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Thesis

**Downloading and filesharing through Peer-to-peer networks: the
copyright versus the free access to the cultural products**

How to find a pertinent solution to this global problem?

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Abstract

The “peer to peer” (P2P) is a technology of downloading and filesharing between online - Internet - users by the mean of specified software. Since June 1999, the Napster software has made the happiness of millions of individuals who used it to obtain and share free audio files Mp3.

Rapidly, the major recording companies have prosecuted the Napster Company and managed to force it to close down. They were arguing against it for it is supporting the development on a large scale traffic of files protected by copyright and thus was threatening the whole music and movies economic world. Since fast Internet connections multiplied, "peer to peer" software and networks improved, so that this mode of exchange became an unprecedented success.

Today all cultural products, in particular films and music, are concerned with this free –of– charge distribution without any financial counterpart for the copyright holders. Two tools hold today the top ranks and concentrate large traffic: eDonkey and eMule. These two softwares contain a search engine which makes it possible to find in less than ten seconds almost any film, musical album, video game or even electronic book (e-book). It is enough to click on the file which one is interested in and some time later (between few seconds to few days) it is recorded on the hard disk of the computer.

The new technologies and combined practices, Internet and the P2P networks, offer to the consumers new possibilities a.They create a real new market, the so-called **DFM - downloading and filesharing market**. This new technological situation has generated new problems for the cultural products and artefacts rightholders because it enables consumers or users of these technologies and practices to get easily round the current property rights.

One question is relevant to this new situation: **How could be reached a pertinent solution enabling to reconcile satisfactorily the copyright and other rightholders’ interests with the consumers’ desires and practices ?**

The aim in this matter is to find an adequate equilibrium of rights between the copyright holders and the Internet users and technological innovators, so that each one could get a fair share of the system and receive their right earnings.

Does the solution searched for, or any solution, depend from the legal copyright status or any other legal mean? Or does it have to be searched for through other business means, as marketing strategy for instance?

The authorities, under the impulse of the music producers, the producers of video games and the studios of cinema, run after the users of this type of system with an aim of prosecuting them for piracy. Already programmers announce the imminent launch of new "peer to peer" softwares which will guarantee the total anonymity of its users.

“Hunting for the thieves has started and appears complicated for the gendarmes”¹.

¹ “Guide Le Figaro”, *Le Figaro* (French Newspaper), 8th November 2005.

Preliminary remark - Terminology

In this thesis the *Downloading and Filesharing Market* – so-called *DFM or DFP2PM*² in the following pages – is considered as a whole or a world competitive market. This thesis concerns the kind of artistic works which are mostly music and films and can be shared through Peer-to-peer - P2P - networks.

Therefore, this thesis will not deal with one sector of the industry in particular, music or movies, but with this industry and this market as a whole world. Thus each time the term “*the industry*” is used, it designates the entertainment industry of music and/or movies without particular distinction between them. The text will expressly specify when one or the other industry has to be designated individually.

Similarly, when expression such as “*cultural products*” or “*artistic works*” are used, they designate only the categories of works or products subject of the **DFM – Downloading and Filesharing Market through P2P networks**, i.e. music, movies, ... but exclude definitely paintings for instance or other “*cultural products and artefacts*”.

The terms “*users*”, “*final users*” or “*consumers*” designate individuals accessing to the online connections as Internet and thus having the possibility to use P2P networks.

For the legal analysis the term “*case law*” will be used frequently in reference to the law as established by the outcome of former cases. In the thesis several cases will be presented with the term “*case*”.

² *Downloading and Filesharing through Peer-to-Peer networks Market*

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Introduction

One often underestimates the speed of progress and change. Awakening and acknowledgement of the evolutions are often made rather late. These maxims, which have become truisms, easily apply to many aspects of our modern societies. Who would have bet ten years ago that all the possibilities offered by new technologies from today would exist ? All is going too fast, too far, so fast and so far that citizens usually consider and are involved in new situations when the change is already ineluctable. The two main problems are firstly the speed of acclimation/assimilation of the new technologies and secondly the compliance of these new technologies with the present rules, regulations and practices of the instant considered society.

Today it is not any more a question of deciding in favour or against these technologies and referred practices, since they already exist in a deep-rooted way among the youngest population which applies particularly to the Internet users, but not only.

1 - Problem definition

The new technologies and combined practices, Internet and the P2P networks, offer new possibilities to the consumers and create a real new market: the so-called **DFM - downloading and filesharing market**. But this new technological situation and the consequential development of a new market have generated new problems for the cultural products and artefacts rightholders because it enables consumers or users of these technologies and practices to get easily round the rights by creating a free-of-charge accessible market.

The present thesis analysis will be focused on the following research problem: **How could be reached a pertinent solution enabling to reconcile satisfactorily the copyright and other rightholders' interests with the consumers' desires and practices expressed on the new DFM ?**

2 - Purpose

The aim in this matter is to find a win/win situation and equilibrium of rights between copyright holders (artists and distributors) on one hand, Internet users (consumers) and

technological innovators³ on the other hand, so that each one could get a fair share of the system and receive the right earnings for their work and know-how.

Does the solution searched for, or any solution, depends from the legal copyright status or any other legal mean? Or does it have to be searched for through other business means, as marketing strategy for instance?

In order to answer the first question, this thesis will firstly present the problem and its context, so as to expose a clear understanding of the concrete current situation, with a realistic approach based on facts and mass phenomena. Then the current legal framework will be presented on different levels, international, European and national. For this presentation it will be demonstrated that a systemic approach is necessary to face the problematic, Internet being a global system without any limits, boundaries or borders.

Secondly this thesis will try to demonstrate that a legal solution is necessary and ordered but is insufficient to answer adequately the problematic and that the problematic requires an incremental kind of approach, i. e. in the field of the marketing strategy. An analysis of the problem will be developed in this marketing field with the aim of finding and proposing the most appropriate solution to the current problematic.

In order to carry out this analysis and to find a likely solution some main references will be used: the understanding of the real market situation, enabled by some author's personal experiences and acquaintances in the field, the theoretical references that will serve as guidelines throughout the analysis, and the existing and potential legal corpus provided by the international, European and French legal bases.

3 - Delimitation

In order to verify experimentally the pertinence of the analysis carried on in this thesis and the adequation between the proposed solution and the problematic's reality, an survey in the field would be necessary with the different market actors. This could be the subject of a PhD thesis that would combine a more in-depth legal analysis with a marketing strategy study on the basis of inquiries and special interviews of the different market actors. Obviously this phase of a PhD

³ Companies holding the technology allowing the free copy through Internet, i.e. P2P networks.

thesis is beyond the possibilities of the present thesis which will be satisfied only with the analysis of the available documents and upon the personal field expertise of the author.

4 - Outline

The thesis is structured in six parts:

- The part 1 or chapter 1, presents the problem in its context, so as to understand the current situation.
- The part 2 or chapter 2, gathers the theoretical and methodological references as a background relevant to the thesis problematic.
- In part 3, chapters 3 and 4 the research concerns the survey and analysis of the international legal framework and the US case law.
- Part 4, chapter 5, presents the European Union legal framework as it has to be translated in the Member-States laws.
- In part 5, chapter 6 and 7 is presented the French legal example in relation to its own goals and as an application of its obligations as a Member-State of the European Union.
- The part 6, chapters 8 and 9, consists in an empirical study on a strategical marketing level, so as to empirically seek for possible solutions or new ways of approaching the reflection on this matter.

Chapter 1: The Peer-to-Peer growing usage market and its law issues

Here will be presented the trends of appearance and growing use of new worlds of technologies. Then will be explored the consecutive new market, the so-called DFM, and its main actors that contribute activating it. And finally, it will be shown that the war waged between the industry sector and the growing DFM piracy might create an uncertain and asymmetric market situation which needs to find an efficient and effective solution.

1.1 – The emergence and development of new worlds of technology

Since the worldwide development of the Internet, the growth of the number of people connected has gone exponentially ⁴. New forms of technology are replacing existing ones. Moreover the Internet connections are improving more and more and become much faster ⁵. This

⁴ Midi Libre (French Newspaper), “*The use of new technologies in 2010*”, 09/12/2005.

⁵ Midi Libre (French Newspaper), “*The use of new technologies in 2010*”, 09/12/2005.

allows new uses, like sharing files efficiently. It is possible to download and share more and more rapidly (few seconds/minutes) and in a large quantity files of musics, films, video games, e-books.

Concerning the copyright field the same major issue comes under consideration each time appears a new technology, allowing individuals to copy a cultural product protected by the copyright in new and better ways. This brings on the table the question of the conflict between individual users rights and the protection of the intellectual or artistic property conferring rights to authors, producers and various intermediaries.

In the past this problem has occurred with books when the public became able to photocopy them. The same question required consideration when it became possible to copy audio tapes or record radio programs, then video tapes and TV programs (JVC's VHS, Sony's betamax). Again the question became crucial, and this time more problematically, with the appearance of several new technologies at the same time: more importantly the Internet and P2P networks on one hand, the mp3 and Divx/Xvid formats on the other hand. Obviously, Internet has brought a real revolution in communication, information, and transmission of documents and files. P2P networks created a new and very efficient and unexpensive ways to share files and documents.

1.1.1. The growing use of Internet connections and the P2P networks

The users of P2P networks⁶ allowing to exchange free-of-charge unlimited quantities of music, films, e-books, software and videogames, often pirated, increased their practices massively. For instance in France, the number of files thus downloaded has doubled in 2005, accounting for 1 billion musical files and 120 million films⁷.

The fact that people get more and more fast Internet connections, and can leave their computer the whole night long and download a huge variety of songs and movies has expanded the P2P systems usage rate. People can access easily to any music, film, book or video game that interest them.

⁶ The *peer-to-peer* constitutes, between two computers ("ordinateurs" in French since the 16 April 1955, denomination chosen by IBM and exclusively authorised for the French name of these apparels called computers; word found and proposed to IBM by the latin linguist Jacques PERRET) connected to Internet, one system of communicating and sharing files as well as a mutualisation system of the treatment and storage capacities. The P2P can not be only assimilated to a downloading way previously proposed by a programmer even freely of charge. It is only the immerged technological iceberg peak with as well uncertain as increasing dimensions. It is the statement to which leads the development and the diversification of technologies enabling the free-of-charge access to digital contents.

⁷ Midi Libre (French newspaper), « *Downloadings* », 23/01/2006.

During the past few years the infatuation for Internet has depended mostly from the existence of P2P networks. Upon a study, issued in 2004 and updated in 2005 (excluding the French datas) and driven by the *CacheLogic* company, has been given the information that 60 % of the Internet traffic is caused by the P2P one. According to the OECD ⁸, the users of these networks were in 2004 about 10 millions in the world, their number increasing of 30 % in one year.

Besides that, fast Ethernet networks have also developed with huge connection speeds like 100Mbit/second ⁹ as it is in the Lunds University Network for instance ¹⁰, and even faster ¹¹. It is possible for students to leave the computer on and download in one night a very important amount of musical or video files.

The Internet is essentially premised on the ability of users to share information through file sharing technologies that do not and must not depend on the pre-screening of content. It is a medium appreciated for its open, democratizing qualities ¹² and its internationally compatible size.

Facing such a tremendous evolution in the digital era, it is necessary to briefly explain and describe the concerned technologies in this thesis, in order to be able to sharpen and understand the real issues.

1.1.2. Internet

“*The Internet*”, or simply the Net, is the publicly accessible worldwide system ¹³ of interconnected computer networks that transmit data by packet switching using a standardized Internet Protocol (IP) ¹⁴. It is made up of thousands of smaller commercial, academic, domestic, and government networks. It carries various information and services, such as electronic mail, online chat, and the interlinked Web pages and other documents of the World Wide Web” ¹⁵.

⁸ “*OECD, Information Technology Outlook 2004 : Peer-to-peer networks in OECD countries*”, OECD report, 2004.

⁹ 100 Mbit/s corresponds to 12,5 Mbyte/s. At this speed, it is possible to download a movie (Divx/Xvid), in less than 5 minutes only, or several musical albums in the same lap of time.

¹⁰ The system in the Lunds University network is currently progressively being modified (spring 2006), so as to prevent from this phenomenon.

¹¹ It exist fast Ethernet networks with a speed up to 400MBit/s.

¹² STEINBERG (B.M.), 2000, <http://iml.jou.ufl.edu/projects/Fall2000/Steinberg/lawsuit.htm>.

¹³ The « Interconnected Network » (creator Tim Berners LEE) has become effective in April 1969 when american university researchers have achieved to link the computers of four research universities centres. Historically Internet is only a mean to interconnect computers. In March 1989, as to say twenty years after, was created the World Wide Web enabling to go directly from one message to one other and not only top connect two machines.

¹⁴ www.w3.org is the site of the World Wide Web Consortium which defines the international functioning of the Web.

¹⁵ <http://en.wikipedia.org/wiki/Internet>

It is coordinated today by the Internet Corporation for Assigned Names and Numbers (ICANN), headquartered in California. The ICANN manages in particular the assignment of domain names and IP addresses ¹⁶.

1.1.3. P2P Networks ¹⁷

The Peer-to-Peer ¹⁸ or the so-called short term P2P refers to the direct connection between two computers by which files can be uploaded and downloaded. To speed up the file transfers it is possible to establish several simultaneous P2P connections and to send and receive different parts of the same file almost at the same time.

Without entering in a very detailed display of the different P2P networks it is necessary to define the two basic kinds of system:

- a centralized approach, used by programs like Napster, using central servers to keep record of all shared files on the network and to process the search queries,
- more recently a decentralized approach has been developed by which supernodes, typically individual computers with a broadband Internet connection, take care of routing the search queries over the network. This is the case of programs like Kazaa, Grokster, LimeWire, Ares Galaxy, Morpheus.

EMule and eDonkey programs use the same approach as Napster, but the servers are not really central in this sense that they are independent from the programs. Individuals can make their own server available on the network.

A centralized P2P file sharing network has many benefits such as reliability and speed but it is also very vulnerable and can be shut down easily. After Napster was shut down by the RIAA, most new P2P networks adopted the decentralized Gnutella protocol which was originally developed at Nullsoft.

Another technology also exists, BitTorrent, elaborated by Bram Cohen. This program uses the upstream bandwidth of its users - the more users, the more aggregate bandwidth is available

¹⁶ IP address = Internet Protocol address; this is a kind of ID for computers. Each internet connection has an IP address.

¹⁷ http://www.brothersoft.com/internet/ftp/ares_gold_44229.html

¹⁸ The P2P technology has been invented in 1999 by Shawn Fanning, founder of Napster.

for sharing the files - after downloading has been completed, the user may leave his BitTorrent client open so that others may continue to gain from the file that has been distributed ¹⁹.

Currently a new generation of P2P programs is being developed, ensuring the total anonymity of its users. An anonymous P2P computer network is a particular type of P2P network in which the users and their nodes are pseudonymous by default. The primary difference between regular and anonymous networks is in the routing method of their respective network architectures. These networks allow for unfettered free flow of information, legal or otherwise ²⁰.

For example, Freenet is one of these programs; it is a decentralized censorship-resistant P2P distributed data store aiming to provide electronic freedom of speech through strong anonymity. Freenet is currently under development, and a version 1.0 has not yet been released ²¹. The principle of Freenet is an entirely decentralized network, in which information publishers and consumers are anonymous. Communications by Freenet nodes are encrypted and are "*routed-through*" other nodes in order to make it extremely difficult to determine who is requesting the information and for which content ²².

As of today it seems that Freenet is not very user friendly, because it is not easy to use, and also quite slow. But it might be improved in the future. For now it is a very advanced technology.

These technologies, together with piracy, have in particular enabled users to obtain and share with each other for free a tremendous amount of cultural products, thus disregarding the copyrights protecting them.

Copyright owners have tried to find some solutions in three fields. Firstly, they tried to settle the problem on a technological level, and also on a legal level. Reacting slowly on a business level, they finally started a reflection in order to adapt themselves to the new environment and structure of the DF market.

1.1.4. Mp3 ²³

¹⁹ http://en.wikipedia.org/wiki/Bittorrent#Legal_issues

²⁰ http://en.wikipedia.org/wiki/Anonymous_P2P

²¹ <http://en.wikipedia.org/wiki/Freenet>

²² Source: <http://freenet.sourceforge.net/>

²³ Source: "Guide Le Figaro", Le Figaro (French Newspaper), 8th November 2005.

It is the most worldknown format of musical file. It has more than ten years of existence, and still preserves its leadership even though it is facing an offensive competition. It has been developed in three years by forty researchers of the Fraunhofer Institute and of Thomson engineers.

The Mp3, for "Mpeg Audio Layer 3", is an algorithm of compression charged to reduce the quantity of data necessary to the restitution of the sound. This treatment aims to remove the frequencies that the ear does not perceive (very low and very high-pitched sounds) but also the "masked" sounds. It is thus quasi inaudible for the listener. If a sound track contains whispers and suddenly an individual speaks extremely loud, the whispers are then overcast and become inaudible. Conversion into mp3 format removes purely and simply the masked sounds of a sound track. In practice, an audio file takes 4 to 12 times less space once transcribed in Mp3 format.

And the advantage of this compression is due to the fact that, on CD R, it becomes possible to record more than 200 tracks, while usual CDs on the market comprise about twenty tracks. Indeed the manufacturers of car radios, hi-fi systems or walkmans understood very quickly the interest to produce devices compatible with this format. This is the main reason of the huge success of the Mp3 format.

Nevertheless, for the last few years, the music industry has sought by all means to cut down this invention which is favourable to piracy and illegal exchange over the Internet. Their aim is to replace the Mp3 format by other algorithms like the WMA, which is secured and prevents from reading the file on computers or walkmans without having previously acquired the rights.

1.1.5. DivX/XviD

The DivX and XviD formats are to the video what the Mp3 is for the musics. They are video codecs that can compress lengthy video segments into small sizes while maintaining relatively high visual quality. The DivX has been created by DivX, Inc. (formerly DivXNetworks, Inc.). The XviD is the main competitor of Divx; It is an open-source video codec quite similar to Divx, originally based on OpenDivX. XviD was started by a group of volunteer programmers after the OpenDivX source was closed in July 2001. In other words, XviD is to DivX what Linux is to Microsoft Windows - an open source competitor of a commercially owned program.

With this compression, it is possible to have a movie on one CD, or 5 or 6 movies on one DVD, and numerous ones on a harddisc. As for the Mp3, the manufacturers of DVD players understood very quickly the interest to produce devices compatible with this format. This is one of the reasons of the huge success of these formats. And it is considered by the Movies industry as a tool favourable to piracy and illegal exchange over the Internet.

1.2 – The DFM and its main actors

1.2.1. The three sectors of the DFM

The DFM can be considered as well as a new market or as a new extension of an existing market which is based on a **triple sector**.

The **first sector** is specified as an economic one and the **second sector** as the primary producers' one. The **economic sector** is constituted by the **producing and trading sector** of music and films which includes all the people working to produce, distribute and sell artistic creations made by **artists, the primary sector**; this economic sector or market is necessary for the artists who are the primary cultural goods and artefacts creators/producers but who are unable by themselves to promote and distribute these goods and to make them available for the consumers.

Producers promote and sell artistic creations with all the necessary marketing means in return of what they have to be rewarded with a real profit-earning, in the same way as the artists should. Otherwise the cultural production would stop and artists will face enorèous problems for selling their works and their art. Therefore the problem here is to know how to fight against the unfair competition made by the third sector in order to continue to produce added value on the basis of sufficient respect of intellectual and commercial property.

The economic sector involves as well the **technological innovators** which category includes a group of influent actors of the DFM as the Internet access providers, the software and programs producers. This category of actors is important for a fair and continuous development of this DFM to let play them freely. The technological innovators provide the technology and practices enabling to copy or get files which are protected by copyrights and are all producing and widespreading the best usage practices of Internet and the other available or in-progress digital tools. who. In this category are classified the owners of the P2P networks, and also all the Internet Service Providers for instance.

The **third sector** is composed of all people who like to buy or to access freely to the cultural goods and artefacts hereabove described. They are called the **users or consumers**. The **final users or consumers**, which should be divided into two sub-categories:

- those who download and also upload protected files to share it with the public (this is the vast majority),
- those who only download protected files (interesting to consider at least on a theoretical point of view ²⁴).

This third sector is ruled by the principle of paying the lowest price or almost a total gratuitousness of access to the productions of the economic sector firms by short-circuiting eventually the property right and its fair profit-earning through an effective price payment. To this category of actors of the third sector belong the **hackers** ripping or cracking technological protections of the softwares and placing files at the public disposal. There are also those who put the files on first release through P2P networks ²⁵. These can actually be anyone, hackers or simple users ²⁶.

The key issue is to know and to find if there is a possibility to draw up an equilibrium or balancing system between pros & cons for every part of the competition, between these three sectors, or does the Internet system make doomed to failure any attempt to render compatible the strictly private use of downloading and filesharing with the continuous development of the trading sector indispensable to artistic creation based on the respect of the intellectual property right and its fair earnings ?

The aim in this matter is to find an equilibrium of rights between copyright holders (artists and distributors) on one hand, Internet users (consumers) and technological innovators on the other hand, so that each one could get a fair share of the system and receive the right earnings for their work and know-how.

These three categories of actors should be kept in mind as the background of this entire thesis in particular in relation to the case law.

²⁴ For instance, under French law, as of today, downloading such files for a private use benefits from a legal exception, while sharing them with the public (uploading) is illegal (see further “The French example”)

²⁵ POWER (Richard), *CSI/FBI Computer Crime & Security Survey*, in *Computer Security Issues & Trends*, Vol VIII, n° 1, Spring 2002; *Annual Cybercriminality Survey 2005*, CLUSIF – French Club on the Information Systems Security, 12/01/2006.

²⁶ For instance, a user who shares files that he copied from a CD that he has bought on the market.

1.2.2. The psycho-sociological background

One other important part of the DFM issue context is at the same time psychological and sociological:

1) Concerning the **psychological aspect**, there is a common feeling among most of the filesharing users that downloading and filesharing through P2P networks protected files is not wrong, inappropriate and abnormal. Indeed, it is possible to argue in this sense: how could they think that it could be bad and wrong when such P2P systems still exist, work, and are not forbidden yet, while everybody knows that this massive traffic occurs and is carried on ?

2) As regards the **sociological aspect**, the current feeling that something is right or wrong usually comes from common values and feelings which are shared by the whole society or a major part of it and determine what should be accepted and what not. Here a big part (majority ?) of the society thinks that downloading and filesharing without paying any euro for it through Internet (for which they are paying already their servers) is normal. Therefore it is obvious that nobody feels guilty of dishonest or abusive practices in these ways.

The real problem comes from a dissension or more precisely a psycho-sociological dichotomy between these individual or collective feelings among the Internet users/consumers and the normal need of earnings for the copyright holders, artists and producers/distributors.

1.3 - The problems of piracy on Internet and the P2P networks

Since the Internet technology is relatively new to everyone, the law must essentially be built from the ground up and new practices - the so-called best practices according to the European Union common move -. Therefore the regulation is lacking in this field and the laws concerning the copyright issues are unclear compared with the nature of this market. One can remark that this lack of regulation and standardised practice is an indicator that a body of laws or regulations and practices standards are compulsory to face the new environment created by the Internet world and the P2P networks linked expansion.

1.3.1. Main characteristics of the DFM pirates

Any attempt to hinder the exchange through P2P networks of files protected by copyright on a technological level, for instance by DRM ²⁷, which are anti-piracy devices ²⁸, could be considered as quite useless, because rather inefficient. Because there are thousands of hackers out there, among which are some real genius, putting all their efforts and even challenging each other in finding solutions to break these protections. The best hackers are in fact organised in teams challenging against each other, so as to which one can show the best performances, resolve the most difficult problems, rip the new DRM protections, rip musical and video files, and crack programs, ...

Moreover, most of these hackers have an excellent knowledge of the considered technologies and they know how not to leave any trace behind them since the nature of the Internet enables them to do so. It is thus extremely difficult or most of the time impossible for the police to identify them. Indeed better hacker they are, more difficult it is to find them. Therefore it is almost impossible to catch the best ones who will probably always carry on their activities and find more and more ingenious solutions.

There will always be someone to find some new and better systems and tricks. New and better programs and technologies also appear all the time. And in some way or another, these files come, sooner or later – usually rather soon, to be available to the public through P2P networks.

1.3.2. First attempts to solve the problems of piracy and the effective ways of doing it

When the music industry tried to destroy the activities on the P2P networks, “the fileshares have moved from one open network to more hidden networks” ²⁹. The disturbances produced by the industry are actually not really efficient, and thus rather useless. Furthermore, it is not a constructive or interesting kind of activity.

Beside that innovators have often been on the side of the piracy which explains the fact that the industry is very late in its reactions and the piracy so in advance. Therefore it seems to be quite impossible to win this battle on a technological level. For this reason it is on both legal and

²⁷ Digital Right Management.

²⁸ Technical systems of protection, aiming at preventing from pirate copies. DRM devices enable copyright owners to control the use that is made of the files containing their work.

²⁹ BLOMQVIST, ERIKSSON, FINDAHL, SELG, WALLIS, “*Trends in downloading and filesharing of music*”, Musiclessons, 2005, p.10.

business aspects that a sustainable solution has to be found. Concerning the particular topic of downloading and filesharing through Peer-to-peer networks, legal and business issues are particularly closely interconnected.

As of today a lot has been already made in the legal field, while less has been effectively made on the business aspects. This is due to the extraordinary complexity of the issue: copyright owners have been surprised by the digital environment, got scared and turned to the law in order to save their interests, believing that the law could resolve all problems. But this time, an effective legal framework has been particularly difficult to build, because of the global and international (worldwide) nature of the Internet, and also the complexity of the issues. Till now this task is not fully accomplished.

In one European Commission communication following in 1996 the 1995 green paper on copyright and related rights in the information society it was stated that : *“In view of the development of new forms of reproduction, such as scanning of printed works, or loading and/or storing of digitised material (such as text, music and video) in a computer memory or other electronic system, there is a need for a clear definition of what exactly is protected as well as an equivalent level of protection across the EU”*.

This shows that early on, the international and European authorities have brought an anticipated reflection about the core issue. In the above mentioned 1995 green paper, Mario Monti, the past Internal Market DG, stated that *"The Green Paper adopted today by the Commission will contribute to a wide debate with all interested parties on the definition of a clear, stable and coherent regulatory framework for the development of the Information Society"*.

Conclusion of Chapter 1

Through the presentation of the new technologies, it has been shown that the emergence of these new technologies and their development bring new issues and problems to solve. The growing use of fast Internet connections and of P2P networks has led to a new situation on the market with a different behaviour of consumers.

The resulting new market DFM has been presented as composed in three sectors, basically the industry as opposed to the consumers. Each of them have different, or sometimes opposed

goals. The main actors on the P2P network have also been presented, and an emphasis put on the psycho-sociological aspects related to the DFP2PM.

Finally, it has been explained that the war waged on a technological level by the industry against piracy is mostly questionable. Concerning the legal war against piracy, it appears to be necessary and efficient to a certain extent, but might not be sufficient to correctly answer the problematic for the economic and the artistic sectors of the market.

Chapter 2 : Theoretical and methodological references and background for the DFM

In this chapter are presented the theoretical references that constitute the most relevant theoretical background to this thesis problematic. This background has been built up by surveying all the existing theories which are relevant to this problematic and the thesis analysis. At the end of the chapter, a summary will enable to easily make understand the connections between this theoretical background and the analysis developed in this thesis.

The DFM is a whole competitive market which means that customers, suppliers (producers and servers) and programmes are combining through Internet their supplies and demands which constitute the real market including the exchanges on CDs, Videos and DVDs.

2.1 - The market law and the approach of the DFM

2.1.1. The concept of market law is pertinent to the DFM

The market is usually defined as the ensemble of offer and demand phenomena located in a geopolitical framework (space) involving a juridical and social order which constitutes the juridical and economical framework of the “social exchange” between different and various individuals or groups.

Conceived like this the market highlights the notion of the market law³⁰ applied to the studied subject and not only the intellectual and commercial property right which is the usual input. This market law is the ensemble of juridical rules and techniques concerning as well the enterprises, the products, the services as the marketing of all that the purpose of which is to

³⁰ Inspired by TEMPLE (Henri), *The Market Right*, Master course, 1995/1996.

organize the relations between the enterprises and the consumers: regulating and harmonising these relations with a view to a certain efficiency of the market.

The market law is special compared with other law's fields in the sense it is transverse i.e. it concerns and links different types of laws and regulations and parts of them: civil law, penal law, commercial or business law, social regulations,.. But its main implementation field is the market with its imperfections, bias and anomalies,... The market law is thus applied to organise and control the effectiveness and the efficiency of a relevant market correct functioning.

2.1.2. Microeconomics, marketing and the DFM

Of course in the economics field market efficiency is based on the economic choices of the different parties in utility-maximising and profit-maximizing ways which influence the customers and suppliers decisions ³¹. Every party on the market tries to obtain the maximised gain from the so-called “*social exchange*”. This DFM could not be resumed only in the aspects of microeconomics approach and needs to investigate the marketing field and some others domains which are the four paradigms further described.

This DFM is a complex world in the sense of “world of peer-to-peer” as the sociologist Becker has defined for the “*art market*” ³² for which it is necessary to include different and various elements or components in the approach. These components based on a work division are conditioning the existence of a cooperation network or chain between different parties and highlight various collaboration factors between diverse partners of the artistic production world environment.

The economy as well as the marketing is defined in relation to an existing market, place where meet and compete supply and demand of goods or services which are autoregulating by the prices in view of an equilibrium situation. This simple definition is that one of the microeconomy, first object of the present analysis.

2.2. The microeconomic approach

2.2.1. Nature and characteristics of the DFM products and of their supply and demand

³¹ NICHOLSON (Walter), *Intermediate Microeconomics and its application*, The Dryden Press, Harcourt Brace College Publishers, Fort Worth, USA, 1994 and further edition.

³² BECKER (Howard S.), *Art Worlds*, 1988.

For the economic goods as musics, CDS, videos and DVDs on the peer-to-peer market suit discriminantly the criteria of divisibility, banality, typicality, durability, utilitarianism, reproductibility and substitutability, even if it is not in an uniform way. These characteristics of the considered goods define the flexibility universe in which the customers can load their preferred music pieces for private or exchange uses. This is one of the advantages compared with the traditional CDs goods

On one other hand the direct goods demand and of course the demand expressed through the DFM market is elastic and non rigid to the prices compared to the demand of paintings – choosen example for comparison ³³– which is unelastic for they are unsubstitutable. And this goods and artefacts demand is also typical.

The supply can vary according to the demand as well as its prices which always will try to reach the market equilibrium, i.e. they have a natural or pure value. Due to the competition the market will bring back under the effect of a magnet the current price towards the average cost including the cost of the required capital. In fact the price is here the access price for the customer through an Internet provider or a downloading service.

The DFM demand is elastic related to the income and complies to the Veblen effect ³⁴, – differentiation or ostentation effect –, to the Akerlof effect (1970), – information effect by the price ³⁵. Likewise the Engel theory (1857) ³⁶ applies in the field of the evolution curves of the expenses budget coefficients in function to the income.

This category of economic goods has a higher than 1 elasticity coefficient in respect to the income and is acquired thanks to the discretionary income – that which is not provided to the purchase of goods satisfying primary or fundamental needs -. For these goods plays essentially the esthetic and symbolic pleasure ³⁷ in the purchase decision.

³³ BAUMOL (William J.), *The Economics, Principles and Policies, Microeconomy, 1986*, for the « natural value », and ALLAIS (Maurice), *Traité d'économie pure, 1994*, for the concept of « purity » in economics.

³⁴ VEBLEN (Thorstein) has proposed this concept in 1899 in his book *The theory of the leisure class*. VEBLEN speaks of « conspicuous waste », (litterally: useless and showy expense). KATONA (Georges) will speak in *The powerful consumer* of « *unconspicuous consumption* », concerning the consumption of symbolic object or service.

³⁵ The price is synthesizing the information and leads to a so-called adverse selection ; its highest level is used to indicate that the most expensive product is of better quality which is not necessarily the case. AKERLOF, (George A.), "*The Market For Lemons: Qualitative Uncertainty and the Market Mechanism*", *Quarterly Journal of Economics*, Vol. 83, No. 3

³⁶ ENGEL's Law, stating - in 1857 - that food expenditure rises less than proportionally at the increase of income (the rich spend for food a smaller percentage of his income than the poor). <http://www.economicwebinstitute.org/essays/consumerttheory.htm>

³⁷ This factor is not specifically held back in microeconomics ; it appears in the same way other elements enter among the satisfaction criteria awaited by the consumer: FILSER (Marc), *The consumer behavior*, 1994, pp. 347/363.

Thus the consumer optimum which is achieved when its basket of goods and services is maximising his satisfaction level is applying easily for this category of economic goods as they are substitutable.

This category of goods enter in the the simple preference calculations in matter of consumption – opportunity choice and indifference curve -.

Some other theoretical approaches are useful to shape the real DFM. Firstly the Duesenberry effect (1949) in the framework of the relative income theory is the demonstration or imitation effect between the consumers whatever should be the income level. The consumption pawl or inertia effect of T. M. Brown (1952) facing an income decline applies evidently to the DFM.

2.2.2. The exchange framework or the DFM in microeconomics

In microeconomics the market insures the regulation of the economic activity by the mean of an auto-regulation mechanism which results from the mutual adjustment of teh quantities and the prices according to the supply and demand rule. It is the the place where this autoregulation is achieved towards the automatic return to the equilibrium, the “natural equilibrium situation” for which is acting the A Smith so-called “*invisible hand*”. This mechanism is functioning as easy it could when the considered market situation is drawing nearer to the situation of pure and perfect competition, the market is complete and efficient. Can these conditions apply to the MPM and how ?

A) The necessary conditions of the pure and perfect competition

Four conditions determine the functioning of the market autoregulation mechanism and characterize at the same tim the form of a pure and perfect market : atomicity, homogeneity, fluidity, transparency³⁸. These conditions are very rarely met what induces market unperfections: monopoly, oligopoly, duopoly, monopolistic competition,...

³⁸ 1) atomicity : a big number of suppliers and buyers, in order to avoid anyone could influence the prices making, 2) homogeneity of the products which must be divisible and negociable indefinitely, of the expectations and attitudes of the buyers who all act and anticipate rationally in view to maximize the utility of their budget or wealth 38, 3) fluidity of the market which involves the free entrance and exit of the suppliers and buyers, the absence of taxes and transaction costs enabling behavior disparities, 4) transparency or perfection of the information which spontaneously available and free of charge, identical and without distorsion for the economic actors.

Further has been formed the general equilibrium theory which define the harmony between interests on the market. Due to Léon Walras (1834/1910), whose works have been followed by those of several economists (Pareto, Arrow, Debreu, Edgeworth,...), this theory enhances the freedom to contract of individuals, the search of their personal interests, the private character of property, the internal competition of the markets and their interdependence. Obviously appear links of systemic nature between these different parties, individuals and groups, despite their heterogeneity of interests – see further systemic analysis -.

B) Application modalities to the DFM

Evidently the existing conditions on the DFM do not allow to achieve the situation of pure and perfect competition. Certain conditions could be achieved when the suppliers have positions of monopoly, oligopoly or of imperfect competition other forms. The normal cycle for traditional products like musics CDs, videos and DVDs states that after a first phase where a limited supply with high prices is made follows a phase with abundant supply and low prices. It seems that it is thus the case for the DFM moreover when the downloading and filesharing are free-of-charge or very close to this situation.

2.3 - The marketing considerations as basis of the DFM law

The marketing theories constitute the second way to shape the DFM. They are streamlining mostly the market right conception. Three main concepts relating to the marketing and linked with the key points of the microeconomy are given by Jean-Jacques Lambin ³⁹ in his definition:

« The marketing is the social process, oriented towards the satisfaction of needs and desires of individuals and organisations, by the mean of the creation and the voluntary and competitive exchange of goods and services providing utilities to the buyers.

The three key concepts of this definition are: need, product and exchange. The need notion implicates the buyer motivations and behaviors, individual or organisational client ; the product concept is driven the ways of action, of production and organisation of the producers ; the exchange involves the market and the mechanisms of meeting between supply and demand ».

³⁹ LAMBIN (Jean-Jacques), *Le marketing stratégique*, 1994.

This part will emphasize the exchange concept as the two others, the need and the product, have been surveyed in the microeconomic aspects.

2.3.1. The concept of social exchange and the DFM

As said by Micaieff⁴⁰: “marketing and market are two closely linked notions” for which the present suitable paradigm is the “**social exchange**” defined as:

« ...the exchanges are both economic and social [...] J.M. CARMAN suggests the new paradigm exchange/combined system. It includes the following elements:the aims of the system, the environment and the constraints, the control mechanism, the actors (nature and functions), the exchanged goods and their values, the transaction costs, the information level and the exchange functioning rules. This conception of marketing which finds its origin in the “functional theory” of W. ALDERSON authenticates the definitive renunciation of the restrictive exchange, mechanic and bilateral. This exchange is indirect, symbolic and three at least actors participate to it. »

Such an approach situates the markets in their social exchange problematic. The demonstration is carried on by Micaieff as follows⁴¹:

« The marketing appears finally as factor of intermediation of the exchanges, tool of creation and solution of the exchange relationship, of allocation of the productive forces up to the utilisation of the distributed incomes.In this way the marketing intervenes in the organisational system (supply formation) and in the social system (demand formation/use of the supply).»

Other authors as D.F. Dixon, I.F. Wilkinson confirm the interest of this approach insisting on the necessary analysis of the transactions, result of the exchange, which can be interpersonal, intergroups and interorganisations, with in background the M.E. Porter competitive system⁴². O.E. Williamson (1975) has added the notion of the transaction costs⁴³ which are not extremely pertinent for the DFM. This intermediation marketing is in the heart of the “distribution systems”.

⁴⁰ MICAIEFF (André), *Marketing theories*, in *Encyclopédie de gestion*, 1989, p.2 979.

⁴¹ p. 2 981, *ibid cit.* and MICAIEFF (André) , « *The scientific status of the commercial action* », *Economie et Sociétés*, avril-june 1979, pp. 571/601).

⁴² PORTER, (M. E), “*Changing patterns of International Competition*” , *California Management Review*, 1986.

⁴³ O.E. WILLIAMSON, *Market and Hierachies : Analysis and Antitrust Implications & The Economic institutions of Capitalism*, 1983.

2.3.2. The theory of distribution applied to the DFM

For Dixon and Wilkinson the transactions nature and structure depend on the relation between the exchange gains and the coordination costs of the specialists' activities. One gain could be intrinsic (association of two persons) or extrinsic (the future gain involved by the transaction). In other words the search of these gains lies on a collaboration and/or specialisation chain the mission of which is to ensure efficiently the distribution of goods and services. They propose furthermore one distribution theory in close both to this analysis in gains compared to opportunity costs and to the collaboration principle of several specialists.

At the same time the central distribution theory determines the crossed and associated roles of the actors inside the social exchange, it opens the perspective of the strategic marketing in competitive universe as described for instance by Porter. It reveals the relations market/environment, the existence of strategy and power games from the different market actors between them and with this environment.

2.3.3. The role of the strategic marketing

The definition given by Jean-Claude Larrech : « *satisfy the market needs better than the competitors, reach a better profit-earning level than the competitors, achieve a better organisation integration than the competitors* »⁴⁴. The competitive environment is emphasized which the strategic marketing can not avoid and that it has precisely to include in its basic concern when it wants optimizing the implementation conditions of the social exchange. Talking of the marketing of the real some authors like Matricon⁴⁵ will speak of systemic marketing of strategy or civilisation; this is an other way to express the necessity to position the marketing in its organisation societal logic of the exchanges and of the distribution in view to satisfy in a long while and in an efficient manner the needs and desires that express on the markets the consumers of different statuses.

2.4 - The relevant paradigms for the DFM analysis in relation to the market law

⁴⁴ LARRECH  (Jean-Claude), *Le marketing strat gique*, Enc. de gestion, Economica, 1989; and cited in CHIROUZE (Yves), *Le marketing strat gique*, 1995.

⁴⁵ MATRICON (Claude), *Le marketing du r el*, 1987.

Before going further appears the necessity to add to this first theoretical material those which are in relation with an analysis approach on organisations as reading and presentation check-up of the organisation and the functioning of DFM.

Seen as described in the first part of chapter one the DFM needs characterised references for relevant analysis also called paradigms. A short definition of the term “paradigm” is necessary to highlight its signification for this work. A paradigm is defined as a pattern or example but by extension it is a modelised interpretation of reality shared by the scientific community.

This work is based on four paradigms which have seemed pertinent and accurate to the purposed analysis and proposal. In other words, which paradigms of the management sciences and from the theory of the organisations have to be considered as pertinent for this essay ? Here are applied four paradigms: constructivist, interactionist, systemic and of the contingency which seems to stand as relevant and suitable work hypothesis convenient for the defined issue.

2.4.1. The constructivism

Traditionally, the scientific rigour recommends materialism which consists in considering facts and phenomena in the field of research as external to the researcher, in other words as objects with which there is no intellectual, affective or psychologic interference with the researcher. It is thus place the observation in the independence of the observer. In fact one analysis is always dependent from the observer for there is in all perception an interpretation of sensible data, as said the philosopher Alain: there is only fact through idea. And he hurries to add in order to bring also the researcher back to the scientific modesty that “*the relation of idea to fact is inside that idea is never enough*”, that idea needs to be verified and is relative. The considered method implies a continuous backward and forward movement between the observer and the analysis, one to apprehend, the other one to control and assess the correctness of this apprehension.

In the management science field such a care is formulated in this way by Alain-Charles Martinet:

« what is important is the building up of reasonable terms or statements, which can be communicated, discussed (disputed) through the double play of experience (more than the experimentation) and the exercise of the logics »⁴⁶.

2.4.2. The interactionist paradigm

It has been chosen by Becker who belongs to the Chicago sociology school especially for its studies on art worlds. The corresponding approach emphasizes a non specific and non exceptional form of social organisation for the MPM world based on a cooperation network of which the configuration can be special. This approach is centred:

*“on the dynamic of the interindividual relations and its material and cognitive dimensions*⁴⁷”.

Blumer defines four principles for the interactionist school:

« 1) People, individually and collectively are making ready to act on the basis of the significations of the objects their world comprises ; 2) the association of people takes necessarily the form of a process in they send mutually indications and interpret them; 3) social acts, individual or collective are built according to a process in which the actors note, interpret and assess the situations they are facing; 4) the complex relations and chains of acts from which are made the organisation, institutions, division of labour, and the interdependence networks are moving and non static ».

2.4.3. The systemic paradigm

It is now usual for the study of organisations⁴⁸. The functioning scheme is based on the definition of certain characteristics of a system which is simply defined as a “complex of interacting elements” which is “open to its environment” and “can evolve”⁴⁹.

⁴⁶ MARTINET (Alain-Charles), *Epistemology and management sciences*, Paris, Ed. Economica, 1990, chap. 1, pp.27/29, and also LEMOIGNE (Jean-Louis), “About the “epistemologic incongruity” of the management sciences”, *Revue française de gestion*, november-december 1993, pp. 123/135.

⁴⁷ Citation from the book preface of BECKER, *Art Worlds*, written by MENDER (Pierre-Michel), p 7. He has added a citation from BLUMER defining these principles of the interactionist school.

⁴⁸ YATCHINOVSKY (Arlette), « *L'approche systémique, pour gérer l'incertitude et la complexité* », 2005. PLANE (Jean-Michel), *Management des organisations*, 2003. *Dictionnaire des méthodes qualitatives en sciences humaines*, collective book under the direction of MUCCHIELLI (Alex), 2004

⁴⁹ GERVAIS (Michel), *Stratégie de l'entreprise*, 1995, and GERVAIS (Michel), *Contrôle de gestion*, 1994; and BOURRICAUD (François), *The Organisations*, In *Encyclopedia of Management*, 1989, n° 98, and ROJOT (Jacques), *Theory of the Organisations*, In *Encyclopedia of Management*, 1989, n° 141.

With Ludwig Von Bertalanffy (1951)⁵⁰ the systemic approach is an analysis tool of any organisation represented as an open finalised system with strong interdependencies between its constituting elements and regulation⁵¹ processes which are more or less formalized and automatized and that have eventually to be mobilized and implemented. It is above all a modelling tool for the research of global solutions and to promote reflection and action amidst working groups or task forces. This approach considers as vital the relations between one system and its environment and integrates in the analysis the temporal and diachronic dimensions⁵².

Upon the analogies with the characteristics of living systems and moreover complex living systems the systemic approach is born as a likely application to human and social sciences like management and law⁵³.

It is also possible to add with Michel Gervais⁵⁴ that:

“The systemic analysis learns that a complex system presents the following specificities:

- *a behavior which is difficult to understand in its entirety,*
- *a resistance to changes (homeostasis),*
- *a strong sensibility to some parameters (or points of influence),*
- *very special adaptability ways,*
- *The influence of time in the reply of the system to any change action,*
- *“movements towards less performing states”.*

⁵⁰ Biology doctor and professor at the Vienna University, BERTALANFFY (Ludwig von) (1901-1972) is considered as the founder of the systems theory. *General Systems Theory*, December 1951 (his first article), *General Systems Theory*, 1968 (his main book). For von Bertalanffy exist in nature general rules which can be applied to all systems independently from their special characteristics and their components. Other authors like FORRESTER (Jay W.), professor in management at the Sloane School of Management and at MIT, and his theory of flows developed in his major book *Industrial Dynamics* (1961), WIENER (Norbert), professor in mathematics and specialist in cybernetics at the MIT,... On one other hand, McCULLOCH (Warren) using the cybernetics translating from the neurophysiology to the mathematics and from the mathematics to the engineering, creates the bionics, science which enables the building up of machines able to copy the living organisms behavior : it is the beginning of artificial intelligence and robotics.

⁵¹ Three regulation modes are commonly distinguished : 1) regulation by anticipation : facing a dysfunction in the system before it affects the organisation ; 2) regulation by alert : trying to correct a dysfunction occurring in its organisation in searching the reason(s); 3) regulation by error : the organisation and its command system find out gaps between the objectives and the results that lead them to take action to redress the situation.

⁵² Five principles have been characterised in the systemic analysis : 1) interaction or interdependence principle : every element finds its information in the other elements and acts on them. To understand one element one has to consider it in its context in which it is interacting; 2) totality principle: when occurs a grouping of elements the group logic take the lead of every component; 3) feedback principle : the B effect produced by A acts back on the A cause which has produced it; 4) homeostasis effect : when a system is affected by a slight change (of internal or external origin) it tends to come back to its previous state; 5) equifinality principle : the same result can be achieved from different initial conditions and by different ways.

⁵³ For DONNADIEU (Gérard), in *“ The Systemic Approach : What is it ? ”*, *Arts et métiers Magazine*, novembre 1985., the main characteristics of the systems : the systems 1) are necessarily open ; 2) are relational : they interact, are linked, have influence mutually, every organ is a sub-system,... 3) are finalized : they contribute together to life even they keep their own specificities and aims, 4) need variety to adapt themselves to the environment, to new contexts,... 5) are self-organisers and can repair themselves. See also ROSNAY (Joël de), *Le macroscope*, 1975, p. 87.

⁵⁴ GERVAIS (Michel), *Stratégie de l'entreprise*, 1995, and *Contrôle de gestion*, 1994

The key word in the systemic analysis being the term relation, relation between the internal actors of the system, and relations of the system and of its actors and thus the application field appears appropriate to the considered theme.

2.4.4. The school of contingency

Contingency is a key concept in the analysis field of organisations and is defined as a specific and evolutive situation which leads to reject unique and standardised prescriptions. For the organisations this contingency is structural because external variables changes (technologies, markets, etc) induce evolutions in the organisations structures⁵⁵.

This approach is completing the two previous ones by the fact it distinguishes as a result of the already cited Mintzberg works between contingency factors which influence the organisation and could be external to it as independent variables, from those which are called conception parameters or dependent variables of an organisational system. It is precised that the structural efficiency depends on two hypotheses:

- the first one is the **congruence** which signifies adequation between contingency factors and conception parameters, that can be simply defined as “to be in phase with the situation”.
- the second is the **configuration**, i. e. of internal coherence between the conception parameters or also of “compliance to a coherence principle”.

In conclusion of this introduction part concerned by the pertinent paradigms one can say that the basic elements of these approaches are relation and voluntary building up of exchanges relations which reply to the strategic marketing and the market law and specifically in the field of the DFM.

The two parts of this introduction have induced that the DFM needs a specific approach combining the legal aspect to the business one which are in the heart of the “social exchange” based on built relationships between the three types of the DFM sectors actors previously described in chapter 1.

⁵⁵ Pioneers are BURNS (T.) & STALKER (G.), *The Management of Innovation*, 1966, and WOODWARD (J.), *Industrial Organization, Theory and Practice*, 1965, followed by LAWRENCE (P.R.) & LORSCH (J.W.), *Organization and Environment*, 1967, and PEROW (C.B.), *Organizational Analysis. A Sociological View*, 1970, and MINTZBERG H., *Power In and Around Organization*, 1983.

Conclusion of chapter 2

There is not any specific field of law concerning as such DFM. It is thus required to apply a law that is transversal to different fields of law: **the market law**. The market law is envisaged here not only in terms of a simple legal framework, but also in terms of **negociation and bargaining between the actors** on the market.

Faced to such a complex market, the simple classical marketing approach – rule of the 4 P – is not sufficient. The mere law of offer and demand is not sufficient anymore, and the market should be considered under the angle of the **social exchange**, the **complex of interacting elements** – see **interactionist paradigm**. The question, connected to the Nash theory, is how to draw and built up a win/win situation on the market. The different market actors need to talk the same language, in order to understand each other, so as to reach a win/in situation – see **interactionist paradigm**.

The DFM is a mass market, therefore neither a classical individualistic microeconomic approach of the market nor a Malthusian approach of the offer cannot enable to reach this aim. The problem should be solved on a **macroeconomic level**.

The offer of the industry must adapt to the new context of the market – see **contingency paradigm**. The digital area with the emergence of the P2P technology has brought a new situation on the global artistic market, thus modifying the social exchange on the market. It has changed the relation between the industry and the consumers, by giving more symmetry of power between both parts, and eliminating the information assymetry. The answer of the industry in its offer must adapt to this new situation – which evolve extremely fast nowadays. Consumers' needs and expectations change fast, especially today with the unfair competition of the illegal offer. But the industry probably needs to adapt to these changes as fast as they occur, otherwise it will loose its competitiveness. Indeed, if the legal offer is so much less good than the new illegal offer, it is obvious that consumers are really tempted to turn to the illegal offer. It might be argued that if the industry refuses this evolution, it is because they did not realise the benefit that it could get from the acceleration of certain market phenomenona – for instance a growing consumers' interest for these products.

In the current context, which is rather static on the industry's side, if the legal offer evolves – the industry does something new – the illegal offer adapts immediately – hackers break protections and copy. Therefore the legal offer would probably need to invade the market with

legal products at reasonable prices, so as to overflow piracy and render it marginal. This is the application of the **interactionist and contingency paradigms**.

This market, which is particularly globalised, requires to be considered as a whole. All the possible relationships of the system should be taken into account, in a systemic type of analysis – see **systemic paradigm** - studying the **system as a whole**, because Internet with P2P networks constitute a whole system that cannot be divided and with **numerous complex interactions**.

This **systemic analysis** should be the basic tool of a **constructivist approach**, which is the general research approach of this thesis. It is based on a connection between on one hand the know-how in terms of experience, best practices and empirical experience, and on the other hand a game of logic – see **constructivist paradigm**. This approach is necessary to deal with the thesis problematic, due to the extremely complex nature of the issues raised by the digital area and Internet. All the economic theories need to be reviewed so as to adapt to the new economic structural context involved by this digital era.

Introduction to chapters 3, 4 & 5: Understanding of the American, international and European current legal situation for the DFM

It is a truism to say the current legal situation is unclear because the DFM is too recent. It concerns several rules mainly defined by the case law especially in the USA in which country the P2P networks have started. In their world dimension the P2P networks are concerned by the WIPO⁵⁶ rules and have connections with the European regulation – see chapter 4 - which is in cross-section with this world regulation.

As previously explained the controversy between the industry and the consumers on the DFM and on one other hand the war against the hackers are an issue which is difficult to overcome for the authorities. Since Internet is a virtual and unlimited network about which the users and hackers have an excellent knowledge they can hide very easily and not leave any trace of their illegal activities. Thus they can act in a quite total impunity. The authorities have to deal with this reality which means in fact their own powerlessness and thus they can only more easily identify and eventually prosecute the technological innovators and final users or consumers.

⁵⁶ World Intellectual Property Organization is one of the 16 specialized agencies of the United Nations system of organizations. It administers 23 international treaties dealing with different aspects of intellectual property protection. The Organization counts 183 nations as member states. It is headquartered in Geneva, Switzerland. www.wipo.int/about-wipo/en/.

Indeed, in many countries some private users have been prosecuted and after conviction were imposed to pay quite heavy fines for having downloaded or shared through Internet, i. e. through P2P networks, some files protected by copyright. It might be argued that this kind of lawsuits are not really fair and does not constitute an efficient solution, especially due to the fact that the law is unclear on one hand, and, on one other, that it might seem to be rather unfair and arbitrary, since millions of people do the same or much more⁵⁷ ; in fact only few are prosecuted serving as examples. Moreover, it could be argued that the real hackers or even the providers of P2P networks should be sued instead of or before the simple final users or consumers. These remarks proceed from the author's opinion that these first lawsuits do not constitute a good solution.

In the matter these lawsuits might be seen on one hand as a proof of the legislative and legal lack or of an unclear and insufficient legislation, and on the other hand as a proof of the police powerlessness. Indeed, it seems that since no satisfactory solutions have been found by law-makers, and that it is impossible or extremely difficult for the police to catch the real hackers, the only ways that have been found till now seem to be the official pressure or unofficial intimidation on final users by randomly picking few of them, suing them and passing on them sentences of heavy fines.

Besides it could also be stated that the industry and all the producers of artistic products and artefacts are react too slowly and should offer better services, more adapted to the demand, instead of promoting and supporting a repressive logic oriented against individual consumers.

Thus this kind of lawsuits is only aimed at intimidating other Internet users, while not communicating about the real legal framework which is actually very unclear. This is unsatisfactory, unfair and inefficient. Moreover suing tens of millions of private users who have shared files protected by copyright would be impossible and not a good solution. Sometimes it could also be argued on the contrary that specific intimidation campaigns are also necessary to provoke a right reaction from some users who could become good examples to promote better practices.

As above mentioned, the legal framework on the matter is rather unclear and very confusing. Beside the fact that these technologies are quite new and complex, this confusion

⁵⁷ The remark could be that from several cases that I have read, it appeared that some of the users who were sued had only shared few protected files, while it is known that thousands or millions of heavy downloaders have not been prosecuted..

mostly comes from the most important specific fact necessary to bear in mind: **Internet is a global and unlimited network**. Dealing with this question thus **requires a global and harmonized solution**. The biggest difficulty is probably here: in order to be efficient it is necessary the legal rules to be the same in all countries throughout the world. This kind of global harmonization is not an easy task, and in fact it has never really been carried on and implemented. These are some element of the general trend of the world globalisation.

During more than 20 years the most famous case law in the copyrights matter has been built up in the USA. It is important to properly understand this case law, including the Napster case, in order to be able to carry on a reflection at the legal level.

Chapter 3 - Case Law in the USA

The P2P technology itself has never been condemned by any court in the USA and the P2P networks are thus not illegal as such. It is the exchange of files realised by users on these networks that can constitute an illegal activity in particular by disregarding the copyrights. The problem is that since Internet is a global and unlimited network and the users are anonymous, it is not effectively possible neither desirable to catch and sue every user.

Therefore the US case law here below is concerning the secondary responsibility regime of the technology innovators when they contribute to copyright infringement. The legal issue is to define and verify under which conditions technological innovators could be also held responsible due to their development and distribution devices or software allowing to carry out counterfeits.

3.1. The three major US cases

3.1.1. The Betamax case⁵⁸ as case law prior to the existence of P2P networks

This is a very important case concerning copyright. As previously explained the same major issue comes into consideration when appears on the market a new technology allowing the public to copy products that are protected by copyright. When was launched on the market the

⁵⁸ Sony Corp. of America v. Universal City Studio Inc, Supreme Court of United States, January 17th 1984.

Betamax⁵⁹ which made it possible to everyone to copy the protected programs diffused on the television, the copyright holders have prosecuted its manufacturer, the Sony Corporation, because they could not or did not want to sue every user. The US Law does not recognize as such a right to private copy⁶⁰.

The Supreme Court has considered that the non authorized copy of a television program with a purpose of time-shifting in order to watch it later constituted a fair use⁶¹, but that the use of Betamax with a purpose of constituting a video library was an counterfeit act infringing the copyright. Indeed the Court has ascertained that the technology allowed users to access television program without reducing the income of the beneficiaries, as to say the copyright holders, of the copied works⁶².

The Supreme Court has judged that the sale of the Betamax does not constitute by itself a contributory infringement if the product is largely used for legitimate purposes; indeed, it is only necessary that the product to be capable of substantial legitimate uses. The act of copy is not an counterfeit act if the copied work is capable offering a legitimate use.

The Court had been very cautious when considering technical evolution. This was a judicious decision because the copyright holders largely benefited from this judgment which enabled the birth of the market of video-cassettes and later the market of DVDs. Conscious that a balance has to be drawn up between the copyright holders and the consumers the Supreme Court has offered through this case a legal harbour of safety to technological innovators.

3.1.2. The Napster Case⁶³

Concerning the filesharing through P2P network, the Napster Case is in 2001 the first and the most famous case ever. Napster was founded in 1999, and has known a huge success in a short time reaching over 30 millions registered users, who could share for free plenty files through the network. As previously explained, Napster is a centralized network, with central servers keeping track of all the files shared on the network at all times.

⁵⁹ Sony's Betamax is the 12.7 mm (0.5 inch) home videocassette tape recording format derived from the earlier, professional 19.1 mm (0.75 inch) U-matic video cassette format. The VHS format's (introduced by JVC in 1976) defeat of the Betamax format became a classic marketing case study. <http://fr.wikipedia.org/wiki/Betamax>.

⁶⁰ With the exception of the Audio Home Recording Act.

⁶¹ The Court applies here the Fair use doctrine.

⁶² HUGOT (Olivier), "*MGM v. Grokster : Everybody goes to Hollywood (even the Supreme Court)*", 2005. <http://www.juriscom.net/pro/visu.php?ID=735>

⁶³ A&M Records, Inc. et al. v. Napster, Inc., United States Court of Appeals, for the Ninth Circuit, February 12th 2001

Some artists⁶⁴ have got particularly irritated when they realised that their musics reached the public and was diffused by some radios even before the official issue. Indeed, through the Napster network, these music have been exchanged and accessed by millions of people before the music being launched on the market.

The Recording Industry Association of America (RIAA) has prosecuted Napster, claiming that it was participating in contributory copyright infringement. Metallica and Dr Dre also sued on their own Napster for copyright infringement.

To win the lawsuit, the RIAA has had to prove that the company was guilty of contributory infringement. For this theory of responsibility to apply it must be proved that Napster knew that its product was being used for copyright infringement, and materially, participated in that infringement for instance by facilitating, inducing and encouraging it.

Indeed, Napster kept a list of the cultural products available on the network. Moreover, the counterfeits have took place on the servers of Napster. Napster thus facilitated the exchange of protected files through servers owned and controlled⁶⁵ by itself.

Napster argued that its service was protected by the Audio Home Recording Act, which Act allows people to tape for personal use musical programs in their homes:

“The attorney defending Napster said “Napster allows users to share their personal copies of recorded work, which is legal under the Fair Use Doctrine”. He also compared Napster to the VCR and argued that the U.S. Supreme Court decision that allowed users to record television programs also covers Napster”⁶⁶.

The District Court has reminded that the Audio Home Recording Act does protect consumers from copying protected works for personal consumption as long as there is no public or commercial distribution. But since Napster involved millions of people sharing files, this was not the case. Napster does contribute to widespread copyright infringement in violation of the 1992 Audio Home Recording Act⁶⁷. Napster thus lost the case and was convicted to pay important amounts of money. Napster became later a legal platform of online sale, today owned by real Networks.

⁶⁴ Heavy metal band Metallica, Rapper Dr Dre, Madonna.

⁶⁵ HUGOT (Olivier), “MGM v. Grokster : Everybody goes to Hollywood (even the Supreme Court)”, 2005.

⁶⁶ STEINBERG (Brett M.), 2000, University of Florida, <http://iml.jou.ufl.edu/projects/Fall2000/Steinberg/lawsuit.htm>.

⁶⁷ STEINBERG (Brett M.), 2000, University of Florida. See note 66

3.1.3. The Grokster Case ⁶⁸

This case is also one of the most important concerning the matter. The judgment delivered on June 27th 2005 by the US Supreme Court, have had great consequences. *“The case has been called the most important intellectual property case in decades”* ⁶⁹. It is often considered as a re-examination of the Sony Case.

“Software companies feared that a ruling against Grokster would stifle innovation. Computer and Internet technology companies such as Intel, and trade associations including firms such as Yahoo! and Microsoft, filed amicus curiae briefs in support of the file sharing companies, while the RIAA and MPAA (Motion Picture Association of America) both sided with MGM” ⁷⁰.

Grokster and Morpheus ⁷¹ networks were decentralized networks in the model of Kazaa. Grokster used the FastTrack technology of exchange, licensed by Kazaa. Morpheus used the Gnutella Protocol technology. These decentralized networks have been much more challenging for copyright holders to sue. Thus the MGM v. Grokster case is different from Napster.

Indeed, concerning the issue of contributory infringement, Grokster and Morpheus did not keep record of the cultural products available and did not control the used technologies. Thus the District Court and the Court of Appeal did not find them responsible for contributory infringement.

Besides, another issue has been raised: the vicarious infringement, related to financial benefit and control.

Grokster and Streamcast (owner of Morpheus) both got a financial benefit from the use of their software, mainly by selling advertising spaces. But Grokster and Streamcast have alleged not to be technically able to control what their users/consumers did. The District Court and the Court of Appeal have agreed and judged consequently that the defendants could not be held responsible for the counterfeiting activities. Comparatively is was the case with Napster which had a power of

⁶⁸ Metro-Goldwyn-Mayer Studios Inc. et al. v. Grokster, Ltd., et al., Supreme Court of United States, juin 27th 2005

⁶⁹ http://en.wikipedia.org/wiki/MGM_Studios%2C_Inc._v._Grokster%2C_Ltd.

⁷⁰ http://en.wikipedia.org/wiki/MGM_Studios%2C_Inc._v._Grokster%2C_Ltd.

⁷¹ Morpheus software was created and owned by the company Streamcast.

control. Obviously its users had to log in to be able to use the software and Napster had the possibility to prohibit the access to those who did not observe the general conditions of use ⁷².

Thus Grokster won in front of the District Court and the Court of appeal. But the Supreme Court which has agreed to hear the case has disagreed with the previous judgments. On June 27th 2005 the Supreme Court unanimously ruled:

"We hold that one who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third parties" ⁷³.

In other words, Grokster and Morpheus may be held liable when their users pirate music.

It has been considered that, at the difference of the Sony's Betamax Case, there has not been any Fair use of Grokster and Morpheus software and that the software were mainly used to counterfeit.

This case is a decisive one, and it reflects a general today trend which is that P2P networks close down one after the other or turn into legal platforms of online sales. Today the bottom line remains that the Supreme Court stated Grokster "induced" copyright infringement. Yet the definition of this term "inducement" remains really unclear.

3.2 - Consequences and interpretations concerning the other most known P2P networks

3.2.1. Kazaa

Kazaa is owned by Sharman Networks, headquartered in Australia. Sharman has been taken to court in several countries. In the USA Sharmann has been sued in 2002 by the RIAA and the MPAA; the case is still pending, but the judgment of the Grokster case seems to take away the basis for the Kazaa suit ⁷⁴, since Grokster uses the same technology as Kazaa and work on the same way.

⁷² HUGOT (Olivier), "MGM v. Grokster : Everybody goes to Hollywood (even the Supreme Court)", 2005.

⁷³ http://en.wikipedia.org/wiki/MGM_Studios%2C_Inc._v._Grokster%2C_Ltd.#Court_opinion.

⁷⁴ <http://en.wikipedia.org/wiki/Kazaa>.

Beside that, Kazaa's downloads in Australia have been ceased by the Federal Court of Australia on December 5th 2005. An appeal has taken place in February 2006 and the judgment is still awaited.

3.2.2. eMule and eDonkey

These programs, based on the eDonkey2000 network ⁷⁵, are today the most known and used one but they have not been subject to a lawsuit. Due to the large traffic they generated, it is easy to guess that the music and films industries dream to see them closing down and have probably armies of lawyers working on this matter but it has not been done yet. Thus it may be interesting to try to understand why it has not been made, since their system is very similar to the Napster one. Indeed the system keeps through some servers the record of all the files shared on the network with specifying the availability of the files.

There are even several websites containing numerous links allowing to download directly and automatically in the eMule program a video file protected by copyright ⁷⁶.

The differences that it is possible to identify are as follows. EMule and eDonkey programs use the same approach as Napster, but the servers are not really central in this sense that they are independent from the programs. Individuals can make their own server available on the network. The servers, which index the files available on the network, do not belong to the company (as it was for Napster). Each server constitutes a network; eDonkey2000 network is thus constituted by several networks. Since November 2004, authorities have closed down all of the major eDonkey servers in the United States, and now, in Europe ⁷⁷. For instance, facilitating the illegal file sharing, with about 1,3 millions simultaneous users Razorback2 has been the number one eDonkey server,. Its servers have been seized by Belgian authorities in February 2006. And the site's operator has been arrested in Switzerland.

Beside that Napster has also kept a record of its users who logged in the network with a username, while it is not the case with the eMule and eDonkey programss. Therefore concerning eMule and eDonkey, the company has no mean to control who does what on the network.

⁷⁵ eMule also uses the KaD network.

⁷⁶ For instance, www.emule-paradise.com.

⁷⁷ <http://www.slyck.com/news.php?story=1102>.

In September 2005 Sam Yagan, president of the company owning eDonkey, announced in a hearing led by the legal committee of the US Senate, that under the pressure of the RIAA, he was going to abandon the fight, and that eDonkey will be transformed in a private and legal P2P network.

3.2.3. BitTorrent

BitTorrent is still being processed; however it has also been controlled by the movie industry. Most of the websites enabling users to find torrent musical or video files have been closed down by some way, lawsuits or threats from the MPAA and in 2005 Bram Cohen - the creator of BitTorrent - and the movie industry have concluded a deal so as that BitTorrent.com do not enable piracy anymore. Since February 2006, the MPAA is taking action against sites that enable users of Newsgroups to easily find and download illegal content. Newsgroups are electronic bulletin boards which in recent years have become a major source of pirated content as users are able to attach movie, music and games files to their messages⁷⁸. Some websites of this kind are also linked to eDonkey and eMule⁷⁹.

Concerning the problematic of this thesis, beside this US case law, which is very important on a worldwide scale, there has also been another kind of case law, much less significant, consisting in lawsuits brought directly against individual users, which took the form of intimidation campaigns, so as to dissuade users from sharing protected files. These campaigns have been mainly carried out by the RIAA, and also the MPAA.

Chapter 4 – The world legal framework

Facing the new technologies as Internet and the P2P networks it is necessary to seek for adequate solutions at a global level. For a global question as Internet there is only a world global solution. Internet and other new technologies of communication and exchange are connected with the general trend of world globalisation and are indeed probably one of the main globalisation motors.

⁷⁸ http://www.boingboing.net/2006/02/23/7_new_mpaalawsuits_.html.

⁷⁹ For instance, www.Ed2k-It.com, a leading eDonkey site, has recently been sued (February 2006).

With Internet the notion of national or cross-border communication and exchange, or internal or external ⁸⁰ communication and exchange, does not really exist anymore or becomes undefinable. For this reason it is necessary to deal with it globally since a national, a local or a regional legislation and legal practices will be immediately diverted. Therefore it is so far understandable that, alone, a European solution is not sufficient. A global solution is required which solution has then to be implemented in the European Union legislation. According to that the Berne Convention and the WIPO 70 Copyright Treaty have to be studied before analysing and enlightning the EU Copyright Directive.

4.1 - The Berne Convention

The September 9th 1886 Berne Convention for the Protection of Literary and Artistic Works has been completed and revised several times until the Paris Act on July 24th 1971 has been enforced.

This convention is still applicable today and provides copyright rules. Further it has been supplemented by the WIPO Copyright Treaty which has adapted the copyright rules to the new technical and communication environment in particular with new developments such as the Internet. It is thus not necessary to go through the Berne Convention in details but rather through the WIPO Copyright Treaty.

4.2 – The WIPO Copyright Treaty and WIPO Performances and Phonograms Treaty: a global solution to a global question

4.2.1. Background of the WIPO Treaty and the WPPT

The WIPO Copyright Treaty ⁸¹ and the WIPO Performances and Phonograms Treaty (WPPT) ⁸², have been adopted in Geneva on December 20th 1996. The WIPO Copyright Treaty supplements the Berne Convention for the Protection of Literary and Artistic Works referred to as the Paris Act of July 24th 1971 in order to improve copyright rules so as to adapt them to the new technical environment.

⁸⁰ to the European Community.

⁸¹ http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html.

⁸² http://www.wipo.int/treaties/en/ip/wppt/trtdocs_wo034.html.

As above mentioned the WIPO Copyright Treaty supplements the Berne Convention and does not replace it. Article 1(4) of the WIPO Copyright Treaty states: “*Contracting Parties shall comply with Articles 1 to 21 and the Appendix of the Berne Convention*”. For instance, nothing is stated about the right of reproduction in the WIPO Copyright Treaty: this means that it does not modify the article 9 of the Berne Convention which is thus entirely and effectively applicable as such.

The WPPT supplements the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations adopted in Rome October 26th 1961.

4.2.2. Objective of the WIPO Treaty and the WPPT

These Treaties have been adopted when the P2P technology did not yet exist⁸³, but the Internet Web did already exist. However it is interesting to see through their Preamble, which is the same for both Treaties, that it is aimed at adapting the copyright rules to a new global environment, in particular with the new technological developments.

The objective is to provide adequate solutions to the questions raised by this new environment:

“The Contracting Parties,

Desiring to develop and maintain the protection of the rights of authors in their literary and artistic works in a manner as effective and uniform as possible,

Recognizing the need to introduce new international rules and clarify the interpretation of certain existing rules in order to provide adequate solutions to the questions raised by new economic, social, cultural and technological developments,

Recognizing the profound impact of the development and convergence of information and communication technologies on the creation and use of literary and artistic works,

Emphasizing the outstanding significance of copyright protection as an incentive for literary and artistic creation,

⁸³ As already cited the P2P technology has been invented in 1999 by Shawn Fanning, founder of Napster.

Recognizing the need to maintain a balance between the rights of authors and the larger public interest, particularly education, research and access to information, as reflected in the Berne Convention,

Have agreed as follows: ”

This Treaty seems to be right in line with the European Commission’s 1995 green paper on copyright and related rights in the information society. One could say that the international authorities, the WIPO and European Commission, have been quite visionary because this preamble takes all its sense ten years later in particular with the legal problematic concerning copyrights brought by the P2P systems success.

A concept which is particularly important in this preamble is the idea that the balance between the rights of authors and the larger public interest needs has to be looked for and maintained. But this argument is not new; it had been used already in 1984 by the US Supreme Court in the Sony case above presented.

4.2.3. The WIPO Treaty and the WPPT main pertinent articles

Two articles of the WIPO Copyright Treaty are particularly important concerning the rights of authors of literary and artistic works:

A) The article 6(1) concerning the right of distribution:

“Authors of literary and artistic works shall enjoy the exclusive right of authorizing the making available to the public of the original and copies of their works through sale or other transfer of ownership”.

B) Even more precisely, the article 8 concerning the right of communication to the public:

“authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them”.

Two other articles of the WIPO Copyright Treaty provide the Member-States obligations

C) The article 11 concerning the technological measures:

“Contracting Parties shall 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 authorized by the authors concerned or permitted by law”.

D) The article 12(1) concerning the right-management information:

“ Contracting Parties shall provide adequate and effective legal remedies against any person knowingly performing any of the following acts knowing, or with respect to civil remedies having reasonable grounds to know, that it will induce, enable, facilitate or conceal an infringement of any right covered by this Treaty or the Berne Convention:

- (i) to remove or alter any electronic rights management information without authority;*
- (ii) to distribute, import for distribution, broadcast or communicate to the public, without authority, works or copies of works knowing that electronic rights management information has been removed or altered without authority”.*

The article 12(1) constitutes the basis for the Digital Right Management which is a system increasingly used today.

4.2.4. Assessment of the WIPO Treaty and the WPPT main pertinent articles

All these articles show that the today faced problem about the DFM, in particular through the P2P networks had been anticipated in this treaty whereas P2P technology had not been invented yet. The designers of the Treaty had probably already guessed that further technological evolutions could bring the trend that we can clearly identify today as the massive downloading and filesharing through P2P networks.

It is also interesting to notice how articles 6(1) and 8 are formulated. It is question to ensure an exclusive right of authorization to authors. It is interesting to see that this formulation

⁸⁴ Member-States of the WIPO (183 nations).

particularly corresponds properly to answering the issues brought by the P2P networks. Indeed, many artists use themselves the P2P networks in order to make some promotion of their works. Therefore sharing files protected by copyright could not be considered as illegal if the author has given his authorization, or has done the release himself. Therefore it is judicious to formulate the rules in terms of exclusive right of authorization.

By the way, this observation implies another idea that sharing files that a copyright owner has himself issued through the network can not be regarded as disregarding copyrights, and is thus not illegal. The fact that the author would himself issue and promote his work on the network could be considered as an implicit authorization. Thus downloading a protected file does not necessarily infringe copyright rules, it depends of the cases.

Beside that, these articles are clear, easy to understand and they don't require any further comments. The concerned Treaty constitutes a good tool for a global solution which is required by the questions linked to Internet and the downloading/filessharing.

Conclusion of chapters 3 and 4

The US case law related to copyright and DFP2PM has been analysed, with its consequences on the technological innovators holding the P2P networks. The international current legal framework has been presented: the WIPO Treaty.

The probable weakness of this Treaty could be its implementation. This Treaty should be enforced by the national judge of every contracting State but there is no common judicial power to ascertain that it has really been enforced and implemented.

For this reason it is necessary that it will be implemented into EU law and at another lower level into the national law. This Treaty is a model which enables to confirm that all the contracting parties - 183 States, almost the whole world -, are on the same track. Indeed this is a *sine qua non* condition to a suitable solution to the problems linked to the Internet since it is a world global and unlimited network.

The following chapter 5 is surveying the EU legal approach of the copyright.

5.1 – The EU Copyright Directive - EUCD

5.1.1. Background of the European Directive

The European Union (EU) Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 relating to the harmonisation of certain aspects of the copyright and related rights in the information society⁸⁵, commonly known as the EU Copyright Directive (hereafter EU Copyright Directive) constitutes the EU's implementation of the 1996 WIPO Copyright Treaty⁸⁶ with some elements from the WPPT.

As above mentioned, alone the European solution would not be efficient. But a global solution and a European solution linked together are necessary and require to be harmonized. Indeed with the 1995 green paper of the European Commission on copyright and related rights in the information society, Mario Monti, then DG Internal Market, already stated :

"The same issues will have to be addressed at the international level, because we need a framework for cooperation to ensure the global development of the Information Society".

That is why this EU Copyright Directive is actually the EU implementation of the WIPO Copyright Treaty. It is expressed at the point 15 of the Directive's preamble:

"(15) The Diplomatic Conference held under the auspices of the World Intellectual Property Organisation (WIPO) in December 1996 led to the adoption of two new Treaties, the "WIPO Copyright Treaty" and the "WIPO Performances and Phonograms Treaty", dealing respectively with the protection of authors and the protection of performers and phonogram producers. Those Treaties update the international protection for copyright and related rights significantly, not least with regard to the so-called "digital agenda", and improve the means to fight piracy world-wide. The Community and a majority of Member States have already signed the Treaties and the process of making arrangements for the ratification of the Treaties by the Community and the Member States is under way. This Directive also serves to implement a number of the new international obligations".

⁸⁵ Available at http://europa.eu.int/eur-lex/pri/en/oj/dat/2001/l_167/l_16720010622en00100019.pdf.

⁸⁶ http://fr.wikipedia.org/wiki/Directive_EUCD

5.1.2. Objective of the European Directive

An EU implementation of the global solution is necessary because the European Union has a real judicial power over Member-States and European citizens through its jurisdictions. The EU is able to implement and enforce its legislation. While on a global world level, it is only a matter of political cooperation and negotiation between States and there is not yet much judicial power in this matter.

In the same way, there is a need to improve administrative cooperation between the Member States. The Commission Communication of 30 November 2000 on the follow up of the 1995 Green Paper on combating counterfeiting and piracy in the single market⁸⁷ states:

“The responses to the Green Paper confirm the scale of the problems and the detrimental effects on the proper functioning of the internal market ... The parties concerned mentioned several factors facilitating this sort of situation, in particular the current disparities between Member States in the systems of sanctions and other means of enforcing intellectual property rights”.

A European Directive is particularly pertinent in the matter because Internet has no borders and is a global system as previously explained. Therefore the legislation in one country is absolutely useless if it is not applied in the other countries because it would be immediately diverted. If implemented in all Member-States the European Directive is the only way to offer a satisfactory solution in Europe. It is not sufficient due to the fact that Internet is a worldwide system but it is necessary in order to make sure that all Member-States work at the same level.

Indeed the preamble of the Directive takes this orientation and shows that the Directive is aimed in this direction in particular in its points 6 and 7:

“(6) Without harmonisation at Community level, legislative activities at national level which have already been initiated in a number of Member States in order to respond to the technological challenges might result in significant differences in protection and thereby in restrictions on the free movement of services and products incorporating, or based on, intellectual property, leading to a refragmentation of the internal market and legislative inconsistency. The impact of such legislative differences and uncertainties will become more significant with the further development of the information society, which

⁸⁷ European Commission's green paper of 1998 on “Combating counterfeiting and piracy in the single market” - COM/98/0569.

has already greatly increased transborder exploitation of intellectual property. This development will and should further increase. Significant legal differences and uncertainties in protection may hinder economies of scale for new products and services containing copyright and related rights.

(7) The Community legal framework for the protection of copyright and related rights must, therefore, also be adapted and supplemented as far as is necessary for the smooth functioning of the internal market. To that end, those national provisions on copyright and related rights which vary considerably from one Member State to another or which cause legal uncertainties hindering the smooth functioning of the internal market and the proper development of the information society in Europe should be adjusted, and inconsistent national responses to the technological developments should be avoided, whilst differences not adversely affecting the functioning of the internal market need not be removed or prevented’.

5.1.3. Basic articles of the European Directive

The 2001 EU Copyright Directive is compliant to the 1996 WIPO Copyright Treaty, which is logical since it is the EU’s implementation of the WIPO Treaty. Indeed, in order to show the parallel about the four most important articles mentioned about the WIPO copyright Treaty:

A) The article 3(1) of the directive concerns the right of communication to the public and is the same as the the WIPO Treaty article 8 almost exactly in the same wording.

B) The article 4(1) of the directive concerns the right of distribution:

“Member States shall provide for authors, in respect of the original of their works or of copies thereof, the exclusive right to authorise or prohibit any form of distribution to the public by sale or otherwise”. It corresponds to article 6(1) of the WIPO Treaty.

C) The article 6(1) of the directive concerns the technological measures:

“Member States shall provide adequate legal protection against the circumvention of any effective technological measures, which the person concerned carries out in the knowledge, or with reasonable grounds to know, that he or she is pursuing that objective”.

It corresponds to the article 11 of the WIPO Treaty.

D) The article 7(1) of the directive concerns the right-management information:

“Member States shall provide for adequate legal protection against any person knowingly performing without authority any of the following acts:

(a) the removal or alteration of any electronic rights-management information;

(b) the distribution, importation for distribution, broadcasting, communication or making available to the public of works or other subject-matter protected under this Directive or under Chapter III of Directive 96/9/EC⁸⁸ from which electronic rights-management information has been removed or altered without authority, if such person knows, or has reasonable grounds to know, that by so doing he is inducing, enabling, facilitating or concealing an infringement of any copyright or any rights related to copyright as provided by law, or of the sui generis right provided for in Chapter III of Directive 96/9/EC”.

It corresponds to article 12(1) of the WIPO Treaty, and concerns in particular the DRM - Digital Rights (or Restrictions) Management⁸⁹ protections.

It is possible to find such similarities in all the text, also in others articles of the directive, and it is thus not necessary to develop it any more here. The EU directive is actually in strict compliance to the WIPO Treaty.

5.1.4. Assessment of the European Directive

Meanwhile the EU directive is more precise and brings few novelties in the light of the technological evolutions made between 1996 and 2001⁹⁰, in particular the appearance of P2P networks and the development of fast Internet connections. Indeed the point 5 of its preamble shows this objective of the Directive:

⁸⁸ Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases.

⁸⁹ DRM are a so-called protective feature used on new digital media (CD's, etc) in order to restrict or control the way the digital media is used. It is sometimes called "content protection" or "copy protection". The alleged benefit of DRM is that it precludes the possibility of copyright infringement of the digital content. At its core, DRM is designed to prevent the user from making a copy of the digital media that they have obtained. The record labels, and other content-holding corporations designed DRM in an attempt to abate the piracy. The DRM cuts off many of the fair use rights of digital media consumers, particularly CD consumers, including the right to make a back-up copy of the CD, the right to transfer the songs onto an mp3 player, or simply play the songs on a computer rather than CD-stereo.

⁹⁰ Date of the WIPO Copyright Treaty and date of the EU Copyright Directive.

“(5) Technological development has multiplied and diversified the vectors for creation, production and exploitation. While no new concepts for the protection of intellectual property are needed, the current law on copyright and related rights should be adapted and supplemented to respond adequately to economic realities such as new forms of exploitation”.

Each article is more developed and precise in the EU directive, which is probably due to the fact that the WIPO Treaty was only designed to serve as a sort of orientation guideline to its Member-States. The EU directive is differently intended to be directly judicially enforced and also implemented in the Member-States ⁹¹ in a very precise and harmonized manner. Thus it is specifically required to be particularly clear and precise.

The article 2 of the Directive concerning the reproduction right is the implementation of the Berne Convention article 9(1) in much more precise terms though:

“Member States shall provide for the exclusive right to authorise or prohibit direct or indirect, temporary or permanent reproduction by any means and in any form, in whole or in part:

(a) for authors, of their works;

(b) for performers, of fixations of their performances;

(c) for phonogram producers, of their phonograms;

(d) for the producers of the first fixations of films, in respect of the original and copies of their films;

(e) for broadcasting organisations, of fixations of their broadcasts, whether those broadcasts are transmitted by wire or over the air, including by cable or satellite”.

This article concerns the act to copy cultural products by downloading or otherwise. The fact to share the products on a P2P network is a communication to the public aimed at by the articles 3(1) and 3(2).

The EU directive also brings some novelty, in particular an interesting one:

A) The Article 3(2)

⁹¹ Member-States of the EU this time.

The way as this article is stated: it also concerns the right of communication to the public, but of other rightholders - while article 3(1) concerns the authors only - :

“Member States shall provide for the exclusive right to authorise or prohibit the making available to the public, by wire or wireless means, in such a way that members of the public may access them from a place and at a time individually chosen by them:

(a) for performers, of fixations of their performances;

(b) for phonogram producers, of their phonograms;

(c) for the producers of the first fixations of films, of the original and copies of their films;

(d) for broadcasting organisations, of fixations of their broadcasts, whether these broadcasts are transmitted by wire or over the air, including by cable or satellite”.

This article includes in particular the producers, thus the major recording companies who are most of the time the plaintiffs in lawsuits concerning downloading and filesharing through P2P networks.

B) The article 5

This article offers the possibility to the Member-States to provide exceptions or limitations to the articles 2, 3 and 4 of the Directive, respectively the right of reproduction, the rights of communication and making available to the public, and the right of distribution.

The paragraphs 1 to 4 of the article 5 provide exceptions, and the paragraph 5 of the article 5 provides as a three-step test three conditions which are required for the exceptions provided in paragraphs 1 to 4 of article 5 to apply.

This article 5(5) of the Directive corresponds to an EU implementation of the Berne Convention article 9(2) which states:

“It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author”⁹².

⁹² Article 9(2) of the Berne Convention

As it is possible to see, the Berne Convention article 9(2) provides three conditions to the possible exception. Article 5(5) of the Directive provides the same conditions.

The article 5(2) of the Directive provides exceptions and limitations only to the article 2 of the Directive. The article 5(2)(b) states:

“in respect of reproductions on any medium made by a natural person for private use and for ends that are neither directly nor indirectly commercial, on condition that the rightholders receive fair compensation which takes account of the application or non-application of technological measures referred to in Article 6 to the work or subject-matter concerned;”

The article 5(2)(b) provides a general exception for private use reproduction, which thus may apply to the categories of products shared through P2P networks.

The article 5(4) of the Directive provides exceptions and limitations to the article 4 of the Directive in similar conditions than exceptions and limitations to article 2 pursuant to article 5(2) and 5(3) to the extent justified by the purpose of the authorised act of reproduction.

The article 5(3) of the Directive provides exceptions and limitations to the articles 2 and 3 of the Directive. But these exceptions do not concern the categories of product that are shared through P2P networks (music, films, etc.).

The consequence of this is that concerning our problematic of the DFM by copyright through P2P networks the Member-States may be able to provide an exception to the article 2 of the Directive concerning the reproduction right and eventually also to the article 4 concerning the distribution right, but not to the article 3 of the Directive concerning the right of communication to the public of works and right of making available to the public other subject-matter.

This is very important to acknowledge this statement, because concerning the kind of artistic works that can be exchanged through the Internet, it means that if Member-States can provide exceptions in certain conditions to the right of reproduction such as defined in the article 2, and to the right of distribution such as defined in the article 4, they cannot in any way provide any exception to the rights of communication and making available to the public such as defined in the article 3.

Therefore, a national law allowing to share files protected by copyright could not be compatible with the EU Directive since sharing files correspond to making available to the public. Thus the interpretation mostly required concerns the acts of reproduction, in other words the debate is mostly about copying and downloading files. This is a key element for understanding properly the French example and also the difficulties encountered in France to correctly implement the Directive.

5.2 – The 2005 Commission Recommendation and the project of creation of a unique European Licence

5.2.1. Background of the Commission Recommendation

The previous Directive is supplemented by the Commission Recommendation of 18 May 2005 on collective cross-border management of copyright and related rights for legitimate online music services.

The point 4 of the recommendation's preamble states :

“New technologies have led to the emergence of a new generation of commercial users that make use of musical works and other subject matter online. The provision of legitimate online music services requires management of a series of copyright and related rights”.

5.2.2. Objective of the Commission Recommendation

The objective of this recommendation is the **cooperation between Member States** concerning online sales of music as point 2 of the recommendation states:

“Member States are invited to take the steps necessary to facilitate the growth of legitimate online services in the Community by promoting a regulatory environment which is best suited to the management, at Community level, of copyright and related rights for the provision of legitimate online music services”.

In particular, one important objective of the European Commission is to **create a unique European licence for the management of the copyrights in the online sale of music** which is required by the nature of online sales.

Indeed today copyrights of artists are managed by some authors and composers societies which are organizations for the collective management of artists' rights, a bit similar to some kind of artists unions. As of today copyrights of artists are managed by several similar national organizations. The exploitation of cross-border sales of the works is therefore very complex because it requires negotiating separately with each of these organizations. This is not compatible in the European and world space with a proper functioning of online sales which are cross-border and thus require a unique centralized management of the rights of artists.

5.2.3. Economy of the Commission Recommendation

Thus the point 8 of the preamble states that:

“In the era of online exploitation of musical works, however, commercial users need a licensing policy that corresponds to the ubiquity of the online environment and which is multi-territorial. It is therefore appropriate to provide for multi-territorial licensing in order to enhance greater legal certainty to commercial users in relation to their activity and to foster the development of legitimate online services”.

The Commission argues that the absence of such a unique European licence has been one of the obstacles the full potential development of the new sale services of music based on Internet has to face.

Currently, the editors of these online music sale services must negotiate almost country by country to obtain the authorizations from the copyright holders and in particular to be sure to correctly fulfil their duty of remuneration owed to the copyright holders. Theoretically they have to negotiate with 25 organizations. In reality, they negotiate most of the time only with the biggest ones⁹³. Thus, royalties are not always distributed to the copyright holders beyond the national borders and this distribution does not always reflect the real use of works in other countries. In both ways this is not indeed an efficient system.

Besides that, the Commission wants to open to the competition the digital management of copyrights. In 2001 forty societies of authors in the world have founded a system of "one-shop" for obtaining an international licence for diffusing music. The Commission estimates this agreement is incompatible with the European competition policy.

⁹³ In particular SACEM (France), Gema (Germany), MCP-PRS (UK), ...

The Commission recommends the creation of European organizations entitled to collect the royalties for all the 25 Member States. The platforms of online music sales could then choose to buy only one licence valid in the whole European Union.

The point 10 of the Commission Recommendation's preamble goes in this direction:

“Fostering effective structures for cross-border management of rights should also ensure that collective rights managers achieve a higher level of rationalisation and transparency, with regard to compliance with competition rules, especially in the light of the requirements arising out of the digital environment”.

But this whole process is not an easy task because the national societies of authors and composers represented at the EU level by the EGSAC - European Grouping of Societies of Authors and Composers -⁹⁴ offer a great resistance to the first proposal of global licence.

Conclusion of chapter 5

The European legislations has been analysed and compared to the international legal framework. It has been shown that the European legislation is compliant to the international legislation, which is necessary due to the global and unlimited nature of the Internet.

It has been remarked that the EU copyright directive offers to Member-States the possibility to provide for exceptions or limitations to the articles 2, 3 and 4 of the Directive. One of these exceptions is the right to private copy.

Finally the 2005 Commission Recommendation has been presented. One objective of this recommendation is the project of creation of a unique European Licence.

Introduction of chapters 6 and 7: The French Example

The next step of the thesis is now to see through the French example if and how a global harmonized solution could be effectively and correctly implemented in Member-States so as to become efficient. For instance in France like in many other Member-States these changes and moves present great difficulties to be discussed, legislated and implemented.

⁹⁴ http://www.gesac.org/eng/homepage_en/entree.asp.

The same principle of a necessary connection between a global solution and the EU legislation applies here between the EU legislation and the French national one. In order to be now efficient the national legislation must be in compliance with the EU legislation both for the reason it is compulsory according to the EU treaties to transpose the EU directives in the EU Member-states national legislations and for the already explained fact that Internet is worldwide and requires a global solution.

Further it is necessary that the EU legislation to be transposed into the national law because it is easier to deal with cases on a national level according to the main EU subsidiary principle. Firstly because the national authorities and jurisdictions have more proximity with the individuals and they have in this way the possibility to get a better understanding of particular situations. Secondly because European jurisdictions could not deal with each and every case. It is the objective that a national judge could apply simultaneously the national and the EU legislations. In fact these two legislation need to be in compliance with each other.

The French example helps a better understanding of the situation in general since all the Member-States are faced to the same important issue by itself and in relation to the needed systemic approach. This French example is particularly interesting for three main reasons forming the background of the French example:

The DFM rights matter is in France of a **hot actuality** and it seems to be a **particularly sensitive question**, probably like in the other EU Member-states even they have already transposed the EU legislation in their own national one. The EU Copyright Directive has not been yet implemented in France while it has been done in almost all Member-States⁹⁵. Indeed the date of implementation stated in the Directive article 13 was the 21 December 2002. Thus France is late in implementing it.

An attempt has already been made in December 2005 with the draft law, the so-called **DADVSI** - "*Droits d'auteur et droits voisins dans la société de l'information*" : "*Rights of the Author and other Related Rights in the Information Society*". Actually it has not been a real success because the draft law has been deeply amended by the French "Assemblée Nationale" in a manner rending the law inconsistent with the EU Directive. The DADVSI as it has been adopted by the French National Assembly was supposed to implement the EU Copyright Directive in France before the presentation to the second Assembly, the Senate.

⁹⁵ Only three Member-States have not yet implemented the directive: France, Spain and the Czech Republic.

Two last-minute amendments⁹⁶ on the 21 December 2005 have however legalized the copies exchange for private use through Internet, thus legalizing the "peer-to-peer" exchanges. These amendments were supplemented by the proposition that this exchange would be authorized at the condition users would pay few extra euros added to their Internet provider subscription. This amount would serve to remunerate the copyright owners within the framework of a "global licence"⁹⁷. The debates started again in March 2006 and those amendments were effectively repealed. The December 2005 imbroglio occurred at the National Assembly is absolutely exceptional concerning the last decades.

The Prime Minister, Dominique de Villepin, having declared the immediate urgency on the draft law : only one reading by the French National Assembly and one by the Senate have been envisaged. A new version of the DAVDSI Act has been adopted in March 2006 by the "Assemblée Nationale" in first reading, and in May 2006 it is examined in a second reading by the Senate⁹⁸ before it will be definitively adopted.

At the time the thesis is written up the text which will be adopted by the Senate is unknown but several new writings of various articles have been already undertaken. In the event of dissension between the two chambers the Prime Minister will be able to call a paritary Joint Commission⁹⁹ in order to harmonize the text¹⁰⁰ before its definitive adoption.

Following this explanation of the first interesting element, one other element is particularly interesting in the French example: the **French Law recognizes a right to private copy** which is for instance not the case in the USA¹⁰¹. This probably explains the difficulties encountered in December 2005 in the first attempt of transposing the EU directive¹⁰² into the French national law.

The two last-minute amendments of the 21 December 2005 are the amendments 153 and 154, which concern two questions at issue:

⁹⁶ Amendments 153 and 154. Available at <http://www.assemblee-nationale.fr/12/amendements/1206/120600153.asp>, and <http://www.assemblee-nationale.fr/12/amendements/1206/120600154.asp>

⁹⁷ <http://fr.wikipedia.org/wiki/DAVDSI>, and Midi Libre, "Downloadings", 23/01/2006.

⁹⁸ The Senate is the second chamber of the French Parliament carrying on a second reading of draft laws.

⁹⁹ This Paritary joint Commission is composed of both chambers members in equal number whose role is to find a compromise for the presented draft law.

¹⁰⁰ <http://fr.wikipedia.org/wiki/DAVDSI>

¹⁰¹ In the USA the Courts apply the Fair use doctrine instead, which is different.

¹⁰² As above explained the two last-minute amendments previously mentioned have legalized the exchange of copies for private use through Internet.

- the **right to private copy**, extended to copies made by downloading from online communication services,
- and the system of “**Global Licence**” proposed in complement ¹⁰³. The “*Global Licence*” proposition has been discussed by the French National Assembly ¹⁰⁴, which generated a serious polemic in December 2005. Opinions were clearly divided about it. This led to have to open again the debates in March and May 2006.

Chapter 6 - The genuine French right to private copy, its case law and the DADVSI

6.1 - The French right to private copy

This point is the first main difficulty encountered in December 2005 in trying to transpose the EU Directive into French law. Under the French law there is a legal exception to the normal rules of copyright: the private copy, which includes the downloader’s family and close friends - up to 5 persons -. This exception concerns copies made by natural person for private use and for ends that are neither directly nor indirectly commercial.

6.1.1. The ground articles

Articles L 122-5, L 211-3 of the French Intellectual Property Code, concern exceptions to the prohibition of reproduction for respectively the author’s rights and related rights. Article L 122-5 of the French Code of Intellectual Property states ¹⁰⁵:

*“When the work has been issued, the author cannot prohibit:
 1° Private and free representations carried out exclusively in a family circle;
 2° Copies or reproductions strictly reserved for the private use of the copyist and not intended for a collective use, ...”*

A first remark which can be made is that when the article states “*When the work has been issued*” it could be interpreted as meaning that this legal exception for private use does not apply when the work has not yet been issued. Indeed through P2P networks artistic products and artefacts are often issued and shared before the date of their official distribution launch on the market ¹⁰⁶. In practical terms this means that downloading and filsharing a product before it has been officially launched on the market by the copyright owners, would not benefit from this legal

¹⁰³ The earnings stated about in these amendments would be collected through a system of “Global Licence”, see next footnote.

¹⁰⁴ The two last-minute amendments previously mentioned have legalized the exchange of copies for private use through Internet if the user has paid a “Global Licence” in the form of some euros being added to their Internet provider subscription.

¹⁰⁵ Directly translated from the French texts for both articles.

¹⁰⁶ As previously explained about the Napster case in the USA.

exception for private use. Nothing has been expressed about it though, either in case law or in comments ¹⁰⁷, and this interpretation is purely personal.

Article L 211-3 of the French Code of Intellectual Property states concerning the related rights:

*“The beneficiaries of the rights concerned by the present title cannot prohibit:
1° private and free representations carried out exclusively in a family circle;
2° reproductions strictly reserved for the private use of the person who realises them and not intended for a collective use, ...”*

But it should be remarked that the right to private copy is not an absolute right but only a legal exception to copyright rules. This has been recently expressed in 28 February 2006 by the Cour de Cassation ¹⁰⁸ in the “Mulholland Drive” case ¹⁰⁹. This means in particular that the Courts can interpret it more flexibly in one way or the other.

6.1.2. The French case law on the right to private copy

French Courts have extended and constantly applied this exception of private copy to copies made by downloading through Internet ¹¹⁰. This case law leads to the legal consequence that downloading and copying products protected by copyright is not illegal if it is for private and non commercial use only. Therefore it is on the contrary illegal to share the product with the public, even if it would be for non commercial purpose because this does not benefit from the legal exception. Of course is illegal any downloading for commercial purpose.

In practical terms, this gives the following consequence. When using a system like KaZaA if the user does not share any folder containing files protected by copyright and always leaves empty of such files the folder “*my shared folder*” ¹¹¹ which means that the user does not illegally share any protected file with the public the user is considered as acting legally. So each time a new file has been downloaded, the user can move it to another folder which is not shared on the network, and under the French case law - the exception of private use - this would be legal.

¹⁰⁷ At least, nothing has been found about this.

¹⁰⁸ Which corresponds to a French Supreme Court dealing with matters between individuals only – not the administrative matters.

¹⁰⁹ See section 7.3

¹¹⁰ Case law confirmed in the case n° 04/01534, Cour d'appel de Montpellier, 3ème Chambre correctionnelle, 10 mars 2005; the facts were that the police had found 488 copies of films at the defendant's home; the court found that he had used them for private use only – himself and few friends – and thus did not convict him to any sentence and has released him.

¹¹¹ “My shared folder” is an incoming folder in which automatically goes the downloaded files; the files contained in this folder are also automatically shared on the KaZaA network.

On the contrary users of programs such as eMule or eDonkey are forced to share files: shared files larger than 9500 KB are divided and downloaded in parts so that a recipient starts to share the parts of the already downloaded file even before the whole file download has been completed. The recipient is forced to share in this way until the download has been completed¹¹². When a user downloads for instance a movie, the parts already obtained are automatically put on release while it is downloading, which corresponds to communicating the file to the public and is as such illegal¹¹³. Therefore by using such a system downloading files is automatically associated to uploading them which is illegal if it is made by disregarding copyrights.

6.2 - The French right to private copy and the 21 December 2005 DAVDSI

6.2.1. Description of the DAVDSI amendments n 153 and n 154 concerning the copyright

With the amendments 153 and 154 the of the DAVDSI article 1 states as follows:

“The 2° of the article L. 122-5 of the Code of the Intellectual Property is supplemented by a sentence written like this: “In the same way, the author cannot prohibit the reproductions made, on any support and from a service of communication online, by an individual for his private and for purposes not directly or indirectly commercial, except copies of software other than the backup copy, provided that these reproductions are subject to remuneration such as provided for by article L. 311-4”¹¹⁴.

These two last-minute amendments 153 and 154 modifying thus the article 1 of the 21 December 2005 DAVDSI extend the benefit of the legal exception of private copy to copies made by downloading and filesharing through Internet. In other words, they make official a jurisprudential solution already established by the Courts but whose interpretation remained disputed by the industry.

An argument in favour of these amendments is that they create a legal harbour of safety for the users of numerical networks who are brought to carry out, voluntarily or involuntarily, all kinds of reproductions of protected artistic works¹¹⁵.

¹¹² In this system, it is not necessary to have downloaded an entire file for it to be placed on release; the already downloaded parts (of the file) are automatically shared with other users progressively before the file to be completely downloaded.

¹¹³ This interpretation/deduction about eMule or eDonkey is purely personal because no legal clarification has been made on this topic.

¹¹⁴ Directly translated from the French text. This is the article 1 of both Amendments 153 and 154, available at:
<http://www.assemblee-nationale.fr/12/amendements/1206/120600153.asp>;
and <http://www.assemblee-nationale.fr/12/amendements/1206/120600154.asp>

¹¹⁵ From comment made with the amendment 154: <http://www.assemblee-nationale.fr/12/amendements/1206/120600154.asp>

But it seems that the legal situation would not be especially clearer with these amendments. Actually this solution would not bring anything really new in the legal situation. The real question which has not been clarified is the filesharing act.

Beside that, this legal exception of the private copy as extended in particular to files downloaded through Internet makes the French law inconsistent with the articles 2 of the EU Copyright Directive. The question is thus to see if this legal exception of private copy constitutes a possible exception to article 2 such as provided for in the article 5(2).b of the EU Copyright Directive and fulfils the three conditions of the article 5(5) of the same Directive (or of article 9(2) of the Berne Convention):

Article 5(2).b states: *“in respect of reproductions on any medium made by a natural person for private use and for ends that are neither directly nor indirectly commercial, on condition that the rightholders receive fair compensation which takes account of the application or non-application of technological measures referred to in Article 6 to the work or subject-matter concerned”*

It appears that the exception of private copy provided by French law corresponds to a possible exception under article 5(2).b of the EU Directive.

111. The article 5(5) states:

*“The exceptions and limitations provided for in paragraphs 1, 2, 3 and 4 shall only be applied in certain special cases which do not conflict with a normal exploitation of the work or other subject-matter and do not unreasonably prejudice the legitimate interests of the rightholder”*¹¹⁶.

6.2.2. Assessment of the DAVDSI amendments n 153 and n 154 concerning the copyright

A) The three-step test

It is thus required to verify the compliance of the exception provided in French law with this article by doing a three-step test which corresponds to the three criteria set in the article. The following analysis is limited to the case of copy made by downloading through Internet:

1) The exception is limited to a special case: it relates only to copies made by downloading through Internet for a private use and non-commercial purposes;

¹¹⁶ As previously shown, these conditions are the same as in article 9(2) of the Berne Convention.

2) It does not conflict with a normal exploitation of the work or other subject-matter: this is questionable and subject to debate.

Concerning the factual situation, it might be arguable that the legal exception for private use would probably not change much, since so far no alternative has been found to cover the reproductions having been massively made for several years, without authorization of copyright owners.

But the real legal question is to define what is considered to be a normal exploitation of the work, in order to be able to assess if the legal exception of private copy conflicts with it. This assessment is a key point in the French case law as it will be explain hereunder.

3) It does not unreasonably prejudice the legitimate interests of the rightholder: this is also a very sensitive issue. It depends from what is considered to be “*legitimate interests of the rightholder*”.

B) The present incertitudes deriving from the 21 December 2005 DAVDSI on the private copy right

At first undoubtedly the copyright holders need to receive fair royalties for their work. One may consider that this condition is fulfilled if the exception is directly related to a fair remuneration¹¹⁷. But it remains two fundamental questions:

- How to ensure these royalties or earnings? This is a plain problem; it is very complex and identifying a suitable system appears to be particularly difficult.
- How to define what fair earnings are? Indeed, how to know what is the fair remuneration for a right holder if it is not directly defined by the market itself? On the market the remuneration of copyright holders is directly defined by the sales of the work. But with the Internet it is arguable that controlling how many times one particular work has been copied is very difficult, quite impossible and uncertain.

Beside that, the legitimate interests of the copyright holders could be considered to go beyond the sole earnings. It could for instance include the possibility to keep a control over the work. This assessment is particularly delicate; it could be considered as a kind of proportionality test. For now, it has not been made really clear.

¹¹⁷ This is why a system of “global licence” fee has been proposed together with the amendments 153 and 154.

In conclusion, as it is possible to understand, the question to know if the legal exception of private copy provided in the French law and extended to the copies made by downloading from the Internet can constitute an exception under article 5 of the EU Copyright Directive, and thus be compatible with this Directive, is not clearly characterised and requires an interpretation. Therefore it is necessary to analyse the position adopted in the “Mulholland Drive” by the French “Cour de Cassation”.

6.3 - The “Mulholland Drive” Case ¹¹⁸

6.3.1. The case

On the 28 February 2006 the first civil chamber of the “Cour de Cassation” has rendered an important judgment. The issue in this case is the conflict between the DRM devices and the private copy regulation. This case represents a kind of counter-attack of consumers against the video industry multinational companies.

In this case, the plaintiff had bought a DVD of the movie “Mulholland Drive” on the market. Trying to make a copy of this DVD he could not because of DRM protection devices which were inserted in the support. Joined by the UFC Que choisir consumers union, he has prosecuted the producer, the publisher and the distributor of the film and DVD claiming his right to the private copy. The plaintiffs asked for damages and for interdiction of such DRM devices and interdiction of the distribution of the protected DVDs.

6.3.2. The judgement

The Court of Appeal of Paris rendered on April 22nd 2005 a judgment giving right to the plaintiffs favourably to the consumers. The Court considered that the private copy legal exception cannot be limited since French law does not provide such a limitation. The court also considered that a copy for private use does not hinder the normal work exploitation. The court thus considered that the DRM must enable the private copy.

However, the Cour de Cassation broke and annulled the decision of the Court of Appeal, and sent the case back to a differently composed Court of appeal which should decide again upon

¹¹⁸ Stéphane Perquin et l’Union fédérale des consommateurs (UFC) vs la société Films Alain Sarde, Judgment of the Cour de Cassation, first civil chamber, February 28th 2006. In the same case, Judgment of the Court of Appeal of Paris, April 22nd 2005

the case ¹¹⁹. The case will be judged again by a Court of Appeal and is thus not yet definitively settled.

The Cour de Cassation made an interpretation of the exception of private copy provided by articles L 122-5 and L 211-3 of the French Code of Intellectual Property in the light of the EU Copyright Directive and of the article 9(2) of the Berne Convention. The Court put this exception to the test of the three conditions of the Berne Convention article 9(2).

By the way, one remark can be made concerning the three conditions test : the Court refers to the Berne Convention article 9(2) which one may consider as rather strange since it could have referred to article 5(5) of the EU Copyright directive instead, both texts providing exactly the same conditions.

In the light of these three conditions, the Court has stated that the exception of private copy cannot impede the insertion of DRM protection devices in the support, when this copy would hinder the normal exploitation of the work. And the Courts considers that the normal exploitation of the work must be appreciated *“by taking into consideration the economic incidence that such a copy can have in the context of the numerical environment”*.

The Court states as follows:

“the hinder to the normal exploitation of the work, which can justify to set aside the exception of private copy, must be appreciated in comparison with the risks inherent to the new numeric environment, as regard the protection of copyrights and of the economic importance that the exploitation of the work, in the form of DVD, constitutes for the amortization of the cinematographic production costs” ¹²⁰.

6.3.3. Assessment of the case and discussion

The insertion of such a DRM device is in contradiccion with the right to private copy. But it is known that today a private copy made from a legally purchased DVD is often lately shared through P2P networks, as such or compressed in smaller formats (Divx/Xvid). That is probably what is meant by *“the risks inherent to the new numeric environment”*.

¹¹⁹ In case of variance between the Court of appeal and the “Cour de Cassation”, the French judicial system provides for a system of to and fro movement between the court of appeal and the Cour de Cassation, such as a same case can be judged up to two times in court of appeal and three times in Cour de Cassation.

¹²⁰ Directly translated from the French text.

But this decision is questionable in the sense that it is not aiming at the real problem. Indeed, the fact to make a private copy is legal, it proceeds from a right of individuals; it is the fact to share the copy with the public which may be illegal. In this sense, this DRM device could be seen as not legitimate. That is probably why the Court of Appeal and the Cour de Cassation are not agreed.

In this case, the right to private copy has thus been severely limited, in particular by the use of DRM protections. This might be a turn in the case law, but it cannot be surely said until the case to be definitively settled.

This decision reflects the Court will to transpose the rules of the old environment to the digital era which is the new environment, and constitutes a different economic reality.

The risk is that it might render vague the notion of private copy in the context of the numerical environment. It also creates a difference between films and music, since this kind of DRM devices are rarer on CDs than on DVDs.

Besides, when consumers purchase supports allowing the private copy of music or video (blank Cds or DVDs), they also pay a small amount included in the price which goes to the copyright owners. And it could be also remarked that this amount is higher when buying DVDs than CDs, which is another element creating a difference between music and films. Therefore artists receive indirectly some kind of royalties when consumers do a copy of their work, which could be considered as fair. But other right owners, like producers and studios, don't and that is probably why the industry is trying to impede the copy of their works, even for private use, by the mean of DRM devices.

The industry seems to try going back to the old situation, anterior to the digital era, where it had more market power over the consumers, which seems quite impossible, since the new environment has changed for good, and has modified the balance of power between the industry and consumers. But this DRM device does even worse than going back to the past situation; it is in contradiction with the right to private copy which has been already recognized in the past. And it can be considered that this judgment is giving right to the industry in this approach.

What this surely shows is that finding the right balance between consumers and the industry, and their respective rights, is not an easy task.

Beside that, there is also another important issue in this case: the question of information to consumers. The Code of Consumption, Article L 111-1, provides that a professional seller of goods must allow the consumer to know before the conclusion of the sale contract the essential characteristics of these goods. But the information whether a DVD or a CD can be copied or is locked by such a DRM device is usually not given to the consumers, or at least it is not apparent enough. Yet this is important because this could determine the decision-making to buy. Moreover, this could be an element of determination of the price, which should differ between a locked and an unlocked support. Therefore, clear information has to be given to the consumers precisely about this point.

6.3.4. The “class action”, a new kind of Lawsuit in France

A) The case

Something new has happened which is interesting concerning the form of lawsuits. After the judgment of the Court of Appeal about the Mulholland Drive case, a **class action** has been presented to the commercial Court of Paris on May 18th 2005. This practice is very common in the USA, in Canada, and also in Sweden but is completely new in France. This is the first class action sued in France. It has been organised by some lawyers who have gathered consumers through a website ¹²¹.

The plaintiffs had bought some DVDs on the market, and DRM devices inserted in the supports precluded the possibility to make any copy. Represented by the lawyers who gathered them, they sued six major companies of video edition, claiming their right to private copy, and asked for damages, 1000 euros per person. The legal arguments are the same that in the Mulholland Drive case, and no judgment has been rendered about it, thus it is not necessary to go through this case. It is its form that is interesting in this case. And it is possible to imagine that this kind of class action might develop in France, especially concerning similar issues. But for now, the company classaction.fr has been condemned by the Court of first instance of Paris in December 2005, for illicit canvassing.

B) Case partial assessment

¹²¹ www.classaction.fr.

Like in most of other EU Member-States, in France, except this class action, the case law on this matter concerns only individual cases. It is mostly several isolated cases, where some users having downloaded and/or shared files protected by copyright over the Internet were sued.

Only one thing had been made clear by the French case law: downloading or copying files for private use constitutes a legal exception under French law and is thus legal. But in the of 28 February 2006 “Mulholland Drive” case, the Court has considered that this right to private copy is not absolute and has been limited by the use of DRM protections. But the Courts disagreed upon it and the case is not yet definitively settled.

On the contrary, concerning the act of sharing files, it is not helping much to clarify the legal situation, which remains still quite unclear¹²². This reflects the fact that no pertinent solution has yet been found corresponding to the present issue on discussion. The situation is still unclear and unsatisfactory.

Therefore the first step which is required to be taken is to have a clear and globally harmonized legislation by the way of transposing correctly the EU Copyright Directive into the French national law. This is the purpose of the DAVDSI which is again analysed hereunder in its main proposal of a Global Licence.

Chapter 7 - The “Global Licence” and the DADVSI second writing

This point of the “Global Licence” is the second main difficulty met at the French National Assembly when the draft law on the 21 December was introduced by the French Government in trying to transpose the EU Directive into the French law. Indeed this question was an important part of the polemic. After this analysis it will be interesting to survey and assess the second version of the DAVDSI.

7.1 – The “Global Licence” proposal

7.1.1. Background and the proposal rationale

¹²² It might be argued that the Medias also participate, mostly through newspapers, to an attempt of intimidation, because they communicate unclear or even false messages about these law suits and their legal grounds. They basically tend to make users believe that downloading music and other protected files through P2P networks is illegal, while it is not as above explained. It is easily imaginable that the industry and lobbying forces may put a high pressure on the Medias in order to lead them to communicate these false messages.

As seen above, the two last-minute amendments 153 and 154 provide that the copy must be subject to remuneration in the manner laid down in the Intellectual Property Code article L 311-4. This article is related to the article L 311-3 which is itself connected to the article L131-4. Taken together these articles provide an inclusive remuneration for private use copies when the amount of the remuneration is not possible to assess.

The meaning of the law thus as amended by amendments 153 and 154 is that downloading and sharing files for private use through Internet, other than software, constitute a legal exception to copyright rules and are thus accepted under the French law when the copies are subject to an inclusive remuneration.

Thus it has been proposed on discussion at the “National Assembly” in the framework of the DAVDSI draft law that this remuneration could be inserted in a “*Global Licence*”. Opinions are clearly divided about it. Beside, this proposition is vague.

7.1.2. Analysis of the proposed process

The proposition is that users could download all cultural and artistic products and artefacts after having paid a “*Global Licence*” that means few euros being added to their Internet provider subscription. This money would serve to remunerate the copyright owners.

But does this system allow users to download only, or also to share files? This has not been in anyway clarified both in the text and the comments. Those who have made this “*Global Licence*” system proposition have failed to clarify this point. As it has been presented, it seems that in this system, users having paid the “*Global Licence*” fee would be entitled to download and share any file they want, but not to share and share any protected file. Actually, this proposal would make no sense, but it should be anyway envisaged. At least, nothing has been clearly expressed about sharing files. This point remains in a total vagueness whereas it is a crucial point.

If both download and share is allowed this seems to be a mix between the licensing model and ISP.- Internet Service Provider - DRM business model which are the two feasible DRM business models in the P2P field ¹²³. The licensing model is defined as users buy license to download and share files freely on the Internet. Copyright owners receive statutory licence fees,

¹²³ BLOMQVIST, ERIKSSON, FINDAHL, SELG, WALLIS, “*New embryonic business models and value chains*”, Musiclessons, 2005., p.11-15

fairly distributed amongst them. The ISP DRM business model signifies that the ISPs pay a certain fee per subscriber to the owners. This is based on the fact that ISPs charge subscribers a monthly fee for unlimited use of a fast connection ¹²⁴.

This system is not in compliance with the articles 2, 3 and 4 of the EU Copyright Directive. With such a system, the copyright owners would not indeed have any authorisation power or any prohibition of reproduction, communication and making available to the public or distribution of their work. The filesharing through P2P network is actually not controllable. In fact they would have no control at all over their work even though they might get in the best case a fair financial compensation for their works.

As previously explained ¹²⁵, by using the article 5(2)(b) of the Directive, which is the only exception available concerning the files shared through P2P networks, France is allowed to provide an exception to the article 2 and eventually the article 4 of the Directive for but not to the article 3. Therefore, in any case, this system would remain inconsistent with the article 3 of the EU Directive.

Beside that, these models can be dangerous and inadequate for three particular reasons:

- 1) Firstly it would probably not generate enough money to fairly remunerate the copyright owners.
- 2) Secondly, the purpose of this “*Global Licence*” is to provide the copyright holders with an inclusive income. But on the Internet, it is not really possible to measure how many times a particular work has been copied. Therefore, it is not possible to assess surely and correctly the amount of the inclusive income that a particular artist should get. Usually, it is the responses of the market that determine the likely income of the copyright holders.

At the same time, it would be impossible to measure or anticipate, and also to estimate how to fairly distribute the remuneration among the copyright holders. Indeed, if people can download from the Internet all the works of all artists, how to define what remuneration each artist and other right holders should receive? This would be impossible.

¹²⁴ Both definitions from BLOMQUIST, ERIKSSON, FINDAHL, SELG, WALLIS, “*New embryonic business models and value chains*”, Musiclessons, 2005., p. 14-15.

¹²⁵ In the paragraph “Article 5 of the EU Copyright Directive”.

Especially considering new works and new unknown artists arriving on the market, how to estimate what remuneration they should get?

3) Finally through this a whole segment of the industry would collapse: the distributors, physical stores and also online stores.

Moreover it is also arguable :

- that the principle of a “*Global Licence*” could benefit more to the ISPs than to the copyright owners,
- and that only the artists having already acquired a strong notoriety will eventually be able to manage in this kind of system.

The young creators and small producers risk to disappear under the effect of mass of this steam-roller. And since competition intensifies between the various networks, the income amounts paid at the copyright owners in general are likely to reduce progressively and dramatically.

Therefore it appears that these models could not constitute a pertinent solution. If this system is intended to allow only to download, and that uploading protected files remains illegal, this means that nobody could share files, thus there would legally be nothing to download anymore in the P2P networks.

The principle of the P2P networks is yet that each user can download but also could share some files with the community. Otherwise the system would not work, if nobody shares files. Therefore this “*Global Licence*” fee would be paid by users for no reason. Users would pay a licence to be entitled to download some files that are illegally shared or not shared at all ! This would make no sense but would look like a manipulation, a kind of swindle.

In conclusion, this proposition of “*Global Licence*” system, as it has been presented, is either very unclear or not correctly explained, either purely illogical. In either case or the other, it can not constitute a pertinent solution to the described issue.

Actually, a PhD student specialized in intangible property law¹²⁶ having been interviewed and according to our common opinion, it seems for him that the French government and the “National Assembly” both have been paddling in the dark on this topic.

In fact, on the 21 december 2005, less than 60 deputies were present¹²⁷, and it seems that a great confusion were both in the discussions and in the propositions themselves¹²⁸. Moreover it should be remarked that these two amendments were of last-minute. Thus it is possible that this proposition of “*Global Licence*” might be rather illogical as well as unclear. Furthermore, some business agents from the industry - FNAC and Virgin – were presents in the benches of the Assembly, and have proposed to the deputies subscriptions to download music on their online stores, which one might consider as particularly shocking in a democracy. Indeed, a deputy claimed “*the lobbies have taken possession of the National Assembly*”, and the business agents where asked to leave the room in order to let the deputies decide without being influenced¹²⁹ by anyone. But this shows the kind of atmosphere which has surrounded the debate probably between lobbying and pure confusion.

The purpose of the next paragraphs is to briefly describe and comment the draft DAVDSI Act in its new version – in particular after the two amendments of the 22 December 2005 were repealed.

7.2 -The DAVDSI (second version)

7.2.1. The second version rationale

When the two amendments legalizing the copy for private use made by downloading from the Internet were voted on 21 December 2005 by the French National Assembly, the EU Copyright Directive could not be considered to be correctly transposed into the French law. At least this was questionable.

The debates started thus again in March 2006; the two questionable amendments were repealed. The project of “*Global Licence*” system has been abandoned, and the right to private

¹²⁶ Interview April 2006, MARTIN Nicolas, PhD student at the law faculty of Montpellier, France, specialized in intangible property law.

¹²⁷ Less than 10% of the total amount of deputies in the « Assemblée Nationale ».

¹²⁸ personal comment: in France it seems that this kind of confusion and illogicality would not only be concerning this matter, but has rather been widespread over many matters during the last two years in particular.

¹²⁹ http://fr.wikipedia.org/wiki/DAVDSI#Du_20_au_22_D.C3.A9cembre_2005.

copy severely limited. Beside, the way this happened is rather peculiar: the government decided by itself to suppress from the new draft law the concerned amendments which have already been voted by the French National Assembly. This procedure is questionable; it might be contrary to the French Constitution. But the Constitutional Council which had expressed its doubts about this, has not been seized therefore there is no decision, but only doubts. Anyway, it has not been so well accepted by deputies, and it gives rise to polemics. The least to be said is that this downloading and filesharing issue is indeed very problematic and particularly confusing in France.

The new draft of DAVDSI which has not yet been definitively adopted as of today is under examination in May by the French Senate.

7.2.2. Important features of the draft law version

The draft law introduces possible graduated sanctions in order to fight against the world and fast growing widespreading of illegal downloading and filesharing through Internet: a 38 Euros fine for illegal downloading, 150 Euros for illegal sharing, a 750 Euros fine for possessing a software allowing to bypass DRM protections, 3 750 Euros for a hacker who personally crack a DRM protection, six months imprisonment and 30 000 Euros for the mean provider to bypass DRM protections.

One remark can be made that P2P system are based on a principle of exchange; downloading files is thus associated to sharing files, as previously explained. Therefore both acts require receiving a same coherent legal answer. It could thus be seen as not really coherent to provide different sanctions for downloading or filesharing. Even though this distinction makes sense on a legal point of view it does not really make sense practically since both acts are connected.

A very severe repression for the provider of software allowing illegal filesharing could be laid down: an up to three years imprisonment and a 300 000 Euros fine. This rule is particularly questionable in this sense that it might imply the death of the freeware, to a certain extent. And this also might even be counter evolutionary as regards the technological progress.

Concerning the DRM generalisation, these DRM should allow making few copies of the legally purchased product. This gives a solution to the question of the conflict between DRM

devices and private copy - Mulholland Drive case -. The French Minister of Culture and Communication has announced the creation by the draft law of two new categories of authorities: the so-called “Mediators College” and specialized departments – similar to those fighting against cybercriminality to record infringements. The “Mediators College will decide on an individual basis the number of copies that should be allowed.

The concept of Inter-operability, introduced by the draft law, allows the user who has legally downloaded files to read and copy them on any support or device of his choice. The impossibility for copyright holders to prohibit the reproduction of their work intended to handicapped people. An amendment aiming at avoiding that rights management compromise de facto the security of individual users, companies and administrations, has also been adopted.

This new draft law seems to transpose correctly the European Copyright Directive into the French law and also brings a satisfactory answer to the principal issue raised in the Mulholland drive case (DRM allowing making few copies) but is still not clear enough.

Two important points in particular have not been specified:

- whether the fraud should be recorded at the first infringement already or when if not.
- whether the fines of 38 Euros and 150 Euros are for each file downloaded or shared, or for the all files at once. This question is fundamental indeed, because it changes completely the purpose and reach of the law, and it has not been made clear yet.

Therefore whether this law is too repressive or too lax is not really clear yet. In one case, it probably would be too repressive, and in the other case, it might not be dissuasive enough. There are a lot of discussions upon this question.

These two questions reflect the great difficulty to find a good balance between the copyrights on one side, the individual rights and users and technological innovators freedom on the other side. This balance is however the objective aimed at when searching for a pertinent solution.

If a proper legal framework is obviously required, it could not be sufficient according to the particular nature of the problem. But the industry has been very slow to react on a marketing

level. It is yet indispensable to find out one or more suitable and pertinent solutions concerning the business perspective, in order to adapt to the new environment and structure of the DFM.

Conclusion of chapters 6 and 7

It has been shown that the implementation of the EU copyright directive into French legislation presented great difficulties, with a first attempt which failed in December 2005.

The main issue of dissension is the legal exception for private copy recognized by French law, which has been analysed. The Mulholland Drive case, concerning DRM devices conflicting with the right to private copy, has been analysed.

It has been explained why the proposition of “global licence” made in December 2005 was not a good solution.

Finally the new draft law has been presented. This text is much more severe, and the right to private copy has been diminished. The proposition of “global licence” has been abandoned. The new text has not been definitively adopted yet.

Introduction of chapters 8 and 9: Proposing a solution, consumers’ needs, trends and business models

As previously demonstrated a clear and globally harmonized legal framework corresponding to the DF Market as presently known, adapted to the digital environment of today, is required but not sufficient. In this third part, a solution will be empirically searched for on the field of marketing strategy.

Chapter 8 – Background of the economic and marketing reflections

8.1 - The consumers asymmetric competitive position

8.1.1. The growing consumers claim

On one hand, everyone is anonymous on the Internet and it is possible to hide from anybody. The only way indeed to identify someone on the Internet is by identifying his IP address¹³⁰. For instance, by using a proxy¹³¹, it is possible to do any activity on the Internet without the

¹³⁰ The IP (Internet Protocol) address is an identifier for a computer or device on a TCP/IP network. One IP address corresponds to each computer on the network. In other words this is the ID of a computer, allowing to identify a particular computer on the Internet. This is the tool enabling to find the Internet user, in case this latter would have illegal activities for instance.

¹³¹ A proxy is a server that sits between a client application, such as a Web browser, and a real server. It intercepts all requests to the real server to see if it can fulfill the requests itself (source: www.webopedia.com). By using a proxy, it is possible to keep one’s IP address undisclosed.

IP address to be disclosed or findable. It is a matter of fact at the same time that many fileshares¹³² are rebellious, considering their activity as a contestation against the industry that they believe their needs are not met by, and they might continue their activities anyway. The hackers, especially the most efficient ones, will probably continue their activities for a long while.

Beside that, it has been already noticed by the past that each time there has been a repression or prohibition in the same field, the activities evolved through new more efficient systems against the appearance of more underground networks. Consequently it could be easily argued that this chase and the following legal pursuit are endless since the technological innovation has always a step in advance on the Law.

Indeed, as previously mentioned, a new generation of P2P programs, like Freenet for instance ¹³³, is currently being developed guaranteeing the total anonymity for its users/consumers. Such a network may allow to share illegally and in a total anonymity copyrighted music files – the RIAA has tracked and sued some users of non-anonymous P2P networks.

Thus the launch of programs such as Freenet will probably generate new difficulties for copyright owners and the authorities and raise new legal issues.

On the other hand, the industry continues its pressure and intimidation campaigns. If for a long time these campaigns didn't create the expected effect, they are starting to do so since the big September 2005 intimidation campaign when the RIAA sued 757 users in the USA. This trend might be followed or imitated in Europe, especially when considering the severity of some laws (for instance the DAVDSI in France). Beside that, since the Grokster case, many P2P networks are closing or transforming into legal platforms.

For instance Cottrell, founder and president of Anonymizer.com ¹³⁴, said. "*The problem is that the RIAA has the kind of money that, whether you're right or wrong, you're out of business. It's not whether you win or lose, but whether you survive the litigation*" ¹³⁵. It is for the same reason that Sam Yagan, president of the company owning eDonkey, has declared in September

¹³² Expression used in BLOMQUIST, ERIKSSON, FINDAHL, SELG, WALLIS, "Trends in downloading and filesharing of music", Musiclessons, 2005, whole report

¹³³ Other programs are also being developed: I2P, GNUnet, MUTE, Tor, Azureus, etc.

¹³⁴ Anonymizer provides anonymized Web browsing and dial-up services. Cottrell has chosen not to extend his identity-cloaking service to peer-to-peer networks because of the threat of lawsuits from the music industry.

¹³⁵ McCULLAGH (Declan), staff writer CNET News.com, "P2P's little secret", July 8th 2003,

http://news.com.com/P2Ps+little+secret/2100-1029_3-1023735.html.

2005 that he has abandoned the fight – because he didn't have the kind of money to resist a lawsuit from RIAA. Indeed, the industry is financially extremely powerful compared to its opponents, and its lobbying activities undertaken and continuously carried on constitute an important pressure group compared with the less organised users lobbies.

Anyway, even if the repression and intimidation would eventually win the battle, this could not really be considered as a satisfactory solution. Something more has to be proposed, certainly on a market level.

Indeed, a lot has been made in the legal field but some solutions have to be found in the business area. The reaction in the business area has been formidably slow. It is necessary to analyse the actual business issues related to the DFM question.

8.1.2. The marketing errors of the industry sector concerning the DFM

At first sight one can easily argue that the considered industry of artistic goods and artefacts faces today the consequence of its old and traditional marketing strategy. It is not really a secret that in other words it has been “*dictating*” its rules during years to **the consumers** who were **placed in a very assymetric competitive position** with for instance the steadily high prices even when a right income is required for the success and maintenance of its activities. These high prices concern as well the sale of albums of about 15 or 20 audio tracks, with on each one or two high quality tracks, which are subject to a big promotion and advertisement, as the rest of the sold CDs which were filled with lower quality tracks, probably created faster and easier. Consequently the industry has made big financial profits and has finally benefited from a comfortable rent situation.

A) The industry contempt versus the consumers

Some consumers might have interpreted this situation as a kind of contempt from the industry, in particular contempt for their needs and demands. This contempt for the consumers needs might convert towards a better marketing attitude and evaluate in a real new marketing strategy. Indeed, when consumers have suddenly got through Internet the possibility to obtain and share for free artistic works on the Web, the industry has lost a big part of its influence and renown over the consumers. Subsequently the industry has started recording losses in their

incomes. Through these losses, did the industry get a reward of its previous strategy ? It is a likely argument for someones¹³⁶.

One can think that if the industry had been more carefully watching for consumers' needs, instead of despising them and only taking advantage of its economic power to impose its rules to them and somehow manipulate them, they probably would have seen the turn, and have reacted much faster in their business area to reply adequately to this underground move or wave. On other markets, when the competition is high enough, companies are constantly watching for the consumers' needs and trying to satisfy them more and more by adapting their offered products and services in order to stay competitive. It should have been the same on this DFP2P market.

B) The concentration degree of the industry is playing against a fair competition

By the way, it could also be said that this market is too concentrated around few major recording companies and few huge movies studios. Maybe the market would have been healthier with a higher competition. And if going further in this rationale, the fact to sell CDs with 15/20 tracks, while in reality the consumer wants to buy one or two particular songs, might somehow be seen as a tying practice, which is questionable under competition law. Indeed, it could be seen as forcing consumers to buy 15/20 tracks in order to enable them to get one or two particular tracks. In any case, this practice is not in the favour of the consumers.

The issue related to competition law is thus questionable, and through this remark it is only intended in these pages to propose a new reflection way. Indeed this remark is probably far from the classical concepts, and it is a new approach of the specific musics market, but it appears that it has today become a reality. The digital era and the development of online sales of musics have enabled to clearly identify the fact that consumers most of the time want to buy some particular songs, and not necessarily full albums or CDs with 15/20 sound tracks.

C) The new balance of powers in the digital era between the industry and the consumers

In the new digital era environment, the balance of power between the industry and consumers has changed in favour of the consumers and their competitive position becomes less assymetric. Therefore instead of trying to force them back by lawsuits, DRM devices and other

¹³⁶ In this sense, AUBERT (Pascal), "*Le gratuit, ça peut payer!*", La Tribune, January 20th 2006; www.latribune.fr.

means, to the previous situation prevailing before the digital era, the industry should probably and preferably work on adapting its offer to consumers in order to correctly answering to their needs. The evolutions are irreversible and it seems necessary to evolve as fast as the world does today.

What is sure is that the industry has been too slow in reacting on the marketing point of view in face to the new issues raised by the present digital environment. It has focussed all its efforts on the legal and technical replies to impede the downloading and filesharing which disregard their copyrights instead of looking for the consumers demand.

If now the industry will propose satisfactory solutions in compliance with the consumers needs, the market recover might be positively forecasted. For instance, in the same example already used, some consumers who never or rarely have bought musical CDs because of the high prices level and the several low quality tracks might accept to buy the only tracks that interest them – probably the one or two high quality tracks of the album – at a reasonable price. Besides this probably has, and will continue to have, a positive side effect of improving the artistic creation, since on such a market every single song has to be of high quality in order to meet its purchasers and their needs. Such offer is already made today, in particular through online sales. But this way needs to be tremendously improved, in order to constitute a pertinent and sustainable solution.

If the consumers can't have really their needs satisfied by the market, and see through filesharing the only way to satisfy these cultural products needs, a legal framework, as good as it could be, will probably be insufficient to find a suitable solution to the DFM problem.

Therefore it is important for the industry to carry on rapidly a reflection about the consumers behaviour and their effective needs, in order to be able to propose a suitable solution to the problem of copyright protection related to downloading and filesharing through P2P networks. A first step is to try to understand why so many people download and share cultural products through P2P networks, eventually disregarding copyrights.

8.2 - Brief analysis of the DFM consumers needs

What are the consumers' needs ? Why are they downloading and filesharing through P2P networks so frequently and numerously ? Many of these needs have been clearly identified in

relation to the offered possibility to share files through Internet, as well as the development of fast connections and P2P networks.

The following list is composed of the elements which have appeared to be the most important ones, upon numerous individual users surveys, some surveys being made by some institutions, and also some arguments brought by some users as a defence in lawsuits of the P2P networks – for instance in the Napster case, many users took the defence of Napster. The following checklist is not exhaustive;

Filesharing through Internet enables to:

- Get the products at home, at any time,
- Get the product fast, and if possible instantly,
- Have access to a huge diversity and repertoires (possibility to find anything one wants),
- Get titles independently (music) - market's trends of album is one or two very good songs and the rest filled with low quality tracks,
- Try before buying (if buy later),
- Try and discover new products and artists, get a wider musical personal culture,
For films, most of the consumers will watch most movies only once. Therefore, they don't want to pay the high prices of DVDs for movies which they'll watch only once.
- Get products for Free,
- Avoid market's prices which are often considered too high,
- Have the possibility to use very openly and free-of-charge the available products and services,
- Discuss with other users and fans,
- Protest against the industry's behaviour and the market's dictature concerning the artistic and cultural goods leading to bad music or films with big promotion and advertisement, made by the major recording companies and major studios.

For instance the same song heard ten times everyday on the radio, while some very good music but less promoted, have hardly access to the media. In reality it appears that some consumers buy the products of small or unknown artists and producers in order to support them, and as Internet users download and fileshare products of big major companies.

- Belong to a community,
- Get some reputation and gratitude.

Concerning this latest need, which does concern only few filesharing users, mostly the biggest ones, a particular comment should be made. On P2P networks it has been observed a competition phenomenon between members, so as to who shares the most, is the biggest collector, in the same way as the competition takes place between the hackers as previously explained.

8.3 - The new marketing context offered by the DFM to the industry and the consumers

8.3.1. The effective consequences of the P2P networks filesharing on the industry's results as trends of the DFM

It is necessary to identify as a whole the real effect that the massive filesharing trend through P2P networks has involved on the industry's results. Because if at the first stage this trend has generated losses, on a second step it might have had some positive side effects, thus compensating the first losses.

Numerous surveys have been issued which are thus showing that filesharing does not systematically correspond to less purchase on the traditional CDS and DVDs market. For instance the 2005 survey made by the World Internet Institute has showed that 56% of filesharing users were buying as much as before, 10% bought more and 35% bought less¹³⁷. These surveys also bring an in-depth analysis of the different categories of filesharing users, in order to identify the different trends, corresponding to different kinds of users (free-riders, heavy downloaders, etc.).

It seems that one should not rely too much on these surveys, because it is difficult to know if interviewed people have answered the truth. On this particular topic, many consumers are not really neutral, and might have for instance answered that filesharing had no negative effect on their purchases, in order to protect the filesharing from bearing a negative opinion, with the aim to keep the possibility to continue in total impunity their filesharing. That is appears unnecessary to analyse in more details these surveys.

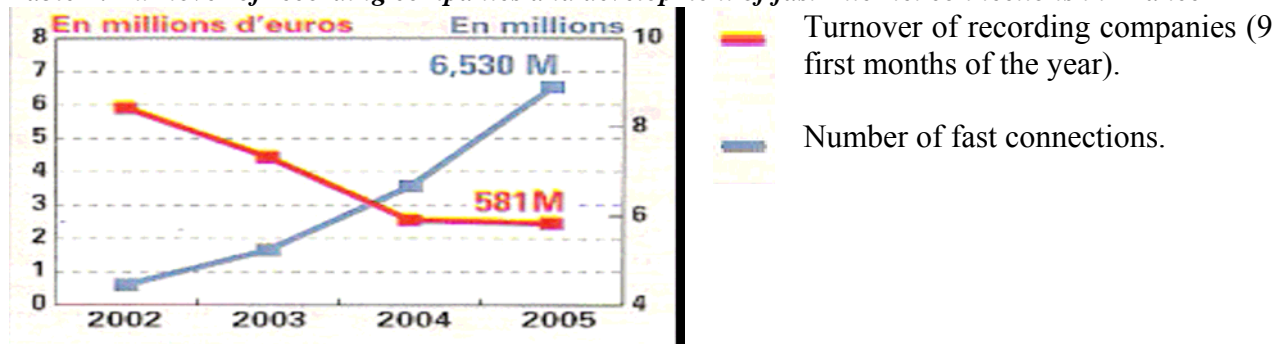
¹³⁷ BLOMQVIST, ERIKSSON, FINDAHL, SELG, WALLIS, "Trends in downloading and filesharing of music", Musiclessons, 2005, p. 13.

Moreover the losses recorded by the industry are real and significant, which is not actually confirmed by these surveys, or at least diminish their significance. Besides, when these significant losses are a fact, it is a mass effect.

It is thus important to seek for a pertinent solution, which goes much beyond the fact to survey who does what (download / buy more / buy less, etc.). A solution should be globally sought on a macro level for. Instead, the most reliable analysis to be done is to explore the correlation - or the lack of correlation - between demand and offer on the corresponding market.

The first following two tables show that the music industry has globally recorded significant losses during the last years, and that these losses are correlated with the development of the fast Internet connections.

Table 1: Turnover of recording companies and development of fast Internet connections in France ¹³⁸



This graph, which concerns France only, is taken as an example. It shows a clear correlation between the development of fast Internet connections – allowing filesharing on a large scale - and losses of recording companies.

Table 2: The 2004/05 World Music Market ¹³⁹

USA	- 5,3
Japan	- 9,2
UK	- 4,0
Germany	- 5,8
France	-2,7
Italy	- 12,3
Canada	- 4,6
Australia	- 11,8
Spain	- 15,7
Netherlands	- 19,8
World average	- 6,0

This table shows that the music market has recorded significant losses worldwide between 2004 and 2005.

The national markets are classified from the most important (USA) to the smallest (Netherlands).

Besides, according to the OECD ¹⁴⁰ Report on Digital Music ¹⁴¹ of June 13th 2005, between 1999 and 2003, the sales of CDs went down from 20%. But it is very difficult or may be even impossible, to know the exact incidence that the P2P networks filesharing has really involved in these losses.

¹³⁸ Graph taken from a French newspaper (no reference available)

¹³⁹ Table reconstituted by using a table found in the same newspaper's article than table 1.

¹⁴⁰ Organisation for Economic Co-operation and Development.

¹⁴¹ OECD Report on Digital Music: Opportunities and challenges, December 13th 2005, available at www.oecd.org.

Beside observing these losses, it could also be observed that online sales of music represent in 2005 only around 5 to 7% of the recording companies' turnover. Therefore the losses could be interpreted as being due to the lack of development of online pay-services. Indeed, another graph shows that what is currently happening is a change in music format, as it happened several times by the past.

Table 3: Music Format Changes ¹⁴²

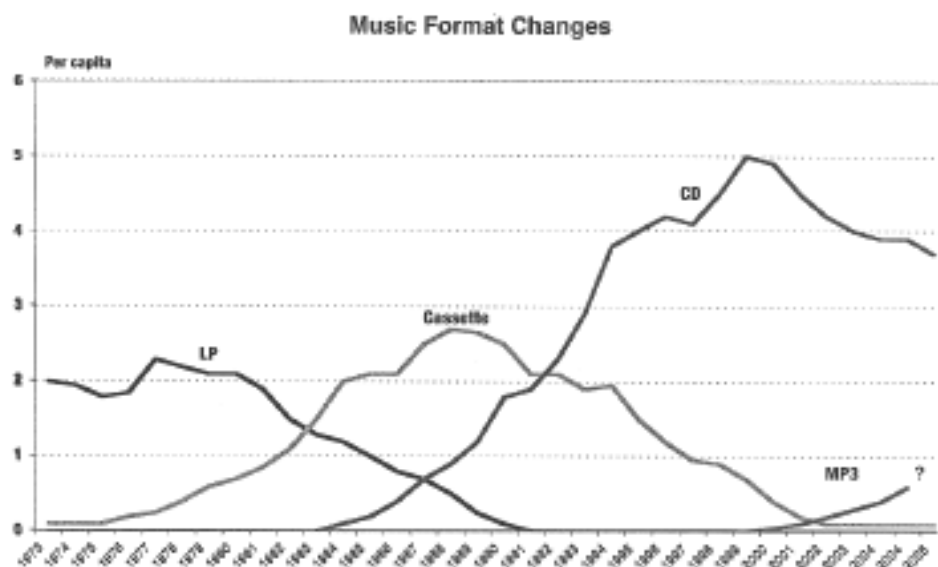


Diagram 2. Changes in music format 1973 - 2005 measured in purchases per capita in US

This graph shows that while CDs sales are decreasing, Mp3 sales are increasing at the same time. And this phenomenon has been observed each time the most sold music format changes. The same trend is repeating. This means that what is happening today with filesharing music and movies through Internet could be a change in formats, adapted to the modern needs of consumers.

The particularity of the current trend is that Internet offering the possibility to share cultural products has given to the users a great market power; they can today impose their demand to the industry, because the balance of power between consumers and industry has been modified. And the industry has been losing the comfortable rent position that it had acquired.

If the industry has been thus too slow to react to the new expectations of consumers, this might be an explanation for its losses. The point here is that if probably the industry is currently bearing the consequences of its own slowness in market reaction, it might tomorrow get the benefit of this trend, if it is able to propose an offer that really corresponds to the demand.

¹⁴² Table taken from: BLOMQVIST, ERIKSSON, FINDAHL, SELG, WALLIS, "Trends in downloading and filesharing of music", Musiclessons, 2005, p.5.

From the above mentioned surveys, it should indeed be kept an interesting element: filesharing through Internet has stimulated the consumers' interest for this kind of products. And this emphasizes the reason why some artists use now the P2P networks as a promotion mean of their works.

Therefore, during this era of massive filesharing through P2P networks, the interest of consumers has increased for this kind of cultural products. If the industry is able to propose a satisfactory offer, the industry might in the future clearly benefit from this consumers interest stimulation. Consumers might likely buy more of these products, because their appetite for them has been stimulated during this period of free filesharing.

Beside that, the sales of digital music increase the percentage received by the recording companies from 40% with physical sales from 50 up to 65 % with digital sales ¹⁴³. This is due to the fact that the digital sales do not require storage and distribution and avoid having many intermediaries, which enables to save some costs. There are thus interesting opportunities for the industry.

8.3.2. Improvements are required for the online sale platforms

A) Rationale of the improvements

Online sales are the closest alternative to the filesharing through P2P networks, and might constitute a good solution. During the last two years, online sales have been effectively developed tremendously. According to the above mentioned OECD Report from June 13th 2005, ten times more music tracks have been legally downloaded in 2004 compared to 2003. And in France for instance, the National Syndicate of Phonograms Edition has revealed that in 2005 online sales have been five times bigger than in 2004 ¹⁴⁴. It seems that the online sales of music went from 1-2% of the total turnover of recording companies in 2003 to a percentage 5-7% in 2005. And this trend is expected to continue in the future at a high rate.

But to outweigh the advantages offered by illegal filesharing, which constitutes the pertinent solution that one seeks for in order to compete positively with that, online sales platforms need to be seriously improved.

¹⁴³ OECD Report on Digital Music: Opportunities and challenges, December 13th 2005

¹⁴⁴ « La musique en ligne explose », Midi Libre, January 24th 2006

Some surveys have shown that most of downloaders would be ready to buy offered products, if their needs can be satisfied by the market. Filesharing through P2P networks is a time consuming and sometimes complicated activity ¹⁴⁵, in particular due to the disturbances produced by the industry – fake files -. If the online pay-services would provide as much possibilities as the P2P networks, many users would buy the displayed products.

Indeed, among the needs and expectations of consumers, only one is unlikely to receive a suitable answer from the market: the expectation of obtaining cultural products completely free of charge. All the other needs and expectations can be satisfied directly by the market, for instance through online pay-services.

B) The online pay-services

These services answer already in a correct manner to the following needs of consumers:

- Get the products at home, at any time,
- Get the product fast, and if possible instantly,
- Buy titles independently (music).

C) The required improvements

The following checklist of the required improvements is not exhaustive:

- Enlarge consistantly their archives (possibility to find anything one wants); it is one of the most important improvement to be made. Many people who have been using digital music stores couldn't find what they were looking for ¹⁴⁶. Today in the 2006 second quarter, about one million titles are available on the legal platforms of music online sales, while about 20 millions non-authorized musical files are available on the Web, of which 90% on P2P networks ¹⁴⁷,
- Fix reasonable prices,
- Clear information about the limited usage rights, in particular the DRM enforced usage restrictions. Indeed, the Indicare ¹⁴⁸ project concludes that European online music stores need to improve in this sense,

¹⁴⁵ From Interviews with heavy downloaders in Blomqvist, Eriksson, Findahl, Selg, Wallis, "File sharing in peer-to-peer networks – actors, motives and effects", Musiclessons, 2005, mentioned in Blomqvist, Eriksson, Findahl, Selg, Wallis, "*Trends in downloading and filesharing of music*", Musiclessons, 2005, p.10

¹⁴⁶ Blomqvist, Eriksson, Findahl, Selg, Wallis, "Trends in downloading and filesharing of music", Musiclessons, 2005, p.10

¹⁴⁷ Source: Charles de Laubier, "Culture et Internet: le "new deal" passé par une baisse des prix", Les Echos, April 15th 2006

¹⁴⁸ The **IN**formed **DI**alogue about **C**onsumer **A**ceptability of **DRM** Solutions in **E**urope, EU-supported project, homepage: www.indicare.org

- Gives the possibility to freely discover products and artists, and to try several times before buying. For instance, a system enabling to try all products two or three times each before buying,
- Provide some information about the artists and their work, some recommendations and criticisms,
- Have some forum where users can discuss with each other, in particular before buying,
- The possibility to promote the small artists, and not only the big “commercial products”,
- Eventually some communities can be constituted, in which users could get and feel their membership,
- Develop platforms of online sale of videos - it exists, but is not very developed,
- Develop “Video on demand” services, which enable to watch any movie once, and pay for one single use of the product; this would thus correspond to a kind of videos rental, instead of sale. Thus the prices should also be reasonable – for instance, prices should not exceed 3 Euros for each use of a movie, rented out for a period of few hours or one day.

Chapter 9 – The Business Models: a proposition of possible solutions

Some possible solutions have already been set aside and analysed, for instance the “Global Licence”, the licensing model and the ISP ¹⁴⁹ DRM business models. The purpose of this last part is to propose some possible pertinent solutions.

9.1.– The first analysed solutions

9.1.1. The development of DRM devices

It appears that DRM devices, already used today, will be increasingly used in the future; they might even enable new commercial exploitations. About DRM protections, three criticisms are to be made:

- Hackers work on breaking the protections, and eventually someone will succeed;
- DRM give rise to a confidentiality and privacy problem ; the question is what informations are transmitted to the centre when DRM protection is connecting to get the

¹⁴⁹ Internet Service Provider

licence? This is not really clear. This issue might become a fundamental one, if DRM are generalised;

- Reading the files requires an Internet connection. Thus the user should always be connected. This implies that the user has an unlimited connection. And it also implies that the user has the possibility to be connected at any time. And what if the user brings with him his laptop, on which he stores files that he has purchased, somewhere without Internet connection ¹⁵⁰? He can not read the files? This might be another problem to solve.

9.1.2. The *development of good pay-services*

As already explained, the market could obtain very good reactions from most consumers – see previous 8.3.2., B).

9.1.3. *Decrease the prices of the digital contents and of the Internet access subscriptions*

This is not a solution as such, but rather an element of the global solution. It is arguable that the future “new deal” induced by the digital era will require a prices decrease of both the cultural products and the Internet access and mobile phone subscriptions. Both have still effectively high prices, and these two expenses might proceed from the same budget of individuals ¹⁵¹, the “communication” budget. Therefore if the prices of Internet access subscriptions decreased, users would have more money for buying digital contents, music and films.

This would work in the same way as when the profit margins moved from the computers in the 70’s - 80’s to the software with a strong added value in the 90’s when computers became cheaper. In other words, the margins of profits moved from the container to the content. The same could happen here, the margins of profit balancing between Internet and mobile phone subscriptions and the purchase of digital contents. By the way, ISP and mobile phone operators might start investing in the cultural production, music and movies.

This previous statement proceeds from the idea that Internet connection and mobile phones subscriptions have today become a utility, like water, gas and electricity. Prices should thus start

¹⁵⁰ While being on holliday somewhere without or with difficult or expensive Internet connection for instance

¹⁵¹ In this sense: Charles de Laubier, “Culture et Internet: le “new deal” passé par une baisse des prix”, Les Echos, April 15th 2006

to decrease in order to leave some space for the digital contents purchase. The prices of these digital contents should also be fairly low, so as to make them accessible to everyone.

9.2 - The weed business model, the chosen solution

Among all the ideas and proposals seen by the thesis author in the books, reports, articles and other papers as well as from the consulted websites, the « **weed** » **business model** proposition seems to be the one that answers in the best way to the consumers’ identified needs and expectations in this chapter. Therefore it appears that this model would constitute the best solution, in order to find a pertinent solution to the problematic. It can be briefly presented in the following table:

*Table 4: Brief presentation of the Weed model*¹⁵²

GET MUSIC	PLAY	WEED SOFTWARE	BUY MUSIC	SHARE MUSIC
By visiting other "weed" files	Listen 3 times for free and then buy	Install "weed" software for free to buy, find and organise music	Play, burn on CD	Using P2P systems to share music on web site or on CD. Earn money when others buy from you.

The system core is that after having bought some files, one becomes reseller of these files to downward buyers. When another consumer buys the file from the reseller, this one earns a commission as reseller. The amount of this commission has to be defined, it might be a percentage of the sale price for instance.

The improvements, offered by this system, that clearly appear in this table are:

- it enables to try before buying (column 2),
- it would give an incentive to fileshares to enter a system of legal offer, with an aim to become reseller and earn some money (column 5).

This would possibly improve the legal offer by increasing extensively the diversity of files available on the market.

¹⁵² Table taken from: Blomqvist, Eriksson, Findahl, Selg, Wallis, "New embryonic business models and value chains", Musiclesssons, 2005, p.11

The main point of interest is that the system could provide an offer as good as the illegal offer – except the fact that it's not free of charge which is the aim. In order to answer the problematic, the legal offer should become as good as the illegal offer, and even better if possible, so that the consumers would probably be more eager to buy the products on the legal market, instead of getting them – for free - through the illegal offer. Therefore this system, associated with attractive prices, could likely constitute a pertinent solution.

This model suits in the best way to the identified consumers' needs and is favourable to the technological innovation. It would formidably improve pay-services, because it would take in the repertories all the files that the big fileshares have collected. This gives a solution to the problem of the lack of diversity in the archives.

Moreover it is very smart because it would probably turn the biggest fileshares from illegal activities to legal resale of the products. This would give an incentive to collectors and heavy downloaders to become resellers. It is always good to take your biggest enemies and turn them into your collaborators. That is what this system could enable the entertainment industry to do.

If the biggest fileshares – biggest providers of files - turn into legal resellers, as a logical consequence, illegal filesharing will decrease dramatically.

It seems that this system could constitute a pertinent solution to the problem, and thus deserves to be tried. This is the solution proposed as a conclusion of this thesis.

At least it remains to verify if it would become successful, if consumers would accept to enter this system. It should also be discussed the fact that this system might have important consequences on the structure of the market, in particular distributors could be excluded from it and disappear. Surely this system would require a restructuration of the market, and possibly some technological innovation.

Another question to be analysed is whether the fileshares could use the files that they have illegally downloaded, and share them directly in the legal system, or if they should start from the beginning and buy each file before reselling. The first solution would obviously be very difficult to obtain – or maybe impossible – and to admit for the industry, but it would bring the advantage of providing the legal offer with the same diversity of repertories than the illegal offer – it should

be beared in mind that today the legal online sales of music offer about 1 million available files while the illegal offer is at least 20 times more.

It is not intended to deal with these further researchs for experimental verification in this thesis. It might be the matter of another study.

Conclusion of chapters 8 and 9

It has been shown that the new digital era, with the emergence of Internet and P2P networks has changed the balance of power between the industry and the consumers, and enables these to have new claims and increased the level of their expectations.

It appears that the industry has shown a sort of contempt of these consumers' expectations, and did not propose any satisfactory offer, compared to what P2P networks offer. The industry has only waged war on a legal level, but has failed to react fast enough to the new situation of the market.

Consumers' needs and expectations have been empirically analysed, so as to understand the gap between the legal offer and the illegal offer on the DFM, beyond the fact that one market enables to get products for free, while the other one doesn't. This analysis enables to see what improvements should be made in the legal offer, in order to become competitive compared to the illegal offer. Thus a list of improvement required in the legal offer has been empirically constituted.

It has been shown that the phenomenon happening today on the music market is a change in music format, from CD to Mp3, in the same way as the CD replaced the audio tape in the past, and the sales of Mp3 should be developed in the future, thus replacing the sales of CDs.

Beside, it has been emphasised the fact that this era of illegal downloading and filesharing through P2P networks has tremendously stimulated the interest of consumers for these products. Therefore, if the industry proposed today a competitive offer, as regard the new situation of the market, it might benefit from this stimulation of interest, and compensate the current losses by the future growth of the benefits.

Finally, after having proposed some possible solutions, with some comments about DRM devices which seem to be more and more developed nowadays, a possible business solution has been proposed: the weed business model, which seems to best answer to analysis made in this part, regarding consumers' needs and expectations. A further study might tend to verify if this business solution could constitute a pertinent solution.

Final Conclusion

Generally speaking, the objective studied in this thesis is to reconcile the entertainment industry with the consumers, and to find a solution which could satisfy all the parties:

- In a legal perspective, to find a balance between on one hand the copyright and the consumers' rights, and the general interest on the other hand.
- In a business perspective, to find the way how offer and demand could meet. In other words, the industry needs to propose an offer that matches the consumers' needs and expectations.

The first conclusion of this thesis is that the problem of **downloading and filesharing through P2P networks, the DFM, requires to be dealt with on a global level, in all its aspects, including both legal and business aspects. The Internet is a global international and unlimited system which requires global answers through a systemic approach.**

The legal framework has to be globally compliant with a world framework, a European one, and a national one, all three being compliant to each other.

The business perspective has to be analysed on a macro economic level, and an efficient solution is required so as to outweigh the trends of the growing filesharing through P2P networks.

The second conclusion is **that the legal and business aspects are particularly tightly connected in this matter. And a pertinent legal solution, if required, is not sufficient.** A lot has already been made concerning the legal level, and that some interesting solutions have been found, the industry has been very slow to react in the business field.

But it appears today that it may benefit from interesting opportunities, if it adapts and suits correctly to the modern consumers needs. The consumers' interest for music and movies has

indeed been very much stimulated, and the digital sales offer a better percentage to recording companies and movies studios.

The third conclusion is that **the balance of power between the consumers and the industry has been completely changed in favour of the consumers with the emergence of the digital era.** Therefore the industry needs to give new efforts of adaptation to consumers' expectations, while it has benefited in the past of a bigger market power versus the consumers, and thus had a more comfortable profit position. This power loss is probably difficult to accept, and this might explain why the industry has been so timorous and slow to react in other ways than lawsuits, lobbying and pressures, and technological hindrance attempts against the illegal downloading and filesharing.

It has also been remarked that some of the consumers' needs and expectations have appeared or could be identified thanks to the digital era. Because this era has given new possibilities to the consumers and thus enabled them to have new expectations, modern needs have been thus created. This might also constitute an explanation to the difficulties encountered by the industry to react; it suddenly had to deal with new needs and much higher expectations of consumers than they can reply to.

The idea that filesharing users are bad people doing illegal activities, disrespecting artists rights and other copyright owners, should be replaced by the idea that they are consumers who did not have their needs satisfied by the industry's offers, and have found in the filesharing through P2P networks the possibility to satisfy adequately their needs and expectations. Unfortunately for the industry the legal online sales offers have appeared late so that the major recording companies have had a false tendency to try preserving their rent situation and their profits instead of innovating, promoting and marketing efficiently new artistic products and services.

In the same way, the current image of an industry, arrogant and enemy of the consumers, constantly trying to repress and sanction them, should be replaced by an industry constantly watching consumers' needs, and trying to best match their (new) expectations.

In other words, the problem is not all white or all black. The entertainment market does not escape from the classical rules of offer and demand constituting the basis of every market. It is not desirable that one side or the other would have too much power over the other, neither the industry nor consumers. The objective is to find a good balance between both.

All the difficulty is to transpose the legal and business rules and patterns of the old world to the new the digital era world.

Today we are attending to a transition towards a new overall economical equilibrium, reconciling intellectual and artistic property on one hand, and individual rights and technological innovation on the other hand.

Finally, a proposal of possible pertinent business solution has been offered: The weed business model, which presents numerous advantages, and deserves to be experimented. It is also important to develop “video on demand” services, which allow watching movies once, similar to online rental of videos.

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