

The Potential impact of Digital Rights Management on the Indian Entertainment Industry

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ABSTRACT

For India, having being endowed with a rich heritage of art and culture, copyright is perceived to offer potential rewards. The entertainment industry is one of the fastest growing sectors in the Indian economy. At present, India is not a signatory to the WIPO Internet Treaties, but the government has proposed amendments to the extant legislation to incorporate Digital Rights Management (DRM) as enshrined in them. Conventionally the western entertainment industry has viewed DRM as an important tool to combat piracy pervasive on the internet. DRM involves the application of a set of technical and legal mechanisms that allow copyright owners to control the access to their works, determine the types of permissible uses and terms of such uses and the ultimate distribution of their works in the digital world. With the growing popularity of Indian cinema abroad, the entertainment industry is attracting increasing foreign investment, is gradually being corporatised and thus it is felt that such investments need to be protected. DRM is considered to be one of the solutions as it prevents loss due to unlimited unauthorized reproduction of works, introduces more effective market segmentation and promotes the incentive to create, facilitating the maximum exploitation of works in the digital world.

However, for India, a developing economy, such a path is to be treaded with caution. DRM is an extra-statutory measure, with perceived potential impact on consumer privacy, innovation and limiting legitimate exceptions. A unique feature of the industry is that it is an extension of its dynamic indigenous folk and classical cultural tradition where the emphasis has been on adaptation and improvisation, drawing upon works in the public domain. Some experts observe that DRM poses a threat to such a tradition by artificially restricting the public domain.

This paper explores the likely impact of the proposed introduction of the DRM provisions in the Indian Copyright Act, 1957 with its focus on Bollywood and the related music sector. Given the tension surrounding DRM, this paper examines the aforementioned issues, taking into consideration the promotion of the underlying objectives of copyright law. Noting that the case for strong copyright protection as a key for innovation is highly debatable, this paper argues that India should keep in mind the flexibilities under law as provided by various international treaties and in technology before adopting the DRM approach.

1. INTRODUCTION

Creation, marketing and distribution of entertainment products involves a lot of financial risks. These risks are enhanced in the digital world as it facilitates the near perfect reproduction of the original product and its rapid distribution through out the globe. In a digital age such as ours, music and films are being increasingly consumed over the internet. This is where the role of Digital Rights Management (DRM) becomes vital as it is perceived to provide a safe environment for transaction of copyrighted content in the networked world by preventing access to it without the content owner's authorisation, making consumer's usage rights explicit and thereby establishing

new channels for revenue generation. DRM has been a highly controversial topic since its inception in the developed world in the 1990s. Apple Inc. CEO, Steve Jobs's recent letter entitled 'Thoughts on Music', suggesting that record labels should sell songs online unencumbered by DRM, has caused quite a stir within the music industry and consumer groups in Europe and the USA. It has once more brought to the forefront debates surrounding DRM. The letter has potential economic/legal implications for both entertainers and the entertained, not only in the matured economies of the west but also in the maturing economies of the east, like India, where the government has suggested amendments to the extant copyright legislation to introduce DRM.

The entertainment industry is one of the fastest growing sectors in the Indian economy. In this sector, Bollywood, the principal Bombay-based film industry of India, is most prolific globally in terms of number of films produced,¹ and at the same time, the film related music sector is also experiencing an unprecedented boom. At present, India is yet to become a signatory of the WIPO Internet Treaties (WCT and WPPT), but the Indian government has proposed amendments to the current legislation to incorporate DRM as enshrined in those treaties. Such proposals, if they become law, have several implications for various stakeholders in the aforementioned industries including the content owners and the consumers.

In view of the controversies surrounding DRM in the western entertainment industry, this paper explores the likely impact of the proposed introduction of the DRM provisions in the Indian Copyright Act, 1957 with its focus on Bollywood and the music industry associated with it. Firstly it gives an overview of these industries and tries to note the DRM initiatives in India. Next, it provides the legal framework for DRM under WIPO followed by some examples of DRM systems in the west. Further, it unfolds the DRM debate by taking into consideration the perspectives of various stakeholders regarding it. Then it examines the Indian government's proposals regarding DRM. Drawing from such examination, the paper then analyses the potential impact of the DRM proposals on the Indian entertainment sector. Finally, it concludes by asking the question as to whether DRM systems should at all be introduced in the Indian scenario. Arguing in favour of DRM, the paper however emphasises that such a path is to be treaded with caution. India should adopt a DRM regime that forwards the underlying objectives of copyright law of maintaining a balance between individual rights of ownership and use of copyrighted works for societal benefit.

2. INDUSTRY OVERVIEW

The Indian entertainment industry is on a high growth path. The current estimates of the Indian Entertainment and Media Industry are at INR353bn (\$8.2bn). It is expected to grow at a CAGR of 19% over the next five years. The film industry's share is INR68bn (\$1.5bn) and is expected to grow to INR123bn (\$2.7bn) by year 2010, with a CAGR of 19%². From the time of the introduction of first talkies in 1931, India has produced more than 67,000 films out of which Hindi language films that are mainly represented by Bollywood have the largest box office share³. Bollywood is now going beyond national boundaries as it is found to be an attractive alternative to the Hollywood ethos, with INR4.5 bn (\$102mn) revenue earned in 2000 through exports⁴. The

¹ Lovgren S. 'Bollywood: Indian Films Splice Bombay, Hollywood', at http://news.nationalgeographic.com/news/2004/01/0121_040121_bollywoodfilms.html accessed on 5.1.07.

² FICCI-PCW March 2006 Report, 'The Indian Entertainment and Media Industry: Unravelling the Potential' at pg 12.

³ Dass R., Kumar S., Rungta A. (2006) 'Risk Mitigation in the Indian Film Industry: A Concept Note', Indian Institute of Management, Ahmedabad, W.P.No. 2006-10-01

⁴ <http://www.bollywoodblog.de/2006/02/06/blogs-und-bollywood/>. Industry's exports grew by 17% in 2002 as overseas territories were increasingly more profitable with numerous productions realizing almost 30% of their total net revenue from abroad, at <http://www.managingip.com/?Page=17&ISS=12711&SID=473309>. As per FICCI's mid 2006 estimates exports have grown by over 30% pa, at http://www.ficci.com/news/viewnews1.asp?news_id=496 accessed on 10.3.07.

music industry's share is INR7bn (\$1.58mn)⁵. Indian movie soundtracks account for nearly 70% of the music market and revenue earned by recorded music sales in 2005 was \$111.6mn⁶.

Currently several significant developments are taking place in the aforementioned industries. In terms of technology, for films, theatre screenings and cable TV have been important distribution formats. However only recently India has introduced digital cinemas and now has more than 350 in number⁷. Such technology is hoped to lower the distribution costs and contain piracy. Satellite television, home video, VCD and DVD markets are the other distribution formats that are considered important for the future of the film business. In case of music, in contrast to the west, the audio cassettes industry is thriving and accounts for more than 60% of total units sold⁸. In juxtaposition, India is the fifth largest consumer of CDs in the world⁹. The mobile music and licensed digital distribution services are the expected star performers for the industry's future growth. In 2007 India is predicted to become only the second country in the world where digital music, mostly mobile music, will generate greater revenue than sales embodied in audio cassettes or CDs¹⁰. Unlike in the west, the market for online music and movies is quite negligible in India as broadband penetration is only around 3%. As per Telecom Regulatory Authority of India's 2006 estimates, India has 2.1 million broadband connections and industry insiders predict that the broadband base will touch 30 million by 2009¹¹.

Another important transformation being witnessed by the industry is that the financing of films is gradually being corporatised¹². Also, foreign investment¹³ is pouring into all aspects of Indian commerce, including the film and music sectors.

One factor that is perceived to be a major hindrance to the growth of the entertainment business worldwide is the problem of piracy¹⁴. In case of music, the latest loss figures due to piracy have been pegged at \$52.7mn by the International Intellectual Property Alliance¹⁵. In case of films, trade analysts report that optical disk piracy is very high¹⁶, which basically nullifies theatre revenues after only 3 months, nearly half that of a typical U.S. theatrical window¹⁷. The Motion Pictures Association of America reports a loss of \$186mn¹⁸ for 2004-05 in India. In case of online piracy, a recent AC Neilson OG MARG study conducted on behalf of the Motion Pictures Association of India informs about the growing tendency of illegal downloading of movies made in

⁵ Supra note 3

⁶ Butler S, (24.2.07) 'Business is Blooming: India' at <file:///C:/Documents%20and%20Settings/Nilanjana/My%20Documents/phd%20articles-qm-10%20jan%202007/india/music%20industry-feb%202007%20stats.htm> accessed on 25.2.07.

⁷ Nair M. (20.8.06) 'Bridging the digital divide', The Economic Times, New Delhi

⁸ supra 7

⁹ Narayanan A, (5.12.06) 'Entertainment Industry: Road Ahead', The Economic Times at <http://economictimes.indiatimes.com/articleshow/712193.cms> accessed on 10.2.07.

¹⁰ Supra note 7

¹¹ Supra note 7, where Soundbuzz, one of the three IFPI recognised online music services estimates that the Indian online music sales that stood at \$29,540 in 2005 is expected to grow to \$227,000 by 2009.

¹² <http://www.rediff.com/money/2003/apr/21spec.htm> accessed on 12.3.07.

¹³ Dubbed Hollywood films in local Indian languages is becoming a very profitable market for Hollywood with the Indian dubbing industry estimated to have grown around 25% over the last five years. Another area where Hollywood is making its presence felt is in merchandising film products/promotional items, at <http://www.ibef.org/industry/mediaentertainment.aspx> accessed on 10.3.07.

¹⁴ Supra note 3

¹⁵ The 2007 Special 301 Report: India at <http://www.iipa.com/rbc/2007/2007SPEC301INDIA.pdf> accessed on 10.2.07.

¹⁶ Supra note 8

¹⁷ 'India's Film Industry Experiences Booming Success, but Escalating Problems of Movie Piracy have Entertainment Sector Demanding Stronger Solutions' (22.2.07) at <http://www.investorideas.com/Companies/ViewDocument.asp?ID=4900> accessed on 23.3.07.

¹⁸ 2006 Worldwide Study Of Losses To The Film Industry & International Economies Due To Piracy; Pirate Profiles, at http://www.fact-uk.org.uk/site/media_centre/documents/2006_05_03leksumm.pdf accessed on 10.2.07.

English, Hindi and other vernacular languages that hurts both the indigenous and western film industries¹⁹. While the overall internet penetration is still low, its high growth rate has put the record industry on guard, which reports that MP3 music file-sharing and other P2P file-sharing are starting to significantly harm the Indian music market²⁰.

In light of such developments there is a perceived need to invoke copyright to protect investments into the industry. DRM is seen as a possible candidate for this job. In the west, various DRM models have been introduced to protect content, detailed examples of which follow in section 4. In case of India, introduction of Technological Protection Measures (TPMs) has been recent but is expected to grow with the increase in stakes for both the local and western entertainment sector. Recent initiatives include the adoption of the MPEG4 Digital Cinema System providing an end-to-end solution comprising film capture, encoding, encryption, management, secure digital delivery and playback at the theatre and importation of USA's Video's watermarking technology²¹.

3. DRM AND THE LEGAL FRAMEWORK UNDER WIPO

DRM is a generic term for a set of technologies for the identification and protection of intellectual property in digital form. It comprises TPMs and Rights Management Information (RMI). TPMs refer to systems and technologies that allow copyright owners to control the access to their works, determine the types of permissible uses and terms of such uses and the ultimate distribution of their works in the digital world. RMI refers to mechanisms that identify digital works and are used to manage the provision of materials to customers²². In order to protect DRM, internationally, anti-circumvention legislations have been enacted that not only ban the actual act of circumvention but also the manufacture, sale and distribution of devices that can be used to break protection provided by DRM systems.

The WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonographs Treaty (WPPT) adopted in 1996, together called the WIPO Internet Treaties, were aimed at adapting the legal paradigms of copyright to new technology. They form the basis for DRM at the international level. Articles 11, 12 of WCT and 18, 19 of WPPT provide for TPMs and RMI.

Article 11 of the WCT obligates *“contracting parties to provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorised by the authors concerned or permitted by law.”*

Article 12 states in relevant parts *“contracting parties shall provide adequate and effective legal remedies against any person”* who knowingly performs any of the acts mentioned in this Article or has reasonable grounds to know that the performance of such acts *“will induce, enable, facilitate or conceal an infringement”* of any rights covered by the WCT or the Berne Convention. The prohibited acts consist of the removal or alteration of *“any electronic rights management information without authority”* and the distribution, importation for distribution, broadcasting or communicating to the public, *“without authority, works or copies of works”* with the knowledge that *“electronic rights management information has been removed or altered without authority.”*

Articles 18 and 19 of WPPT mirror the aforementioned provisions for Performances and Phonographs.

In USA two legislations, namely, the Audio Home Recording Act, 1992 and the Digital Millennium Copyright Act, 1998 (DMCA) provide DRM protection. The latter, implementing the WIPO Internet

¹⁹ 'Now showing, illegally downloaded movies', (19.7.06) at http://www.filmpiracy.com/news/Now_showing_illegally_downloaded_movies.pdf accessed on 10.2.07.

²⁰ Supra note 7

²¹ Supra note 18

²² Digital Rights Management: Report of an inquiry by the All Party Internet Group, Government of U.K., June 2006, at pg 15.

Treaties, has proved immensely controversial till date. In case of the EU, Directive 2001/29/EC entitled 'Harmonization of Certain Aspects of Copyright and related Rights in the Information Society' was promulgated to give effect to the Internet Treaties and its implementation is still an ongoing process.

4. POPULAR DRM SYSTEMS

Some popular DRMs introduced into the western entertainment industries are as follows:-

(a) FairPlay- Apple Inc.'s DRM uses the Advanced Audio Codec (ACC) format to encode its songs which are then protected by FairPlay, its proprietary DRM that administers usage rights. However, FairPlay does not support other protected DRM formats like the WDRM (Windows DRM)²³.

(b) Windows DRM (WDRM) - It uses a flexible Rights Expression Language (RELS) called XrML. Windows Media Rights Manager (WMRM), a Windows RMI specimen, incorporated into the Window's Media Player, uses sophisticated encryption technology to protect media files. However, the system has been recently hacked by programs like FairUse4WM that wiped the media files clean of file sharing restrictions²⁴.

PatchBay, another WDRM, is used for online video-on-demand service, introducing customised usage rules and pricing schemes corresponding to consumers' access to content, their location, which in turn reflects the movie studios' contractual agreements for that place while movie distribution occurs. Thus the DRM is able to successfully introduce effective market segmentation based on various variables.

(c) The Content Protection System Architecture-It refers to the overall framework for security and access control for content protection in DVDs. This TPM system covers encryption, watermarking and protection against reproduction via analog and digital outputs. Content Scrambling System (CSS) and Advanced Access Content System (AACSS) are examples of this system.

In spite of such protection CSS was cracked in 1996 by a software called DeCSS that allowed people to access decrypted DVD content and to copy it. This resulted in the case of *Universal City Studios, Inc. v Reimerdes*²⁵ that tested the anti-circumvention provisions of the DMCA for the first time. The case involved an internet site which provided a link to the DeCSS software that permitted the breaking of the Macrovision protection (a TPM) on DVDs. One of important issues was whether the main aim was to gain unauthorized access to the DVD content or whether it was being used in line with the fair use doctrine by consumers who had lawful access to such content. The plaintiffs' brought an action under Section 1201(b) arguing that by posting and linking to DeCSS, the website provided a tool to circumvent the access and copy control technologies used to protect the content in the DVDs. Conversely, the defendants argued that DeCSS allowed the fair use of DVD media by facilitating people to watch movies on operating systems that did not support Macrovision. Moreover, the DeCSS code was an expression of free speech that deserved protection under the First Amendment. The Court of Appeals ruled in favour of the plaintiffs holding that the principal purpose of DeCSS was to defeat the limitation on access to the content incorporated in CSS. Such an activity was expressly prohibited by DMCA. It further held that the Congress had the legitimate authority to regulate the uses of DeCSS code and thereby banned the website from posting or linking to DeCSS code.

AACS, believed to provide a stronger protection than CSS, has been designed to control access to both audio and video, including high definition content as specified by license holders, in an

²³ Chandak N, George C. (2005), 'Can iTunes be we Tunes?- Is FairPlay playing Fair?', presented at the 20th BILETA Annual Conference 2005.

²⁴ http://www.infoworld.com/article/06/09/27/HNmsuesdrmhackers_1.html accessed on 09.2.07.

²⁵ F.Supp.2d, 2000 WL 968832

online and offline environment. Unlike CSS, this is a renewable system, which means that it has the capacity to withdraw the device features that consumers paid for while buying the equipment, and can even disengage users' efforts to install after market improvements to their own technology²⁶. AACS built into the latest DVD technologies like HD-DVD and Blu-ray has been cracked²⁷.

(e) Copyleft-Through its GNU General Public License (GPL), the Copyleft is a departure from the copyright system whereby the content creator, under a GPL, perpetually transfers his exclusive rights as provided by the copyright system to others, including any revision that is made to that content. The license, irrevocable in nature, allows the users to use the content without limitation and its redistribution and modification for noncommercial purposes. However, it requires making available of such derivative work to others under the same license.

The Creative Commons movement is a similar initiative that follows a middle path between very restrictive DRM models and the Copyleft variety.

5. THE DRM DEBATE

DRM is controversial as it involves mediating of conflicting interests, involving significant investments, of various stakeholders in the industry. The main interest groups are, (i) the content creators and copyright owners, (ii) wholesalers and retailers of content, (iii) network providers, (iv) manufacturers of consumer electronics, computer hardware, DRM developers and vendors, (v) consumers and (vi) social stakeholders²⁸.

In the entertainment business the content creators do not have much say in the debate as they are primarily dependent on the copyright owners and their licensees for their living. The interest of the content owners and licensees lies in preserving the value of their catalogue/brand, business models, monetizing current hit albums/tracks/movies, implementation of rights revocation and existence of interoperable DRM technologies. The dilemma faced by this group is that on one hand they want to protect their content in order to maximise their profits but conversely they may incur losses if the DRM chosen by them is very restrictive resulting in consumer backlash. They form a formidable pressure group whose influence have resulted in controversial legislations like the DMCA²⁹.

The wholesalers and retailers of content unite with content owners when it comes to copyright piracy. However, there are divisions within this group wherein most distributors of content, apart from theatre owners and broadcasters, are opposed to DRM systems that are not consumer friendly³⁰.

When it comes to network providers like the cable and satellite operators or the Internet Service Providers (ISPs), there is again a conflict of interests. Cable and satellite operators support a strong DRM regime as their revenue comes from limiting the number of views and the length of the viewing window of the content. By contrast, the ISPs favor content that is DRM free as they generate revenues from the increasing internet traffic. However, on the other hand, they do not want to be held accountable for copyright infringing activities of their subscribers and hence DRM is perceived to be beneficial for their trade.

²⁶ 'Digital Rights Management: A Failure in the developed world, a danger to the developing world', (2005) at http://www.eff.org/IP/DRM/drm_paper.pdf accessed on 10.2.07.

²⁷ http://www.computerworld.com/action/article.do?command=viewArticleBasic&taxonomyName=intellectual_property_and_drm&articleId=9009322&taxonomyId=144&intsrc=kc_feat

²⁸ Tassel JV, (2006), 'Digital Rights Management: Protecting and Monetizing Content', Focal Press, USA, Chap. 7.

²⁹ Ibid 29

³⁰ Ibid 29

The fourth category of stakeholders includes manufactures of devices like DVD, iPod and computers. Within this group, revenues of the manufactures of technologies are dependent on the availability of content. Hence they disapprove of DRM as they believe that it is used by the content owners to subsidise existing inefficient channels of content delivery and thus inhibits technological innovations. However, because of pressure from copyright owners, popular media equipment like DVD recorders, minidisks etc have had to incorporate TPMs like Macrovision and SCMS to protect copyrighted content³¹. The other subset in group three, the DRM developers and vendors like Apple, Sony, Time Warner etc, thrive on robust DRM mechanisms and are naturally inclined towards a DRM culture.

The consumers as stakeholders complain that many DRM systems are difficult to operate³²; lack interoperability, limit legitimate exceptions, invade their privacy, restrict the access and use of works in the public domain thereby hampering innovation and encourage anti-competitive behavior. One comprehensive example to explain some of these concerns is the FairPlay DRM of Apple Inc.

FairPlay is not interoperable with other DRM systems like Sony's ATRAC or Real Network's Harmony and Apple has refused to license it. This leads to market distortions as Apple is not only limiting the use of the copyrighted content, but also the medium or interface through which the work may be perceived by the users³³. Also, the consumers are locked into buying music only from that company's music store. In the *FairPlay* case³⁴, 2004, Apple's competitor, Virgin Media had filed a claim with the French competition council alleging that the former had abused its dominant position through FairPlay. This argument drew strength from the 'essential facilities' doctrine used in competition law³⁵. However, the Council decided in favour of Apple, holding that it was too early to define the market for DRM and also that, even if Apple was taken to be dominant in the portable player market, it had not abused its supremacy as users could get music from various sources for their iPods. Thus, at this point, it is unclear as to whether restrictions imposed by Article 82, EC Treaty is contravened by Apple's activities³⁶. Recently many European consumer groups have threatened legal action against Apple for such restrictive practices if no agreement is reached soon. Another allegation against FairPlay has been that it curbs the ability to transfer the user rights between consumers and hence not only nullifies the first sale doctrine but also limits consumers' legitimate exceptions concerning the usage of copyrighted material. Furthermore, the DRM does not allow consumers to format shift legitimately purchased content. In early January, 2007 the Norwegian government ombudsman's ruling held that the FairPlay violated Norwegian law. Such concerns are valid and should influence DRM implementation in India.

Another end user concern is that DRM's like CSS, AACs, etc., impinge upon people's freedom of expression and inhibit their non-conformist opinions by forbidding content use for academic research, reporting in media, review, criticism, etc., that are permissible under the Fair use/ Fair dealing doctrines or regulate previously unregulated uses³⁷ through license agreements³⁸. Such

³¹ Ibid 29

³² Ibid 29 at pg 213 where in 2001 the TPM placed on the Natali Imbruglia's CD faced difficulty in playing in some CD and DVD players resulting in product losses.

³³ Simkin G., Smith K, 'Redressing the Balance', Copyright World, March 2007, issue 168

³⁴ At http://www.conseil-concurrence.fr/user/standard.php?id_rub=134&id_article=356 accessed on 12.3.07.

³⁵ As per this doctrine, if a company, which dominates the market for a particular product, refuses to supply facilities, like access to power supply, raw materials, etc., that are required for the production of a competitor's downstream products, then the former company abuses its dominant position and could be held liable for anti-competitive behaviour. In case of DRM systems, the upstream product that is subject to competition law is interoperability standards. The essential facilities doctrine has traditionally been narrowly applied by the courts and is enshrined in Article 82 of the EC Treaty.

³⁶ Supra note 34

³⁷ Arnab A, 'Digital Rights Management-A current review', CS-04-00, Data Network Architecture Laboratory, University of Cape Town, South Africa, at pg 5, available at http://pubs.cs.uct.ac.za/archive/00000139/01/arnab_hutchison_issa2004.pdf accessed on 10.2.07.

control wielded by some stakeholders will affect the health of a pluralistic, democratic society³⁹. Many experts argue that DRM mechanisms cannot ever implement fair use provisions correctly as the concept is too broad, ambiguous, is case specific and will require very sophisticated technology, currently unavailable, for its implementation. Hence, extant copyright laws need to be overhauled to cater to user needs in the digital environment. However, others believe and the author supports the view that even though currently many DRM structures do not support fair uses⁴⁰, current RELs have the capacity to implement most of the fair use requirements on an individual basis⁴¹ and that the proposed amendments to the fair dealing doctrine in Indian Copyright Act 1957 provide adequate consumer protection. This aspect will be discussed in details in part 6 and 7 of the paper. Hence the concept of DRM is not inherently restrictive and it lies on the initiatives of the other stakeholders to introduce such flexibility for consumer benefit.

Concerns pertinent from a privacy perspective for consumers include the extent to which DRMs will collect and further process their personal data while browsing or buying content online, the purposes for and the conditions under which such data will be used and sold to others. The privacy of users may be affected if a DRM assists in the processing of data about them without their consent or knowledge, etc. Consumers believe that their integrity and dignity could be offended if such processing does not conform to their expectations of what is reasonable⁴². The tension between DRMs and privacy issues are heightened in cases of reuse of such data for secondary purposes. For example, in a case captioned, *Recording Industry Association of America (RIAA) v Verizon Internet Services*⁴³, the plaintiff asked the defendant, an ISP, to disclose the identify of a subscriber whom it believed was infringing copyrights by trading digital .mp3 files of copyrighted music via peer-to-peer (P2P) online programs. When the ISP refused, RIAA served it with a subpoena under the DMCA compelling it to produce such information. Though the decision ultimately went in favour of the ISP, it highlights the concerns of users as regards DRMs when content owners place customers' media usage habits under surveillance. However, this author feels that the debate regarding user privacy is not a very plausible one as most internet wholesale/retail services, for example Amazon or eBay, operate in a similar fashion and thus this fear is not unique to DRMs.

Renewable DRMs, like FairPlay, AACCS, etc., create additional problems for customers as mentioned in part 4 of the paper. It is felt that the consumers' anxiety especially in light of Apple's practice, are genuine. FairPlay's usage rules until 2004 allowed users to burn up to ten CDs. However, by introducing an update, the company later reduced this to a maximum of seven, thereby removing features from devices completely to the detriment of the users.

DRM systems are also criticized on the ground that the use of TPMs restricts the access and use of non-copyrightable and copyright expired works present in the public domain thereby hampering innovation as the common pool of knowledge is a repository for material that is needed for research and development and is responsible for creation of several iconic cultural images. Adobe's e-book DRM applied to novels like Alice in Wonderland and CSS technology on DVDs of public domain movies, are an attempt to shrink this common pool of free information. However, it can be argued that such DRM protection is justified as they shield investments concerned in content creation in such formats. Moreover, the public will still be able to avail works from other

³⁸ Dusollier, S, 'Fair Use by design in the European Copyright Directive of 2001', Communications of the ACM 46, 4(2003), 51-55

³⁹ Becker E., Buhse W., Gunnewig D., Rump N. [Eds.] (2003), 'Digital Rights Management: Technological, economic, Legal and Political Aspects', Springer, Germany at pg 423

⁴⁰ Mulligan D., Han J. and Burstein A., "How DRM based content delivery systems disrupt expectations of personal use", (2003), at <http://doi.acm.org/10.1145/947380.947391> accessed on 10.2.07.

⁴¹ Bechtold, S, 'Digital Rights Management in the United States and Europe', IVir, Buma/Stemra-Copyright and the Music Industry: Digital Dilemmas and supra note 40 at pg 603

⁴² Supra 40 at pg 423. In the EU, Directive/95/46/EC on Data Protection and Directive 2002/58/EC on Privacy and Electronic Communications deal with the interface between privacy issues and DRMs.

⁴³ Supreme Court of the United States, No. 03-1579., Oct. 12, 2004; 543 U.S. 924

non-DRM protected sources. This argument draws strength from examples like the Gutenberg Project⁴⁴ in case of Lewis Carroll's masterpiece.

Lastly, the social stakeholders, primarily referring to the end users, also involve institutions representing the content creators, government, legal and law enforcement communities and education institutions. A country's status as a content producer or its consumer plays a major role in shaping government policies regarding DRM. In the case of the US, the entertainment sector is very profitable and hence the emphasis is on strong content protection through DRM and legislations like AHRA and DMCA to support it. At the other end of the spectrum are educational bodies that are not only chief users of copyrighted content but are also key creators of such content. Under USA's laws, they take refuge under the fair use doctrine, enshrined in Section 107 of the Copyright Act, 1976 and legislations like the TEACH Act, 2002⁴⁵ for usage of copyrighted materials.

6. EXAMINATION OF INDIA'S DRM PROPOSALS AND ANALYSIS OF THEIR POTENTIAL IMPACT ON THE ENTERTAINMENT SECTOR

6.1. The examination of the DRM proposals

Considering the changes that the Indian entertainment industry is currently undergoing, it is felt that the introduction of DRM will have far reaching impact on this cultural industry. Before analysing the potential impact of DRMs, it is pertinent to first examine such proposals.

The proposed amendments to the Indian Copyright Act, 1957 include the introduction of Section 2(xa) that defines RMI and Section 65B that provides for the protection of RMI. Both sections are comparable to the provisions in the WIPO Internet Treaties. However, the latter does not provide for vicarious or contributory copyright infringement and thus leaves the question of ISP liability unresolved. The proposed Section 65A corresponds to Article 11 WCT and introduces protection of technological measures. It provides in subsection (1) that '*Any person who circumvents an effective technological measure applied for the purpose of protecting any of the rights conferred by this Act, with the intention of infringing such rights shall...*' be punished with fine and imprisonment. Subsection (2) provides exceptions to subsection (1) and in relevant parts provides that '*Nothing in subsection (1) shall prevent any person from: (a) doing anything referred to therein for a purpose not expressly prohibited by this Act: Provided that any person facilitating circumvention by another person of a technological measure for such a purpose shall maintain a complete record of such other person...necessary to identify him and the purpose for which he has been facilitated for*'.

From the point of view of the content owners and their licensees, such proposals are deficient as firstly, they nowhere define 'effective' technological measures. Secondly, they do not cover access control measures and are limited only to TPMs protecting the exercise of exclusive rights as provided under the Act. Thus, they do not cover TPMs that restrict actions that are not permitted by law. Thirdly, they cover merely the "act" of circumvention and not the trafficking in circumvention devices or services. Fourthly, Section 65A (2)(a) contains an exception which appears to permit circumvention for any purpose that would not amount to infringement under the Act, which in effect dilutes protection under Section 65A to a very large extent. A big shortcoming with the current proposals, as perceived by the entertainment business, is that they create very broad exceptions that can adversely affect the motion picture industry. Such exceptions, under Section 52 regarding Fair Dealing include a very broad private copying exemption⁴⁶. This leaves a possibility of infringement through camcorder copies in theaters under the pretext of their being for private and personal use and in turn can undermine the industry's anti piracy efforts. As per

⁴⁴ www.gutenberg.org accessed on 28.3.07.

⁴⁵ Technology, Education and Copyright Harmonization Act, 2002

⁴⁶ Proposed Section 52(1)(a)(i) provides that if any work except computer programs are used for private and personal use then it will be considered to be fair dealing.

the industry, in order to make this provision more precise and to adhere to minimum international standards of copyright protection and its treaty obligations, the proposed section should be revised to incorporate the three step test in the Berne Convention⁴⁷, the WIPO Internet Treaties⁴⁸ and TRIPS⁴⁹. Also, the exceptions for copying of computer programs, including Section 52(b)(v) that permits copying for any “noncommercial personal use” beyond the usual making of a back-up copy and exceptions for making transient or temporary copies are considered to be unacceptable by the industry. Additionally, Section 65A does not provide for any civil remedies. Lastly, Section 52(1)(c)(ii) tries to deal with ISP liability in case of transient and incidental storage. From the industry’s standpoint the issue of ISP liability is complex and should be framed in great details to facilitate actions against online piracy. Thus, the industry seems to be dissatisfied with the proposed amendments as they provide inadequate protection for TPMs against unlawful circumvention. And hence, if enacted in its present form, the Act would be incompatible with the WCT and WPPT.

6.2 Analysis of the proposals’ potential impact on the industry

Taking into consideration the above analysis and combining it with the status of Indian economy as a whole, it could be said that at present, the introduction of DRM will only have a minimal impact on the workings of the industry. This is primarily because the infrastructure and technology that are required for exploitation of content online, is largely absent in a developing economy like India. Hence DRM critics argue that there is no need for DRMs in their entirety or at best such a move should be delayed.

The management of digital content is anticipated to substantially impact the future growth of this sector. The consequences of such a move can be perceived to be negative or positive, depending on one’s stakes in the industry.

Users and consumer groups are generally not in favor of DRM. This group views that DRM has failed in the west and poses a danger to the development of the third world. The major concerns of this interest group are the lack of standardisation of DRM systems, danger presented by their renewability features, the limitations DRMs pose on the fair use of the copyrighted content, privacy issues, shrinking public domain and competition issues. The relevant counter arguments regarding these concerns have been explained in part 5 of the paper. At the very basic level, it has been argued that the individual appropriation of creation and inventions as signified by the intellectual property regime is alien to many cultures including India⁵⁰ and it might lead to the failure of such a scheme as the western ideology sustaining the copyright system is unfit for the complex non-western creative process⁵¹. However, it may be counter argued that most countries that presently have a successful copyright system have in the past had similar traditions of creation⁵² that have not been hampered by the introduction of copyrights. Conversely, copyrights could be said to have enhanced creativity as the system gives incentive to authors by protecting only original works. Anti-DRM groups further argue that repercussions of failure of copyrights emerge in the form of content piracy. Economically argued, DRM critics point out that piracy acts as one of the most efficient ways to create a market and a lock-in period for a product. Piracy produces network effects⁵³ and could be said to provide an indirect exposure to the product.

⁴⁷ Article 9(2) Berne Convention

⁴⁸ Article 10 WCT and Article 16 of the WPPT

⁴⁹ Article 13 TRIPS adopts and extends the scope of the aforementioned provision to apply to all rights under the Berne Convention.

⁵⁰ Towse R, ‘Copyright in the Cultural Industries’, (2002), Edward Elgar Publishing Limited, UK, at pg 126

⁵¹ Supra 51 at 127

⁵² An example is the Grimm Brothers’ stories that are a collection of the version of Germanic folktales that appealed to the brothers the most.

⁵³ Atreyee MS and Liang , ‘Encountering the Sustaining Myths of Copyright’, (2004), at <http://www.altlawforum.org/PUBLICATIONS/document.2004-12-18.5142324852/view?searchterm=Encountering%20the%20Sustaining%20Myths%20of%20Copyright> and

Hence, the introduction of DRM, one of its important aims being the stoppage of piracy, will in fact be disadvantageous for the local as well as the western entertainment business. However, it could be contended that such an indirect advertisement, finally leading to the legitimate sales of the content, will, amongst other factors, depend on the quality of the pirated copy. If the pirated product is of substandard quality then it might have the reverse effect of permanent loss of customers for a particular good. It could also be argued that if the quality of illegal copies, to a large extent matched that of the legal product, then effectively, there would be no need for the users to buy the legitimate alternative. Losses incurred by the industry due to piracy will lead to less investment that in turn will hamper the growth of quality goods and hence retard the cultural growth of a society. Also, promotion of piracy through the absence of DRMs is detrimental to the state which loses out on revenue as this market is untaxed and unmonitored⁵⁴. It has also been argued that the introduction of DRMs may lead to the possible shrinkage of the public domain that might harm India's entertainment industry. Prima facie evidence seems to suggest that the Indian film industry is an extension of its dynamic indigenous folk and classical cultural tradition⁵⁵ whose traditional expression lays greater emphasis on adaptation and improvisation, drawing from public domain works. However, such an argument cannot be sustained for reasons noted in part 5 of the paper⁵⁶ that makes out a case for DRM promoting creativity.

In spite of such critical arguments against DRM, in light of the rapid developments in the entertainment sector, as mentioned in part 2 of the paper, it is felt that now, it is the right opportunity to introduce DRMs into the industry. It is felt that that with the passage of time the industry's structure will become more rigid and complex making it difficult to initiate such changes. Also, an early launch of a DRM regime will help the government to analyse its effects on the industry and its various stakeholders within a relatively short time span that in turn will help it to fine tune the law to maximise benefits. Moreover, if DRMs are introduced late, there is the danger of consumer backlash, as being currently faced in the west, because by then users will become habituated to free pirated content. Hence a delayed initiation of DRMs is not advisable. Information goods, as represented by the intellectual property regime are public goods which allow joint, non-rival consumption by potential users⁵⁷. Public goods are nonexclusive in nature and hence it becomes impossible or costly to exclude free riders from access to it. Due to these characteristics, markets for information based goods and services are inefficient and prone to failure that diminishes the incentive to create. Copyright laws facilitate the exclusion of such non payers by granting creators certain exclusive rights with regards to their creations. DRMs, under the copyright regime help content creators and owners to effectively exercise their exclusive rights in a digital environment. Moreover, it is commonly argued that DRM protection does not benefit the content creators who are the main protagonists of the copyright system. Though DRMs seem to prima facie mainly benefit the content owners, it could be argued that if this interest group's investments are not protected then it will negatively impact the creators who are dependent on the former for their livelihood and ultimately losses suffered by the owners will harm the end users as such losses will surely be passed on to them in the form of higher usage prices and stricter restrictions. Another reason why DRM will prove advantageous to the industry

Liang L, 'Copyright, cultural Production and Open Content Licensing', (2002), at <http://www.altlawforum.org/PUBLICATIONS/document.2004-12-18.0245048957/view?searchterm=copyright.%20cultural%20production%20and%20open%20content%20licensing> accessed on 15.2.07. , which gives examples of alternative markets being created by piracy for software, VCDs and music in India that forced the copyright owners to sell goods at affordable prices.

⁵⁴ Larkin B. (2004), 'Degraded Images, Distorted Sounds: Nigerian Video and the Infrastructure of Piracy', *Public Culture* 2004 16(2):289-314; DOI:10.1215/08992363-16-2-289, available at <http://publicculture.dukejournals.org/cgi/content/refs/16/2/289>, accessed on March 28, 2007.

⁵⁵ Geravis D.J. (2002) 'The Internationalization of Intellectual Property: New challenges for the Very Old to the Very New', 12 *Fordham Intell. Prop. Media & Ent. L.J.*929. Also, Kutty PVVG. (2002) 'National Experiences with the Protection of Expressions of Folklore/Traditional Cultural Expressions: India, Indonesia and the Philippines', www.wipo.int/tk/en/studies/cultural/expressions/study/kutty.pdf accessed on 01.01.07.

⁵⁶ The French Competition Council's decision in the FairPlay case

⁵⁷ Bettig R, 'Copyrighting Culture', (1996), Westview Press, USA, at pg 79

is that even where exclusion of free riders is possible, it is impossible for copyright owners to establish the exact price differentials that reflect the variations in the value of information. This is where DRM, through technology is able to introduce effective market segmentation based on price differentiation. This is also beneficial to the consumers as they get a variety of price options to choose from. This has been one of the main reasons for Apple's success in the music industry. Thus, a strong case for DRM exists.

7. Conclusion

So is India ready for DRMs? Upon deliberation of facts, figures, arguments and counter arguments presented in the paper, it can be concluded that DRMs is desirable for the steady augmentation of the Indian film and the related music industry. DRM is inherently not a bad concept. The problem lies in the restrictive use of DRM systems by copyright holders. Realising that India presents a peculiar situation, where on one hand, the industry is experiencing an intense growth making it a force to be reckoned with by the developed world, while on the other hand, it still retains the characteristics of a developing economy, it is necessary to recognise and monopolise on the exceptions and limitations provided under the Berne Convention⁵⁸, TRIPS⁵⁹, WIPO Internet Treaties⁶⁰ and the 2004 WIPO Development Agenda⁶¹. India should implement DRMs that retain enough flexibility to promote the underlying objectives of copyright law, that is, the maintenance of a balance between individual rights of ownership and use of copyrighted works for societal benefit.

The examination of the DRM proposals to the extant Act reveals that they retain such flexibility. Firstly, by not defining as to what makes a TPM regime 'effective' it provides India an opportunity to implement DRMs to suit its local needs. Secondly, as opposed to the industry's sentiments, India is in line with its obligations under the WIPO Internet Treaties even when the proposals do not cover TPMs that control access to the content. This is so as the aforementioned Treaties lay down only the minimum standards of protection that every signatory state is obligated to incorporate into their national legislation. At no instance do they explicitly mention the incorporation of control access TPMs. Unlike the DMCA and the Copyright Directive, which provide a higher degree of protection via such access control TPMs, India has the discretion to exclude such measures to permit uses under fair dealing provisions thereby promoting the copyright's underlying objective. However, by limiting anti-circumvention provisions to TPMs that protect the exercise of exclusive rights as provided under the Act, India is preventing the protection of the rights of equitable remuneration under the compulsory licensing provisions, in a digital environment. This is not in conformity with the exceptions and limitations provided in the international legal framework. It is felt that such a move will severely harm the growth of the industry as it will be economically injurious to the content creators, owners, performers and the millions who are employed in the ancillary industries. Moreover, by covering merely the "act" of circumvention and not the trafficking in circumvention devices or services, the proposals are incompatible with the WIPO Treaties. Also, keeping in mind the counter arguments in part 6 of the paper relating to piracy providing indirect exposure to copyrighted material, any such foreseeable consumer benefits are rendered invalid. Also, the incorporation of civil remedies, as desired by the industry, is imperative, as unlike criminal remedies, they can be attained speedily and allow the content owners to take immediate action. Nevertheless, it is felt India will be able to forward the underlying objective of the copyright system through the exceptions clauses that will allow it to

⁵⁸ By granting Exceptions and Limitations in Articles 2(8), 9(2), 10bis, 11bis(2), 13 and 21 referring to the appendix, providing for compulsory licenses, it tacitly acknowledges the implementation of copyright laws that reflect the needs of a developing nation.

⁵⁹ Articles 2(1), 8(2), 9, 13 and 40 (1).

⁶⁰ Article 10 WCT and Article 16 WPPT

⁶¹ The Agenda recognises that countries while implementing an intellectual property regime should not blindly copy the west but should locally appropriate such regimes to stimulate their development, http://www.wipo.int/documents/en/document/govbody/wo_gb_ga/pdf/wo_ga_31_11.pdf accessed on 30.3.07.

cater to the user needs falling under the fair dealing doctrine. Also, it appears that the proposed exceptions are within the acceptable limit as they leave a possibility for the content owners to utilize an interweave of technology, copyrights and contracts to strengthen content protection and thus dispel their worries regarding reproduction through camcorders.

In terms of technology, India can balance the interest of consumers and content owners by adopting "Rights locker" architecture that enable consumers to access any content at any time from any device they want in a DRM protected environment. That is, technology is present that can accommodate fair use practices wherein the doctrine would no longer cover the physical copy of the content, but the attached rights that are stored in the rights locker⁶². Moreover, India should allow only those RELs like XrML found in WDRM that have the capacity to represent most user actions associated with content exploitation in a machine readable form that can be conditioned upon a wide variety of circumstances. Thus, DRMs can be programmed to express creativity leading to innovation⁶³. A live example of DRM just doing so is through Creative Commons licenses as mentioned in part 4 of the paper. Another way to make maintain this balance is to focus on DRM technology license agreements that, though do not directly override copyright limitations, can prevent device manufacturers from producing equipments that do not allow users to exercise legitimate exceptions. Lastly, by making DRM technologies interoperable, promoting efforts towards standardisation and encouraging DRM hardware and software companies to license their proprietary DRMs, many of the users' fears regarding anti-competitive practices, as exemplified by the practice of region coding in DVDs, can be allayed.

⁶² Supra 43 at pg 600

⁶³ Supra note 40 at pg 603