely critical that musicians and artists have access to the underlying networks, that they can't be blocked off of the main channels.

So, again, we appreciate the opportunity to testify. We look forward to answering any questions and thank the Committee for their leadership.

[The prepared statement of Mr. Bracy follows:]

PREPARED STATEMENT OF MICHAEL BRACY

My name is Michael Bracy. As a founder and the Policy Director of the Future of Music Coalition, I appreciate the opportunity to speak with you today.

FMC was founded on the belief that the terrestrial music industry is fundamentally broken. By that we mean that the structures that dominate the marketplace underserve the majority of creators and music fans. We did not form FMC simply to complain, but to effect substantive change in the music community by injecting the critical voices of artists and creators in the midst of this transition from analog to digital. By including these often absent voices at this critical juncture, we work to build more equitable and responsive models. By that we mean:

1. Whenever possible, artists must maintain control over copyright and career decisions.
2. Artists must be able to compete fairly in the marketplace, meaning they must be able to receive compensation for their work and have access to consumers.
3. Artists must be seen by the policymaking community as valued stakeholders in policy debates

The music community is in the midst of a necessary and welcome transition to a digital business model. Major labels and commercial radio stations have become integrated into huge corporations focused less on music and culture but on maximizing revenues. The fundamental basics of the major label structure—the need for huge capital investment and scarcity of promotion and retail outlets—have been overrun by technological innovation.

This innovation has reshaped the way that music is recorded, manufactured, promoted and distributed. Digital studios and software programs dramatically reduce production costs. The Internet vastly increases promotional and sales opportunities. The marketplace for independent music has exploded, as indie labels proliferate to serve the expanding artist community. While much of this music is simply not aimed at the kinds of mass audiences of interest to major labels or commercial radio, there clearly is a market for this music, and alternate and Internet-based economies have begun to take shape.

As these digital models take flight, many musicians are embracing new business models that allow greater independence, direct contact with their fans and more control over their careers. Others point out the uncertainty of these times, and express skepticism that legitimate digital distribution structures can be monetized at a level that would replicate their revenue streams they are used to receiving from previous models.



In this context, the results of a recent study conducted by FMC and the Pew Internet and American Life Project should not be surprising, or controversial. This study found that musicians fully embrace the Internet to promote and sell their work but remain divided over the question of file-sharing.

To a large degree, we found that these results could be tracked according to demographic factors—emerging artists were more likely to embrace file sharing services as a way to promote and distribute their work, while established artists who made a majority of their income from being a musician or songwriter raised more concerns.

From our standpoint, it is important to recognize that we are still in the early days of a significant marketplace transition. While peer-to-peer remains extraordinarily popular, a legitimate digital marketplace is emerging. Consumers are exploring new, licensed ways of accessing and enjoying music, including satellite radio, digital subscription services like Rhapsody, Emusic and Napster, music blogs and ezines, the growth of Internet radio, webcasting, podcasting and digital download stores like iTunes. This trend demonstrates consumers' willingness to adopt legitimate digital services, and reinforces the critical notion that the combination of technical innovation, access to the underlying delivery mechanisms and reasonable licensing terms can create a revitalized industry that serves both musicians and music fans.

The point is not that this industry is now perfect, or that we even can see the "solution". Rather, we all should acknowledge that the digital transition is complicated. It includes multiple competing markets, dependent on evolving technological innovation and regulatory policy decisions. The future music marketplace will be driven by consumer adoption of broadband to the home, an area full of regulatory and technological uncertainty of its own. Spectrum policy and the transition to digital terrestrial radio will play a significant role in determining how consumers are able to access digital content, and how performers will be compensated in the future.

Vigilant Congressional oversight of the transition of the music marketplace has played a critical role in its success to date. At the same time FMC sees a number of potential opportunities for action today. Will Congress listen to the concerns of the music community by addressing consolidation of the commercial radio industry and accusations of structural payola that limit the songs that appear on the public airwaves? Will the FCC be permitted by Congress to expand the wildly popular non-commercial Low Power Radio licenses to urban markets? Will Digital Audio Broadcasting be implemented in a way that addresses the fundamental concerns about localism, competition and diversity in the radio marketplace? And will digital radio be brought in line with other non-interactive digital transmission platforms that are required to pay an additional performance royalty to performers?

Most importantly, will Congress be able to defend the ability of musicians and songwriters to compete in the marketplace by ensuring access to high speed networks? As independent entrepreneurs, musicians and songwriters require that the fundamental open structures of the Internet remain in place and that innovation is allowed to continue.

Over the past five years, the Future of Music Coalition has been fortunate to collaborate with dozens of organizations, representing hundreds of thousands of musicians, songwriters, retailers, promoters, community broadcasters and fans. The transition to a digital economy represents real threats and real opportunities to these communities. That being said, there are core themes that cut across all aspects of the music community. These shared values of artists' control over their copyright and career decision, ability to compete in the marketplace by receiving compensation for their work and accessing consumers, and being active participants in the policy process can serve us going forward.

Thank you again for the opportunity to participate in this hearing, and I look forward to answering your questions.

Mr. SMITH. Thank you, Mr. Bracy.

Dr. Cooper, in your testimony you said sellers of closed platforms need to better inform consumers that their platforms are closed. How would you suggest that they do that? Are you just talking about a warning label or something else? And if there's anyone who disagrees with that, I'd like to know that as well.

Mr. COOPER. You know, we could hypothesize a labeling program which would be an obligation, but I don't necessarily want to get

there because that creates a process of gaming that Mr. Gifford talked about.

But the simple fact of the matter is, imagine if we had—if iPods had to be labeled that said, “This music won’t play on anything else,” or vice versa. That would actually, people would then start to think. And as people build up libraries and they discover that they can’t move their music from one device to another, although if that continues what you’ll get is hackers who will start making it possible because innovation is hard to quell in this marketplace.

So the point is that policymakers need to engage in a little bit of jawboning here, as maybe instead of a regulatory position.

Mr. SMITH. So maybe not a Government mandate, but still full disclosure.

Mr. COOPER. Sure. Full disclosure, and attorneys general ought to be asking these questions, this Committee, et cetera. Jawboning can frequently get you a lot of help in the marketplace rather than having a formal process about is this labeled.

Mr. SMITH. Is there anyone who disagrees with the idea of full disclosure and labeling for the consumers?

[No response.]

Mr. SMITH. Okay. Mr. Gifford, I’m tempted to ask you if you think Schumpeter should be the patron saint of Congress, but let me ask you a more colloquial question, which is, do you see any role for Government at all in the process?

And that’s a question I’d like the other members to address as well.

Mr. GIFFORD. Not at this time, Congressman. You have an emerging nascent market. I think Dr. Pence spoke well, that you have DRM technologies that are less mature than file format technologies, and there’s a lot of foment going on right now in this marketplace, a lot of business models that are being tried, a lot of reliance interests that are just taking root, and I don’t know how Government can do anything but upset that very tentative equilibrium we’re seeing.

Mr. SMITH. Dr. Pence and Mr. Bracy, what do you think about any role for Government?

Mr. PENCE. Well, I mentioned the 115 issue in my opening remarks. Short of that I don’t think there is much of a role to play at this time. We think the market is very dynamic. We’ve been introducing new business models as some of our competitors have been, and we think the market is in the early stages where it should be allowed to evolve and offer more choices to consumers. So we don’t—I don’t see any additional role at this time.

Mr. SMITH. Okay. Mr. Bracy?

Mr. BRACY. Mr. Chairman, I think one of the challenges is that to a certain extent it’s important that Congress look at ways of demonstrating that there is this broader marketplace for local and independent music. I mean one of the realities of the music community is that it is local, it’s independent. The music community has very little to do as far as the mass marketing of music that you see in terms of major, you know, huge platinum selling artists. And there are little things that I mentioned in our testimony that can be done tangentially, less on technology mandates or DRM discussions or things like that, but more on looking at the existing

ways that most consumers access music and making sure they have access to independent voices.

Mr. SMITH. Okay. Thank you, Mr. Bracy.

Mr. Bracy, let me ask you and Dr. Pence to go beyond your testimony. And you don't have to answer this question if you don't want to, but I want to ask you about the Apple business model, whether you think limiting the interoperability to iTunes and the iPod is going to be a successful business model or not, just your opinion?

Mr. BRACY. You know, with the understanding that this is really we have very limited expertise, but as a personal on the specific concept, you know, business people do business and we do different things, but, you know, that we are glad to see the market evolving and obviously they have first mover advantage, but you know, the challenge is will the market speak? And the question is will the market speak or not? And I don't really have an opinion on that.

Mr. SMITH. Dr. Pence, do you have a—

Mr. PENCE. I do have an opinion. I think it is a business model that has clearly had some success. It's actually—the ala carte model is one that we offer as well. However, we have offered other business models and we expect to offer additional models in the future, so we think choice is very, very critical, and that's the path we've embraced, choice not only in business models but an open approach to devices and support on different platforms. The choice Apple has made about retaining a closed environment is a legitimate business choice they have made and time will tell whether the marketplace will reward that or not.

Mr. SMITH. And I think as the market evolves you're probably going to have consumers want more choice, but that's also just my opinion as well.

Mr. Gifford, anything to add to that?

Mr. GIFFORD. Well, actually, I think, and I mentioned—

Mr. SMITH. Well, actually, Dr. Cooper. I called on Mr. Gifford, but then I'll ask you for your response in a minute too.

Mr. COOPER. I think this history of the last 25 years really, I started from that one example of—I'm sure Mac thinks they had a very successful business model, and they have 5 percent of the market now, and that may make them happy. But we can go back and find other examples.

One really interesting example has to do with the World Wide Web, and the predecessor to World Wide Web was a service known as Gopher. It was an application, and some people in this room may remember that. And there was a key moment where the owners of Gopher, the creators of Gopher had said, hey, we're going to start charging people royalties and reorganizing this, and folks dropped it like a rock. And the World Wide Web came along, which is a magnificently open system. And I could give you other examples.

So what happens here is that business people can make decisions about what serves their interest, and they'll be happy with a nice little niche market, but our society is much better served by the drive toward open platform.

Mr. SMITH. Thank you, Dr. Cooper.

Anything to add, Mr. Gifford?

Mr. GIFFORD. First of all, Mr. Chairman, I've been on enough panels with Dr. Cooper to know that he can't help himself. [Laughter.]

I don't think I have anything to add. I think you could, you can recognize a general trend, that digital markets tend toward interoperability, but not necessarily.

Mr. SMITH. Agreed. And despite the sort of divergent backgrounds of the four panelists today, it's interesting that almost everybody seems to agree on the issue at hand.

So I thank you all for your testimony, and the gentleman from California, Mr. Berman, is recognized.

Mr. BERMAN. Thank you very much, Mr. Chairman.

So, Dr. Pence, even though my daughter complains about not being able to get the Napster service on her iPod, you don't think Congress should make iPod get the Napster service?

Mr. PENCE. Well, Congressman, we have a very active community in the Napster service, as I'm sure your daughter knows, and we have very active message boards, and so the issue of iPod compatibility is raised all the time to our customer care group, to us directly. And there's no question that we would benefit with interoperability with iPod.

However, having said that, I think to take that into a Government mandate for some sort of interoperability solution is not the right answer. The Apple service has been very successful. We announced 2 days ago very, very strong growth in our own business, as you may have heard. So we feel very confident that over time by offering choice and using every legitimate means to license the various platforms to take the Napster service to all devices and all platforms, we think that is the best way for us to proceed, and we think it's in the best interest of consumers in the market.

Mr. BERMAN. All right. I'm going to tell her to quit bothering me and go to your message board. [Laughter.]

Dr. Cooper, you make a differentiation in your testimony about when it's okay to demand interoperability, and you cite as an example the music industry is limited in that it affects only the music business, while the railroad industry affects the entire economy. Ignoring the fact that you brush over the role of music and the productivity of the workforce, I want to carry out your assertion, take the logic of your assertion and apply it to something else here. When you say the marketplace and not Government intervention or legislation should and will resolve the interoperability question for technology, why doesn't this analysis work for the copyright owners who use too restrictive DRM? Won't they also pay the price, consumers will choose formats more convenient for them? Isn't that the most efficient way for consumers to let it be known to the copyright owner instead of through legislation? What is the difference between the developer and the content owner in this particular area?

Mr. COOPER. No. I agree. I think that DRM, once we have choices out there, different people will choose the level of use that they're allowing to their customers. And you've heard examples of different kinds of models. And the marketplace will decide that. I do also think that a too restrictive DRM is going to be a form of failure of interoperability and consumers will—we will get competition for

DRM as well. And so I do think because—but that’s still the widgets part, and we think that that marketplace will actually also address that problem. So I accept your challenge. And we consistently will argue and have argued that give consumers choices about the level of functionality and they will make their choice and it will drive the marketplace.

Mr. BERMAN. Good answer. Not consistent with the Consumer Federation’s position on some legislation that’s come to Congress, but a good answer.

Mr. COOPER. Well, I think it went too far but—

Mr. BERMAN. The legislation the Consumer Federation endorsed or the ones it opposed?

Mr. COOPER. No, no. We endorse a reasonable definition of “fair use” for consumer and oppose the legislation that we think—

Mr. BERMAN. And a mandate on labeling requirements, okay. You state that the retailers of digital music—well, actually what I’d like to—the French Consumer Federation, in effect, which is a better way for you to hear about this than me trying to pronounce the French name, has launched a legal action over the two companies’ proprietary music formats, claiming that the respective digital rights management used by both Sony and Apple which prevents songs brought from their online music shops from being played on other manufacturers’ media players is limiting consumers’ choice. The total absence of interoperability between DRM removes not only consumers’ power to independently choose their purchase and where they buy it, but also constitutes a significant restraint on the free circulation of creative works, that group said.

It’s interesting how the French perspective on this is different than the Consumer Federation’s. Could you develop that?

Mr. COOPER. Well, look, our testimony is clear. When we get to widgets, and in my opinion applications of widgets in the digital age, we believe market forces will solve these problems. I’ve identified the situation in which as the market matures if we have lots of exclusive deals and not lots of competition widgets, then we would get some antitrust concerns. But at this stage of this game, especially with the recording industry, the established recording industry just getting into this business—last year was our watershed year—we think that this is not the time or the place to impose mandates. We think we still have platform competition going on at the level of widgets, and we think that we are going to be much better served with the industry now adopting a digital distribution and allowing innovators to continue to innovate, including all forms of distribution.

Mr. BERMAN. The only thing I’ll say in closing because my time has expired is I understand this position and it makes a lot of sense to me. What I don’t understand is supporting my friend’s bill in the context of why won’t the same market forces end up creating music that individuals be able to pass to their friends and take in other formats in their home and do all those things because it will serve a need that consumers want? Why are we getting into trying to draft the exact contours of that?

Mr. COOPER. Well, the—one of the central concerns about DRM is that it is taking away some of my rights that I thought I had in terms of my fair use rights, and that’s a source of concern to us.

So that we used to be able to listen to music in a variety of ways, to make copies to share, and those were fair uses, and maybe unregulated uses that were not bones of contention. And our concern is that we don't want to lose a lot of functionality and flexibility in this transition, which is supposed to be increasing my functionality and flexibility. And so we'll be glad to come back and testify on that legislation too, if I can wangle an invite.

Mr. SMITH. Thank you, Mr. Berman.

The gentlewoman from California, Ms. Lofgren, is recognized for questions.

Ms. LOFGREN. I'll be brief because our joint session of Congress is about to begin. But I'll just say that this has been interesting to hear such unanimity actually from all of the witnesses, that this is a situation where Congress doesn't have to get involved. I mean there are some interoperability issues that demand congressional attention in fire services and the like, but this is not one of them. So I appreciate the intelligent commentary and the pitch to get a hearing on my bill, which would be great.

I yield back. Thank you.

Mr. SMITH. Thank you, Ms. Lofgren.

There are no other Members here, no other questions, so we thank you for your expert testimony today. It's been very, very helpful and very, very conducive to our being able to move forward with the process. So thank you all very much.

And we stand adjourned.

[Whereupon, at 10:52 a.m., the Subcommittee was adjourned.]

## A P P E N D I X

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### MATERIAL SUBMITTED FOR THE HEARING RECORD

PREPARED STATEMENT OF THE HONORABLE HOWARD L. BERMAN, A REPRESENTATIVE  
IN CONGRESS FROM THE STATE OF CALIFORNIA, AND RANKING MEMBER, SUB-  
COMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

Mr. Chairman,

Thank you for scheduling this hearing on digital music interoperability. I hope the testimony will be helpful in our continuing discussion of issues concerning the availability of legitimate distribution mechanisms for digital music.

The explosion of technologies that enable consumers to digitally download music has provided many new opportunities to the music lover. The ultimate goal is to provide consumers with their choice of music anytime, anywhere, in any format. However, this new environment has come at a great cost, that of rampant piracy on Peer to Peer Networks. What is considered "free" music available on the internet comes at the expense of the numerous people involved in the development of the sound recording: the artists, songwriters, musicians, sound engineers, and others. The consequences of piracy are felt throughout our economy, but they are especially harmful in my district where many jobs depend on the lawful sale of music.

The proliferation of legitimate music distributors in the marketplace has helped stem the tide of piracy. The number of available digital music delivery alternatives has increased enabling technology companies to help copyright owners make inroads against unauthorized downloading and sharing of music files. However, music companies will always have to compete with free music and analysts claim it will take a number of years before download services can provide a significant sales boost for the content creators. One of the major impediments to achieving a more level playing field, according to analysts, is the bewildering array of competing technologies.

As with any nascent industry, the development of new business models can lead to unintended results. In the case of digital music, there are concerns that interoperability barriers between the various suppliers could actually hinder growth in the market. Brandenburg, the father of the MP3, has warned that rival technologies will baffle consumers and risk alienating fans, driving them to unsanctioned file sharing networks where the songs are "free" and encoded in the unprotected MP3 format.

The International Federation of the Phonographic Industry (IPFI) has noted that "one important problem that hinders growth of the online music business is the lack of interoperability between services and devices. The danger is of wide-scale consumer confusion and wasted opportunities in a market which has extraordinary growth potential." They observe that there is no easy solution, but that all the players in the online market need to work harder to solve the interoperability difficulties in 2005.

Yet the market continues to develop. The portable player market already presents consumers with an array of choices. Now we see the convergence of music devices and mobile handsets. The goal of making music easier to buy than to steal is becoming a reality, and therefore these innovative services deserve our thanks.

However, anti-piracy efforts must remain a focus for technology companies industries as they develop their products. A legitimate distribution business model must be one that is based on payment and permission of the rights holder.

With digital music moving into the mainstream of consumer life, I believe it will be helpful to further this conversation by discussing what, if any, impediments are facing companies that are now distributing digital music and how they are addressing consumers' needs for legitimate music.

In an ideal world, we would have all the major players in the digital music market at the table to hear their opinions about the issue—but I look forward to hearing from these witnesses to help define some of the issues.

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PREPARED STATEMENT OF THE HONORABLE JOHN CONYERS, JR., A REPRESENTATIVE  
IN CONGRESS FROM THE STATE OF MICHIGAN, AND RANKING MEMBER, COMMITTEE  
ON THE JUDICIARY

Content owners and the high-tech industry should be commended for responding to consumer demand for digital music. For years, consumers have been clamoring for access to digital content. Because content protection technology and content owners had not caught up with the Internet, music lovers turned to illegal download sites like Napster and Kazaa for digital content.

We had heard that, if the content industry would just create a legal avenue for obtaining digital music, consumers would embrace it. The premonition was largely true. The record industry and high-tech worked together to develop digital content protection, to clear the rights needed to get music online, and to get music on the Internet. According to the Pew Internet and American Life Project, the response to legitimate digital content has been overwhelming: in 2004, only twenty-four percent of music downloaders had tried legitimate download sites; in 2005 to date, the number jumped to forty-three percent.

It is probably safe to say that the reason for this overwhelming response is the late 2003 launch of Apple iTunes. In business for a little over a year, iTunes has sold a record-breaking 300 million songs through its online store. Other download sites, like Napster and Rhapsody, are gaining speed by offering alternatives such as monthly subscription services instead of just downloads and allowing transfers to numerous digital music players. No matter how you view it, the marketplace is working.

Digital piracy existed long before legitimate services like iTunes came onto the market and, unfortunately, it likely will continue no matter how much easier the songwriters, recording artists, and record labels make it to obtain music digitally.

