

Illegal Latvia. Methods of intellectual property right enforcement in times of peer-to-peer file sharing.

BACHELOR THESIS

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DECLARATION OF HONOR:

I declare that this thesis is my own work, and that all references to, or quotations from, the work of others are fully and correctly cited.

Abstract

This paper is intended to provide an analytical understanding as to why Latvia is the top country in the world for the percentage of the internet population that are considered pirates, i.e., internet users who acquire copyright protected works (music, audiovisual, and software) from unlawful sources, such as peer-to-peer (P2P) networks (torrents), streaming and direct downloads, and what in turn can be done to combat this in lieu of Court of Justice of the European Union of June 2017 judgment in *Stichting Brein v Ziggo BV and XS4All Internet BV*, which finally gave a European-Union-wide (EU) ruling on whether torrent websites violate copyright law in the sense of "communication to the public" - an exclusive right of copyright holders as defined by the Information Society Directive of 2001. The court ruled that torrent websites do indeed violate copyright law and as such an injunction against internet service providers (ISPs) is proportionate to the goals of high copyright protection goals that the EU set in the InfoSoc Directive.

The work is divided into four parts: (1) copyright in the digital age and how torrents infringe copyright; (2) relevant laws governing copyright in the digital sphere; (3) resulting case law and further legislative attempts to combat illegal file sharing; (4) future of torrenting in Latvia and ways of circumventing any efforts to stem the torrent popularity. An analysis of each topic is intertwined throughout the work, as well as being specifically marked out.

The paper notes and concludes that: (1) the process of torrenting unavoidably results in copyright violations through distribution of downloaded parts, which is an inherent process built into the technology of the BitTorrent protocol; (2) there is a lack of economic incentives in Latvia to purchase media and software from legal sources due to the relatively high prices; (3) the resulting mentality of continuous copyright infringements has become the norm not the exception, further normalizing what is essentially theft; (4) the legislative framework in Latvia respects international and EU laws, yet isn't effectively enforced due to a lack of financial resources devoted to combating torrent usage; (5) the attempts of various representatives of copyright holders within the EU to combat P2P file sharing have only recently succeeded in creating an effective solution by blocking torrent websites; (6) such a solution can be repeated by every member state, possibly lowering the rate of online piracy, due to the similar factual backgrounds faced by every ISP; (7) even this solution can be circumvented by the use of various technological means, such as website mirrors and proxies, use of Virtual Private Networks (VPN), DNS server changes, cloud storage services; (8) yet even though the solution will not result in the banishment of online pirates, it will certainly make their lives more difficult.

The overall conclusion is that acquiring a similar judgment from a court in Latvia would have a substantial impact on copyright protection in Latvia, because it would become more difficult for people without technical knowledge to circumvent blocked websites, which is a positive result for copyright holders, who depend on fair remuneration for the enjoyment and use of their works. There are, however, doubts about who and how gets to decide which websites containing torrent files, hyperlinks, etc., should be blocked - as of yet there exist no guidelines for a controlled shutdown of web content.

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Introduction

In the 2016 MUSO Global Piracy report¹ Latvia took the 1st place in the percentage of the overall Internet population that are considered "pirates", i.e., people acquiring copyrighted materials through various means (torrents, streaming, direct download) from unlawful sources. This outstanding result has led to the need to review the reasons, both legislative and practical, why a member state of the European Union, which has been diligently working at harmonizing both the substantial and enforcements laws of copyright, has become the hotbed of intellectual property right violations. MUSO reported that 46% of internet users have in one way or another, regularly or not, infringed upon copyright law, with the second place going to Bulgaria, with less than twice the population of pirates (the report did not include China, notoriously known for its disregard for the international efforts at cooperation in this field of law). Even Russia, known for hosting many websites that share copyrighted materials, reported only around 10% for the same query. Latvia also took the 5th place in the Top 10 Piracy Demand Rank in the 2017 MUSO Report².

It is more important than ever to delve into the subject of copyright in the digital age, because the number of households that have an Internet connection has rapidly increased over the last decades. The European Union (EU) by the end of 2017 registered an internet penetration of around 87%, with Latvia following close by- 79%³. With worldwide Internet penetration expected to only rise⁴, questions on copyright protection in the digital age are becoming more relevant than ever, mostly due to the ever-increasing popularity of streaming services such as Netflix and Spotify (i.e., consuming digital media online), as well as the ease of downloading and streaming often copyright-protected media using various technological means (most notorious of them being peer-to-peer (P2P) file sharing).

These means of consuming and acquiring media (including software) are developing often too fast for the legislator to adapt, resulting in a fundamental inefficiency in copyright protection. The estimated losses incurred by the global economy from digital piracy in movies, music and software is estimated to have reached \$213 Billion in 2015, with a forecast of \$384 - \$856 Billion in 2022⁵.

There is something to be said about the economic causes for the widespread use of torrents in Latvia. Amongst the current 28 EU countries, Latvia has the fourth lowest GDP per capita purchase power parity (PPP) - a measurement of wealth in accordance with a certain basket of good which takes into account different exchange rates and price level fluctuations-, or in layman's terms - how much of the same products (irrespective of brand) can a person buy in

¹ MUSO, Global Piracy Report 2016, Web.

² MUSO, Global Piracy Report 2017, Web.

³ Eurostat. (2016). Information society statistics - households and individuals - Statistics Explained. In *Europe in figures - Eurostat yearbook*.

⁴ Statista, 2018, Worldwide internet user penetration from 2014 to 2021.

⁵ International Chamber of Commerce, *The Economic Impacts of Counterfeiting and Piracy*, 2016,

their own country⁶. Thus, GDP per capita PPP is one of the most accurate measurements to take into account when talking about economic incentives for torrent usage, also noting the fast internet speeds available to Latvians and the overall high internet penetration in Latvia.

This low level of wealth means that for most Latvians it is quite expensive to acquire legal copies of movies, songs and especially software. This is due to the fact that within the EU, prices for the aforementioned goods are roughly the same across the Union (i.e., the existence of the internal market equalized prices by making product available to everyone, irrespective of their income), with Latvia being only 6 percentage points below the EU average, 4 percentage point below Germany whose GDP per capita PPP is almost twice as high, and only 7 percentage points below Ireland with almost three times the GDP per capita PPP⁷. There is a lack of economic incentives to purchase legal media, and thus it is of no surprise that in a country with the 17th fastest internet speed (on average) in the world⁸, internet users would resort to illegal methods of obtaining, what is now considered, an essential aspect of existence in the information age. Another widespread incentive is the need to acquire media and software as soon as it is available elsewhere. Most people do not want to wait for a movie to come out in the cinemas, have to pay for it, and later buy a DVD - a lack of patience is a popular human character trait, especially amongst the younger, tech-savvy generations.

Even though the international effort to legislate copyright has been going on for more than a century⁹, the plurality of parties and subsequent hesitation in effective harmonization, has led to a *de minimis* formulation of copyright protection, i.e., the international treaties provide for a bare framework for copyright protection, whereas the practicality in enforcement is sorely lacking, which can be seen from the popularity of copyright violation that still storms the online world.

Noting that in Europe and the EU copyright is defined as an exclusive property right by the European Convention of Human Rights (**ECHR**), as well as in the EU's Charter of Fundamental Rights ¹⁰ (**CFREU**), questions of exclusivity have always been weighed against the rights of the consumers of any creation, e.g., in the important 2013 European Court of Human Rights (**ECtHR**) judgement ¹¹ the right to property as defined in the ECHR was weighed against the right to expression and information, with the conclusion that any conviction based on copyright protection must be heavily based on the necessity in a democratic state, not just a mere infringement of copyright law itself. This weighing of rights is as old as copyright law itself, because of the bipartite interaction of artistic expression - the creator and the consumer.

⁶ University of British Columbia, "Purchasing Power Parity", 2016.

⁷ Eurostat, "Price level index for electricity & gas, furniture, household appliances and consumer electronics", 2016.

⁸ Akamai, "State of the Internet. Q1 2017 report.", 2017, p.34.

⁹ starting with the Berne Convention (**BC**) of 1886 and subsequent revisions, the 1996 WIPO Copyright Treaty (**WCT**), World Trade Organisation's (**WTO**) Trade-related Aspects of Intellectual Property Rights (**TRIPs**) Agreement of 1995.

¹⁰ European Commission, Charter of Fundamental Rights

¹¹ Judgment on the merits delivered by the Grand Chamber, *Ashby Donald and others v France*, 36769/08, ECHR, 2013.

The right to information and expression is not the only counterargument to exclusive intellectual property rights. Whenever a person accesses the Internet, there exists a presumption of anonymity and privacy. For Internet to be free and out of the direct control of the governments, the freedom to traverse the vastness of freely accessible information, in the eyes of the user, must remain in their control. Like the well-known right to private life in the physical world, as postulated in Universal Declaration of Human Rights (UDHR) and other notable treaties (ECHR, Charter), an identical right exists online. Thus, there exists a balance between the aforementioned rights not just between professionals for business, artistic purposes (e.g., scientific discovery cannot be completely exclusive for the sake of scientific development, as well as artists using the works of others to create something new), but also between artists and the masses both in the physical and digital worlds.

The urgency for the need to find an equitable solution on EU level has resulted in a string of landmark judgements by the Court of Justice of the European Union (**CJEU** or the **Court**) made in the last decade ¹². The most relevant case for this paper which concentrates on P2P file-sharing using the BitTorrent protocol (colloquially known as **torrenting**) is *The Pirate Bay Case* ¹³ of June 2017, where the Court ruled that two Dutch ISPs must to block their subscriber access to the notorious Pirate Bay website, which gives access to protected materials, resulting in a potentially heavy strike against all EU-accessible torrent sites through the intermediaries of the file sharing process- the ISPs.

Thus, in order to comprehend the variety of factors influencing this latest judgement, its historical, technological and legal causes and the possible effects for the future of online copyright protection in Latvia, this paper will examine and analyze: (1) to what and how copyrights apply in the digital age, as well as the technology behind the widespread phenomenon of torrenting; (2) the relevant laws and treaties governing copyright protection; (3) the resulting landmark judgements, both domestic and EU-level (with one case of United States origin relevant to the discussion) and legislative attempts to stem torrenting; and (4) the possible future of online copyright protection in Latvia and elsewhere in the EU, and ways of circumventing governmental and judicial efforts by technological means.

The resulting research question to be answered is: whether the June 2017 judgment in the *PirateBay* case provides for an effective method (i.e., with visible results) of lowering torrenting rates in Latvia?

Methodology

To achieve the goals set out above, the main methodology used will be doctrinal research, because current enforcement of copyrights online rests on the legislative framework and the resulting case law. Though the issues of online piracy have only appeared once before the courts

¹² Cases referred to: Case C- 314/12, Case C- 557/07, Case C- 70/10, Case C- 324/09, Case C- 70/10, Case C- 610/15, Case C- 527/15

¹³ CJEU judgement of 14 June 2017, Stichting Brein v Ziggo BV and XS4All Internet BV, Case C-610/15

of Latvia in 2013, most of the cases mentioned and analyzed will be of EU origin (with the exception of one United States case concerning an online file sharing platform called Napster). The legislative framework mentioned and used for analysis ranges from international agreements to EU Directives, and Latvian legislation, in order to see whether there are any discrepancies between them, which could explain the high percentage of online pirates in Latvia.

Part 1 Copyrights, file sharing and torrents.

The rapid technological developments in the electronics area, and the rise in a global internet-based community has highlighted a centuries-old problem faced by most creators- that of their works being copied and disseminated across the world without their consent or fair compensation. Nowadays, anyone who wants to make a perfect copy of a work available in digital format (most artistic works are in such a format, e.g., songs, movies, recordings of performances, digital visual artworks, software, etc.) can do so with a few clicks, and, by the use of cloud-based distribution or P2P networks, share whatever they have acquired with millions of internet users, subsequently making a deep cut in the profits of artists and distributors of artistic creations.

It used to be so that infringement of copyrights was easy enough to notice and force the infringer to cease their activities. A reproduction of a painting was limited to the technical skills of an artist and the time it took to copy an artwork, if someone bought a recording of a song, there existed a limited number of times it could be copied, due to the fact that a wax roll, vinyl, or cassettes are subject to physical deterioration. The artistic form of digital artworks, photography, music, film and software have transcended physical limitations and now exist as electronic signals not subject to wear and tear (with exceptions to encryption and conversion which can result in data loss). What is more, trade in such data, facilitated by a growing sense of an online, trans-border community, is no longer sought for profit. There can be said to exist a 'tit for tat' comradery amongst internet users, where each individual can make their digital possessions available to others, with an expectation that others will do the same, i.e., property has become more communal without prejudice to others, but this too is breaching the exception to exclusivity in the form of a private copy, due to the vast numbers of copies made.

There are a number of reasons for this ease of data sharing. First, in the years 2007-2017 the average internet connection speed in the US grew five times¹⁴ (at an exponential trend), which is an increase of around 334 times since the introduction of broadband internet in the early 2000s. As a result, where an MP3 format song (at around 3,5 megabytes or MB) could once have taken approximately 10 minutes, it would take less than a second now. This increase in bandwidth allows a whole movie to be transferred at will across the world in a matter of minutes.

Second, and to concentrate on the Baltic states, amongst which Latvia is the centre of attention for this paper, the usage of internet by households (internet penetration) has grown from slightly

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¹⁴ Average internet connection speed in the United States from 2007 to 2017 (in Mbps), Statista, 2018.

more than 6%¹⁵ of the total number of households in Latvia and Lithuania in the year 2000 (Estonia experience an internet penetration of around 28% in 2000) to 81%, 78% and 88% in 2017 in Latvia, Lithuania and Estonia respectively. Such internet activity now rivals that of the US, where in 2016 internet penetration reached 88,5%¹⁶.

Third, the fall of one-to-one file transfers (where a single person would connect their device to that of another), and the rise to decentralized P2P networks transformed every user's device into a miniature distribution centre (a server), further increasing the overall effectiveness.

Fourth, the shift in attitude towards IPR, shown by the rise in popularity of P2P networks and streaming from illegal sources, meant that people became more at ease with sharing artistic creations.

To understand what the increasing rises in Internet speeds, the huge increase in internet penetration and the change in attitude towards IPR, resulting in losses measured in the hundreds of billions USD for the creative industries, the reader should understand how dissemination of works is realized, thus, a note must be made on how torrents work.

1.1. Peer to peer file sharing using the BitTorrent protocol.

With the popularization of privately-owned computers, increasing internet bandwidth and the rise of digital media, mostly in the form of mp3 files (commonly used for compressing songs), interconnectivity between people grew exponentially, thus leading to an increase in the ability to share privately owned media. In the past the most popular P2P file-sharing systems, such as Napster, relied on a central server-based model that would identify, classify and inform (also known as tracking) potential users of the files and their locations for downloading. The server would store the internet protocol (IP) addresses of its clients to connect them. Such a system was prone to easy shutdowns, because, though the files were not located on the central server itself, which would be a clear violation of copyright law¹⁷, the server was easily accessible to local law enforcement.

Currently the most popular P2P protocol is BitTorrent, developed by Marc Cohen in 2001¹⁸. The BitTorrent protocol is more effective than its previous counterparts, because it creates separate networks for each file within the overall network of users, thus relieving the bandwidth strain¹⁹. This system has created a multilayered "true" network - now there are networks within the overall user network. The users of the network are divided between "seeders" who upload, and "leechers" who download. The more people connected, the "healthier" and popular the torrent (websites use popularity as a filtering option for new users), though this too only works if there is

¹⁵ Percentage of Individuals Using the Internet, ITU, 2018.

¹⁶ Internet Users in the U.S.A. (2016), InternetLiveStats, 2016.

¹⁷ In accordance with WIPO "Agreed statements concerning the WIPO Copyright Treaty" attached to the WCT, "the storage of a protected work in digital form in an electronic medium constitutes a reproduction within the meaning of Article 9 of the Berne Convention."

¹⁸ BitTorrent, "Index of BitTorrent Enhancement Proposals", 2008, Web.

¹⁹ Gill, P., "How Torrent Downloading Works", 2018, Lifewire.

a sufficient number of people "seeding". The file is broken into parts called "pieces" that are encrypted in order to avoid modification; next, a "torrent" file based on the original file is created- it consists of metadata (a way of identifying the original file) - that is then continuously updated for the overall network. This torrent file creates a network devoted to itself, to which anyone can connect. The file is then downloaded non-sequentially and put back into order by the torrent application being used (e.g., uTorrent, Transmission app, Xtorrent, BitTorrent official app, Vuze, Deluge). The benefit of this system is that very large files (in the hundreds of gigabytes) can be split into thousands of pieces, each being available, according to the file's popularity across the network, from multiple "seeders", making the overall download process shorter. Once any part of the file has been successfully downloaded, the "leechers" or "peers" themselves become a "seeders", thus increasing the health of the torrent file. The torrenting website, as other P2P software, does not itself hold the file, but rather its metadata stored as a torrent file, a process that would not appear in itself illegal, but has been regarded as a direct facilitation to the popular trend of illegal file-sharing²⁰. The reasons why this violates IPR technically shall be discussed below.

1.2. How torrents infringe on copyright- private copying and broadcasting.

The key problem, from a legal and author's perspective, is not just that authors' exclusive rights to reproduction are violated, but also their right to limit their work's communication to the public (broadcasting). This second aspect is inherent in the P2P networks, especially the BitTorrent protocol, because it is almost impossible, without specific technical means of limiting outgoing internet traffic associated with the torrent file at hand while using the BitTorrent protocol, to limit the immediate transfer of a part of the file being downloaded to other users as soon as it arrives, i.e., downloading is coupled with immediate uploading, because the file consists of thousands of parts- each an individual meta-file itself ready for uploading. What is more, websites allow individuals to access torrents at any time and place chosen by them, a characteristic that is forbidden by the Art. 8 of the WCT, which states:

...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.

The question of torrent website liability will be discussed in part 3.5., because it forms the main problem of the 2017 case against the PirateBay website, and as such requires special attention.

1.3. Torrent anonymity or lack thereof.

The practical aspects of enforcing author's rights through litigation and sanctioning violations of IPR shall be discussed later in the paper, but it suffices to mention that on the digital stage anonymity is key, thus, even though an author knows their rights to be violated, it will not be

²⁰ Judgment of the Court (Second Chamber) of 14 June 2017, *Stichting Brein v Ziggo BV and XS4All Internet BV*, Case C-610/15.

easy for them to find the perpetrator, for no real names exist in P2P networks (i.e., nicknames are used extensively, or no name is given). When using a torrent software such as uTorrent, anyone monitoring a torrent can see the IP addresses of each individual connected to the network. This strategy has been employed in Germany with great success, with thousands of fines being handed out to private individuals for even the shortest of connections, resulting in Germany having one of the smallest online piracy communities in the world (less than 2% of the overall German internet users in 2016²¹). This is achieved by law firms setting up monitoring systems to catch anyone within the German jurisdiction by noting their publicly available IP address, sending out a cease and desist declaration as well as a fine of up to EUR 1000 per copyright breach²². Though an IP address does not contain the name of the user, nor his/her physical address, the law firms request their courts to order ISPs to divulge this information at their request²³.

All of the aforementioned inherent aspects of the torrenting technology and the economic incentives behind torrent popularity are at the centre of attention for modern-day IPR protection, because the number of visits to torrent sites worldwide amounted to 191 billion in 2016 alone²⁴, resulting in huge losses for the industries associated with collecting fees for the use of protected works and protection thereof. The result has been an ever-increasing attention paid towards enforcing the exclusivity of reproduction and communication to the public even for private, non-commercial use of protected works. To see how this has developed, the next part will concentrate on the legal framework for IPR protection and enforcement internationally, on the EU level and the national, i.e., Latvian level.

Part 2 Relevant laws governing copyright protection.

2.1. International Law concerning copyrights protection.

International laws on the protection of IPR can find its roots in the late 19th century with the adoption of the Berne Convention of 1886 (BC). Since then, other treaties have supplemented the BC in order to cover almost all new aspects of IPR protection for the rise of the digital era. To effectively analyze the research questions at hand, an extensive history of copyright protection will not be at the centre of attention in this paper, rather, the current international treaties shall be mentioned, and their importance noted, but no further analysis will take place. This is also due to the fact that Latvia has already implemented all of the international treaties in its legislation, and as an EU Member State (MS) is more occupied with implementing EU-wide legislation harmonization and correct consideration and application of EU case law in its own judicial findings.

²¹ MUSO, 2016

²² Chenon, R., "File Sharing infringements in Germany", 2016.

²³ German Copyright Law, Article 101a.

²⁴ MUSO, "Global Film, TV Insight Report 2017", 2017.

The BC gives the authors of all the signatory states to the convention a high base level of rights. These rights are given to them and their work is protected automatically without the need to register anywhere. Mere creation of a work suffices for it to be protected. And though the BC was written more than 130 years ago, it still holds sway amongst its signatories, because states are not permitted to derogate from the high standards of the BC, although the "three-step test" (Article 9(2) of Berne) allows for some limitation to copyright exclusivity²⁵. Such limitation is used in many jurisdictions, due to the fact that it would be impossible to grant every individual the right to make a private copy for non-commercial purposes, and such constraint on authors' rights was balanced with "fair compensation", allowing authors to be remunerated for the copying of their works²⁶. Yet the mechanisms to allow for fair compensation have been losing their effectiveness ever since the introduction of digital technology and the almost unlimited reproduction ability it offers.

With the rise of digital technology in the second half of the 20th century, the WIPO Copyright Treaty (WCT) was adopted in order to protect computer programs "whatever may be the mode or form of their expression²⁷", giving them the same protection as literary works, as well as databases - protecting the methods of "selection or arrangement of their contents²⁸." Notably, the Agreed statements concerning WCT, as attached to the WCT, concerning reproduction of a protected work, make it clear that storage in digital format (a perfect copy of a digital work) constitutes a reproduction, which is an exclusive right under Art.9 of the BC. What is more, the statements also discuss communication to the public in the digital age, stating that " mere provision of physical facilities for enabling or making a communication does not in itself amount to communication²⁹", a concept that will become an argument in The PirateBay case discussed later. Besides the WIPO, other international organizations have legislated to protect IPR.

The TRIPS³⁰ Agreement of the WTO, whose membership is slightly lower than that of the Berne Union (162 versus 173), sets down minimum standards for IPR protection. With the exception of the protection of moral rights under BC, all of the substantive provisions of the BC have to be applied³¹. For Latvia, who is a member to both the WIPO and the conventions governed by it, as well as the WTO and its TRIPS Agreement, the next most important level of international (or in the case of the EU - supranational) law is the EU legislation.

²⁵ Berne Convention, Art.9(2) states that "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."

²⁶Wiljminga et al., "International Survey on Private Copying", 2016.

²⁷ WIPO, WIPO Copyright Treaty, Article 4.

²⁸ Ibid Article 5

²⁹ WIPO, "Agreed statements concerning the WIPO Copyright Treaty", 1996, para.7.

³⁰ Trade-related Aspects of Intellectual Property Rights

³¹ WTO, "Frequently asked questions about TRIPS in the WTO", 2018.

2.2. EU law on Intellectual Property Rights and their protection

When the latest international treaties came into force in the 1990s, EU had already been working extensively to legislate in the area of IPR, resulting now in the creation of ten directives³² associated with copyright and related rights³³. The most important Directive for this paper is the InfoSoc Directive of 2001³⁴, which implemented most aspects of the WIPO's BC and WCT, with the exception of moral rights, leaving their protection to the Member States under the WIPO's system. This Directive harmonized, within its scope and substance, IPR across the whole of the EU. The crucial part of this Directive concerning the topic of this paper - torrents - as a means of disseminating protected works, is found in Art.3(1), which states that:

Member States shall provide authors with the exclusive right to authorize or prohibit 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 them from a place and at a time individually chosen by them³⁵.

The Directive also explicitly gives an exclusive right to the authors for the reproduction³⁶ and distribution³⁷ of their works. The Directive also provides for sanctions and remedies that are to be applied to protect authors' exclusive rights³⁸. Such measures must be "effective, proportionate and dissuasive³⁹", and yet the dissuasive aspect, cannot result in the violation of the fundamental rights of the other parties before an infringement has *de facto* taken place. The measures of dissuasion and their results shall be discussed later in the paper when discussing case law of the CJEU.

The harmonization of certain aspects of copyright law, with the added Enforcement Directive of 2004, aim at uniform application and enforcement of IPR across the whole of the EU, which in turn has lead many cases for a preliminary ruling being put in front of the CJEU by states that come across tricky questions of interpretation of the InfoSoc Directive. To understand whether the fault in Latvia's inability to efficiently protect artists' rights has arisen from an inherent problem within national legislation or whether the appropriate directives have not been transposed correctly, the next part shall examine and compare the current legislation on IPR in Latvia with EU law.

³²The ten directives are: Infosoc Directive (2001); Orphan Works Directive (2012); Rental Rights Directive (1992, as replaced by Directive 2006/115/EC); Term Directive (2006 as amended by Directive 2011/77/EU); SatCab Directive (1993); Resale Rights Directive (2001); Software Directive (1991 as replaced by Directive 2009/24/EC); Database Directive (1996); Enforcement Directive (2004); CRM Directive (2014); and the Semiconductor Directive (1987)

³³Quintais, J.P., "Copyright in the age of online access: Alternative compensation systems in EU copyright law", 2017

³⁴Directive 2001/29/EC of the European Parliament and of the Council on the harmonization of certain aspects of copyright and related rights in the information society, 2001 O.J. L 167

³⁵Ibid, Art.3

³⁶Ibid, Art.2

³⁷Ibid, Art.4

³⁸Ibid, Art.8

³⁹Id.

2.3. Latvian legislation concerning copyrights.

Intellectual property and the associated rights are protected under the Constitution of Latvia⁴⁰, putting them on par with any property a person can own, thus giving the state an impetus to protect it accordingly. In 2012 the Constitutional Court of noted that Art.113 of the Constitution does not go into detail as to what specific IPR are to be protected, thus, it drew on international law and agreements binding Latvia to conclude that authors have a right to the protection of moral and a material rights towards their creations⁴¹. The related rights of intellectual property, as enumerated in the Copyright law of Latvia⁴², are also part and parcel of Art.113 scope. Within the same judgment, the Court yet again reiterated that, when interpreting the law, it must abide by the international agreements ratified by the state, and thus must also integrate EU Directives and subsequent interpretation of the CJEU into its own judgments, especially when it comes to fundamental rights. Yet, as mentioned before, even with a legislative framework in place, the violations towards authors, performers, phonogram and film producers, etc., run rampant across the digital field.

Copyright protection, enforcement and sanction in case of violation are present in all levels of Latvian law. As mentioned above, the Constitution protects intellectual property and related rights. Section 15⁴³ of the Copyright Law of Latvia gives authors the exclusive rights towards communication to the public, publishing, public performance, distribution, broadcasting, retransmission, making available to public, lease, reproduction, translation, arrangement and adaptation of their work. The law also gives the author the right to use the work in any manner, prohibit its use by others and receive remuneration for the permission to use their work, with limitations to such exclusivity as laid down in the law. This reflects the rights as laid down in the BC, WCT and InfoSoc Directive, and such rights are seen in most jurisdictions across the world. In case of violation of the aforementioned right, Administrative Violations Code Section 155.8 permits sanctions of up to EUR 700 for private individuals, and up to EUR 7000 for enterprises⁴⁴. The Criminal Law provides for a variety of imprisonment times (from two to six years) in accordance with the severity of the harm to the rights holders and the scale of the violation (e.g., individual, group with a prior agreement, large-scale violation)⁴⁵. It is important to note that Section 148 is found in Chapter XIV "Criminal Offences against Fundamental Rights and Freedoms of a Person" and not under Chapter XVIII "Criminal Offences against Property", which shows that IPR are on par with the most important rights a person can hold.

As will be discussed in section 3.6. "Disappearance of the private copy", Latvia also prescribes to the private levy (blank tape levy) system and describes the procedure for ensuring this system

⁴⁰ Constitution of the Republic of Latvia, Article 113 states: "The State shall recognize the freedom of scientific research, artistic and other creative activity, and shall protect copyright and patent rights."

⁴¹ Judgment by the Constitutional Court of the Republic of Latvia, 2 May 2012, Case No 2011-17-03, para. 12.2..

⁴² Copyright Law of Latvia, Section 47.

⁴³ Ibid, Section 15

⁴⁴ Latvian Administrative Violations Code, Section 155.8 "Unlawful Acts with Objects of Copyright and Neighboring Rights"

⁴⁵ Criminal Law of Latvia, Section 148

in Section 34 of the Copyright Law⁴⁶. The section does not elaborate on the exact amount that is to be paid per "blank tape" (a means of recording something, e.g., CD, DVD, flash drive), but, importantly, it also does not include in its method of calculation the copies made from unlawful sources, i.e., a person is allowed to make a copy from a lawfully acquired DVD, but the amount of the levy paid is calculated on the basis of the number expected for lawful copying - which is a loss for associations representing authors, as well as related rightholders, because unlawful sources, e.g., torrents, are very popular in Latvia.

2.4. Analysis of the legal framework for copyright protection prevalent in Latvia

From the previous it can be concluded the law on all levels (international, EU and national) provides for a framework of rights and sanctions, all to protect authors' and related (neighboring) rights. In the background of the discussion to improve IPR protection lays the need for a balance between the artist and the viewer. The background for the need for this balance is as old as the discussion between any exclusive right to property and the rights of others, i.e., the philosophical maxim of "one's rights end where another's begin". The basis of a society is that proprietary rights of a creation belong to the creator. This could be said is at the heart of any civilized society that is concerned with making a stable system of private property protection. Yet, when it comes to intellectual creations, there is a strong argument against such a complete exclusivity. Humankind, as a group, relies on the creations of others to further its intellectual progress - both scientific and artistic. Thus, for a culture to evolve, its creations must be allowed to disseminate amongst the populace and, under certain conditions (e.g., parody, education, archiving⁴⁷), creations can and, indeed, should be used without the creator's permission. These might sound like ethical questions of balancing rights and common good, but it has been proven throughout history (of artists being inspired to create by their forebearers, or educators using the works of others for the good of the students) to only facilitate artistic development and, thus, culture as a whole.

According to Bernt Hugenholtz, a noted academic in the field of intellectual property law, in his book "The Future of Copyright In A Digital Environment⁴⁸", there are three main justifying limitations to the exclusivity of copyright⁴⁹:

(1) First, there is a respect for fundamental freedoms of others, such as the freedom to expression, without which the press cannot fulfil its useful function to society, and without which society becomes an authoritarian state ruled by the few, hindering any intellectual discourse and possible development. For this right to work there must also

⁴⁶ Copyright Law of Latvia, section 34.

⁴⁷ Article 5 of the InfoSoc Directive describes the ability of Member States to provide for exceptions to the exclusive rights of the creator and related rights holder.

⁴⁸ P. Bernt Hugenholtz, "The Future Of Copyright In A Digital Environment", 1996,

⁴⁹ Lepage, A., "Overview of exceptions and limitations to copyright in the digital environment", 2003, UNESCO.

exist the freedom to information, i.e., to "receive and impart information⁵⁰", for without it information becomes a closely guarded property and does not benefit society. The need for such a freedom is easy enough to understand – without parody, quotation, review, etc., no academic, artistic and intellectual life is possible without it. Of course, this freedom is again balanced against the right to property of authors, and as such, it can be regulated by sovereigns in a manner that is "necessary in a democratic society".

- (2) Second, an exception is necessitated by public interest. Society needs to use such protected works for archival and educational purposes. Museums, libraries and archives rely on easily works being accessible to function, and society relies on these public institutions to ensure a general level of education. Schools and universities could not impart education if no materials are accessible. Of course, again, this right needs to be balanced creators are reimbursed, even if it is less than for a regular licensing, for the exhibition of their works, or for their appearance in libraries. The modern question of online libraries brings forward the issue of innumerable copies being made through technological means (e.g., direct download, screenshots), for which the authors do not get reimbursed it is an uncontrollable process, combating of which would require more resources than the resulting monetary loss to authors, presumably.
- (3) Third, and this is the most problematic exception to creators in the digital age, there is the private copy exemption, the reason for which, as discussed in part 1 is the rise of digital technologies (cassettes, DVDs, CDs, flash drives, etc.) allowing for uncontrolled copying of works. As shall be analyzed below in part 3.6., this exemption is remedied by the "private copy levy", i.e., a surcharge to blank carriers to compensate the possible loss incurred through copying and dissemination. This exemption is losing its legal validity due to the reality of mass copying, forcing legislators to adapt and re-evaluate the need for it, usually by introducing an even higher levy⁵¹.

Latvia, as a signatory to all relevant IPR agreements and treaties, subscribes to the same exemptions and has transposed them into its legislation, giving authors and related right holders the same protection as most EU states.

Next, it is important to note that the law can never be completely exhaustive. Every imaginable case of infringement cannot be legislated, due to human ingenuity and technological development allowing for unforeseen means of breaching the rights of others. Thus, judge-made law, based in the interpretation of provisions of EU law by the CJEU, comes into play as an important source for law when facing unprecedented challenges in upholding rights and

⁵⁰ Article 10 of the ECHR describes the "Freedom of Expression", noting that "[e]veryone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers."

⁵¹ The case of ACI Adam BV shall be discussed in part 3.6., but it shall suffice to mention here that the method for calculating the levy amount changed to include copies from unlawful sources, not just lawful ones.

obligations of everyone involved. In Latvia, similarly to the EU, judge-made law has been in play for years, though it is important to note that unlike common law jurisdictions such as the UK and USA, Latvia and indeed the European continent as a whole, does not prescribe to the binding nature of precedents, rather they possess a persuasive element and act as a means of continuity for the development of law, national and EU-level⁵². Thus, even if the law provides for a high protection of IPR, it is up to the courts to reveal the intentions behind the law by interpreting its own laws or the judicial reasoning of CJEU, and other EU Member State courts in a quickly-evolving digital world, and the historic ways of achieving that and their implications shall be discussed below.

Part 3 Case law and legislative attempts - an analysis

For Latvia to combat digital piracy, the variety of methods available should be discussed. The daily use of torrents involves three parties: (1) the end user desiring to download or share; (2) the ISP providing internet access to both the end user and the torrent website; (3) the torrent website, indexing and sorting torrent files associated with each file being shared in the overall P2P network (it holds the keys to the subnetworks, each sharing an individual file). First, there is the option of shutting down a server hosting a website, a method employed against Napster in the early 2000s in the US. Second, there is the option of punishing end users, who have illegally obtained copyrighted materials. Third, a court may try to impose filtering and monitoring systems on ISPs to manage the flow of copyrighted materials. Fourth, a court may try to force ISPs to block certain websites proven to possess illegal data or facilitate in its transfer. Fifth, when it comes to torrents, the court may try to shut down websites providing end users with access to the torrent files, and thus the P2P network of illegal information haring. Then the concept of "private copy" will be examined to see how a once popular exception to the exclusivity of copyright is now being banned across the EU. Each of these methods have been employed, though only one may pose an actual threat to the existence of torrent networks - that of blocking torrenting sites. This is a hard-won solution for IPR holders, which took many years to achieve, and shall be at the centre of the later analysis. Yet, the struggle for a balance is not over, because even though blocking torrent sites may slow down the rate of torrent usage somewhat, dedicated pirates will and already have found means of circumventing governmental efforts, which will be discussed in part 4.

3.1. Shutting down a server hosting an illegal website.

The landmark intellectual property case between A&M Records, Inc. v. Napster, Inc. 53 of 2001 put to rest the idea that P2P file sharing network services such as Napster could avoid liability

⁵² Mikelsone, G., "The binding force of the case law of the Court of Justice of the European Union", Mykolas Romeris University, 2013, p.490.

⁵³ United States Court of Appeals for the Ninth Circuit, A&M Records, Inc. v. Napster, Inc., 2001.

for copyright infringements. Subsequently, Napster was held liable for vicarious⁵⁴ and contributory infringement of copyright. Even though Napster tried arguing "fair use⁵⁵" of the works by its users, the court found that:

- 1) Napster's users were in direct infringement of the exclusive rights of reproduction and distribution⁵⁶ of the owners as listed in Article 106 of the U.S.C.⁵⁷, because
- 2) Napster's system allowed for "repeated and exploitative" copying of works, which was construed as equating commercial use, further proving the negative effects to copyright holders⁵⁸, and that
- 3) The works available on Napster are "'closer to the core of intended copyright protection than are more fact-based works⁵⁹", and finally that
- 4) Napster harms album sales of existing music and that it creates barriers for the applicants to enter into the market for digital downloading⁶⁰.

As for Napster being liable for contributory infringement⁶¹, the court ruled that "[i]t is apparent from the record that Napster has knowledge, both actual and constructive, of direct infringement⁶²", i.e., it was held that, irrespective of the fact that Napster claims no knowledge of specific acts of infringement, they did know that majority of the files transferred were copyrighted and that the users did not have permission to distribute them, and by not stopping the illegal transfers, Napster overall contributed.

The scenario is unlikely to be seen in the world nowadays, because the structure of the P2P network, i.e., that of a central server being responsible for keeping track of all files and users across the whole network, is perceived as outdated and susceptible to immediate shutdowns by the authorities, thus allowing the whole network to be destroyed in one fell swoop. It is important to note that Napster's server did not possess the files, but rather a list of files and where to find them, which could be compared to a bookkeeper keeping track of all known tax-evaders and, if need be, arranging meetings between them to share know-how - catch the bookkeeper and you

⁵⁴ As explained by the court in para. 65 "[v]icarious liability is imposed in virtually all areas of the law, and the concept of contributory infringement is merely a species of the broader problem of identifying the circumstances in which it is just to hold one individual accountable for the actions of another."

^{55 17} U.S. Code § 107 - "Limitations on exclusive rights: Fair use" states that "[i]n determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.

⁵⁶ A&M Records, Inc. v. Napster, Inc., para 19

⁵⁷ 17 U.S. Code § 106 - "Exclusive rights in copyrighted works".

⁵⁸ Supra at note 48, para 26.

⁵⁹ Id., para 28.

⁶⁰ Id., para 33.

⁶¹ As defined by the court in para. 52 of the judgement, "one who, with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another, may be held liable as a 'contributory' infringer", or "liability exists if the defendant engages in "personal conduct that encourages or assists the infringement".

⁶² Mikelsone, G., supra at note 47, para. 55.

can shut down the whole operation. A scenario like this would be similarly handled, were it to ever appear in the European Union, as will be shown later. Latvia too has been actively shutting down servers in its jurisdiction, as is shown by a list of torrent sites in Latvia and their status (active or inactive) with less than 20% of the number of torrent sites have remained active⁶³. The Latvian state, with its limited resources, has turned to combating online piracy at the spot of access - the servers hosting the websites. But, as will be shown later, not all locally accessible torrent websites are located in the local jurisdiction - internet is a global phenomenon, and certain jurisdictions will gladly host illegal servers in exchange for money, even though such decisions hurt the global economy and the rights of the authors.

3.2. Punishing end-users for illegally acquiring copyrighted materials online - the misguided attempts by HADOPI.

As mentioned above in the description of lack of anonymity in torrent usage and its consequences in Germany, it suffices to note that the process of using torrents is not anonymous. Thus, two methods of punishment will be discussed - monetary fine and the much harsher punishment of limiting a user's Internet access, as attempted by the HADOPI law. The monetary fine is employed across most states, as it aims at remunerating the owners of the copyright, not just punishing the infringer. Punishments harsher than monetary fines can be used if the infringement is serious enough (usually on a commercial scale), with the, e.g., Latvian, law prescribing imprisonment in certain cases, yet the punishment of disconnecting an individual from the Internet merits a special examination.

The 2009 HADOPI hat the internet access holder has contributed to the dissemination of a copyrighted work (irrespective of the fact that they might not be the actual infringers) - (1) an email would be sent to them, notifying of the illegality of their actions and the possible penalties that they are subjected to in case of ongoing infringement; if in the next six months the HADOPI discovers that there has been another infringement, another email is sent, accompanied by a registered letter to confirm receipt; if within a year from the second offence there is yet another infringement, HADOPI has the power to suspend an individual's internet access from two months to one year, with the obligation to continue paying for the Internet access from two months to access that the right to order the ISPs to inform them of the personal information of the IP address that was registered at the time of the offence, speeding up the overall process. What is more, the internet access holder, if not the infringer himself, may be penalized for failing to monitor the illegal data flow, as well as the ISP for failing to suspend internet access to the infringer. The draconian suspension of access was later that year ruled as unconstitutional by the

⁶³ Torrentnote, "List of 2017 Latvian Torrent Websites" and their activity status, 2018.

⁶⁴ Haute Autorité pour la Diffusion des Œuvres et la Protection des droits d'auteur sur Internet, or in English,

[&]quot;Supreme Authority for the Distribution and Protection of Intellectual Property on the Internet"

⁶⁵ Geiger, C., "Honourable attempt but (ultimately) disproportionately offensive against peer-to-peer on the internet (HADOPI) - a critical analysis of the recent anti-file-sharing legislation in France", IIC 2011, 42(4), 457-472, 466, retrieved from Westlaw

Constitutional Council, because HADOPI was not considered a court but an administrative authority, and thus was not empowered to suspend internet access⁶⁶. Later that year another version of the same law was drafted⁶⁷, with similar provisions, which this time will would be enforced by the Courts⁶⁸. The penalty of suspension was abrogated in 2013 by a government decree, thus ending the whole saga, which had cost millions for the French taxpayers and resulted in just one internet access suspension which lasted for 15 days, due to the decree⁶⁹. It must be noted that a "three strikes law" was also introduced in South Korea, back in 2009, and it is still in force, though the legislation is surrounded by controversy and accusations of ineffectiveness⁷⁰.

The monetary penalty system works effectively in Germany (albeit without the threat of suspending internet access), where torrenting now is an almost taboo subject, and, if implemented successfully by private law firms, it could be repeated across the EU. There is a profit incentive for law firms from representing interested agencies and associations, as well as producers and artists themselves.

As of yet there have been very few such comparable penalties received by any end users in Latvia. The only Latvian court case concerning illegally acquired media and software was that of 2013⁷¹, when a private person went to court to contest the administrative fine received by him from the police, after they found illegally acquired software and audiovisual works on his private computer, which were subsequently confiscated. The infringer confessed and the court found him guilty and fined him 50 Lats (approximately 71 EUR) in accordance with the Administrative Violations Code Section 155⁸. This fine is incomparable with the thousand euros one can be fined in Germany, and points to a much milder attitude towards copyright violations in Latvian courts and police.

The reasons for the low penalty rates seem to be largely based in lack of financing and human resources available to the authorities⁷². What is more, the effort to counter the large presence of online "pirates" in Latvia appears to only take the form of advisory campaigns, notifying people that P2P networks do not provide the end user with legal materials - an effort that will likely be disregarded wholeheartedly by the majority of "pirates"⁷³. As the legal framework stands, there is a market of hundreds of thousands of pirates in Latvia alone (i.e., it suffices to download even one movie, song or software or its part to count as one) to fine by anyone choosing to represent copyright and related rightholders and monitor the torrent flow for local IP addresses, and, by acquiring a court ordered, to find out the real addresses for sending a cease and desist letter, as

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⁶⁶Sirinelli, P and Bensamoun, A., "Copyright Throughout the World".

⁶⁷ Id.

⁶⁸ Id.

⁶⁹ Id.

⁷⁰O'brien, D., "Korean Lawmakers and Human Rights Experts Challenge Three Strikes Law", 2013, EFF.

⁷¹ Anonymized Judgement by the Zemgale District of Riga Court of 11 October 2013.

Kluga, M., "Policijai trūkst kapacitātes cīņā ar interneta pirātiem", Public broadcasting of Latvia, 2016.
 Ministry of Culture of the Republic of Latvia, "Biedrība "Par legālu saturu!" uzsāk pretpirātisma sociālo kampaņu", 2018.

well as a fine. Of course, it has to be said that the Latvian bureaucracy is notoriously slow and there might be a need to simplify the acquisition of identity for such clear IPR violations, which on the other hand might result in a sort of "police state" in the minds of some.

There is also the question of effective enforcement of EU Directive (e.g., the Enforcement Directive concerning IPR). There is a certain lack of point for EU-wide legislation in this area if Latvia does not implement the Directives wholeheartedly and effectively - EU authority loses its powers if states undermine its goals. But one can't blame Latvia for a certain lackadaisical attitude - Latvia lacks the financial resources to hire enough people, or indeed pay them in order to enforce copyrights against so many infringers.

3.3. Setting up monitoring systems within the ISPs.

One way to catch infringers sharing copyrighted materials is to set up a data monitoring, or filtering. Such a theoretically possible solution is provided by the InfoSoc Directive in Article 8(3), which states that "Member States shall ensure that rightholders are in a position to apply for an injunction against intermediaries whose services are used by a third party to infringe a copyright or related right. The same wording is used in Article 11 of the Enforcement Directive To The InfoSoc Directive does not elaborate on the conditions applicable to such injunctions, but the Enforcement Directive, when commenting the "measures, procedures and remedies necessary to ensure the enforcement of intellectual property rights", states that "...[they] shall be fair and equitable and shall not be unnecessarily complicated or costly". Though for rights holders it would help a great deal knowing when and by whom their works are being shared, imagining a system that could monitor data, which globally amounted to 121 694 petabytes (a petabyte is a a million gigabytes, to put it in perspective) per month in 2016 does not elaborate in perspective) per month in 2016 does not elaborate on the InfoSoc Directive in Article 11 of the Enforcement Directive.

Yet, in 2004 a Belgian association representing authors, composers and editors (SABAM) brought interlocutory proceedings against Scarlet, a Belgian ISP, with the aim of stopping Scarlet's users illegally downloading works on SABAM's repertoire⁷⁷. The Court of First instance, after having consulted a specialist on the technical feasibility of installing, what basically amounted to a filtering system, which was concluded to not be impossible, ruled in favor of SABAM. Scarlet, of course, appealed, arguing that such an injunction would amount to "...de facto, a general obligation to monitor communications on its network...", something that

⁷⁸Ibid, para. 25.

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⁷⁴ Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonization of certain aspects of copyright and related rights in the information society, Official Journal L 167, 22/06/2001 P. 0010 - 0019.

⁷⁵ Corrigendum to Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights (OJ L 157, 30.4.2004)

⁷⁶ STATISTA, "Global IP data traffic from 2016 to 2021 (in petabytes per month)".

⁷⁷ Judgment of the Court (Third Chamber) of 24 November 2011, *Scarlet Extended SA v Société belge des auteurs, compositeurs et éditeurs SCRL (SABAM)*, Case C-70/10.

is explicitly forbidden by the E-Commerce Directive⁷⁹ in Article 15 "No general obligation to monitor". Scarlet also argued that such a monitoring system would be in breach of, at the time effective, 1995 Data Protection Directive by requiring the ISP to process IP addresses - forming part of personal data of an individual. The Court of Appeal, thus, in 2010 preliminary ruling on questions relating to injunctions against an intermediary such as Scarlet.

The consideration by the CJEU focused on the following main points:

- 1) That there indeed exists a violation of IPR by Scarlet's clients and that SABAM has the right, according to Art. 8(3) of InfoSoc, and Art. 11 of Enforcement Directive, to apply for injunctions against intermediaries;
- 2) According to established case law (*L'Oréal and Others*⁸⁰), the national courts are empowered not just to end ongoing infringements of IPR violations, but also to prevent further infringements⁸¹, which in this case would entail a monitoring system;
- 3) Yet, the Articles referring to the ability to apply for an injunction and its imposition on ISPs must also observe the limitations set within the Directives, such as Article 11 of the Enforcement Directive, prohibiting the imposition of general monitoring of information on ISPs, as was ruled in the *L'Oreal and Others* case (where a similar imposition was sought against eBay⁸²), because as Article 3 of the same Directive states that "measures referred to by the directive must be fair and proportionate and must not be excessively costly⁸³".

The Court went on to note that copyright is enshrined in Article 17(2) of the CFREU⁸⁴, although the CFREU does not state that this fundamental right is inviolable. Thus, a fair balance must be struck between property rights (IPR being part and parcel) and freedom to conduct business as enshrined in Article 16⁸⁵, as well as potential violation of end user right to data protection and information, as granted to them by Articles 8 and 11 of the CFREU respectively⁸⁶. Thus, forcing a local ISP in Latvia to start monitoring the information that flows through their infrastructure in order to spot illegal media is inordinately harsh and nigh impossible, and as such an impossible injunction scenario to be repeated.

3.4. Blocking streaming sites.

Though filtering the vast amounts of information is, as of yet, an impossible task for any ISP, there are other methods to combat file sharing at its source. Such is the case of illegal Austrian

⁷⁹ Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce').

⁸⁰ Judgement of the Court 12 July 2011, L'Oréal and Others, Case C- 324/09, para. 138.

⁸¹ Supra at note 72, para. 31.

⁸² L'Oreal and Others, para. 139

⁸³ Id

⁸⁴ European Union, "Charter of Fundamental Rights of the European Union".

⁸⁵ Id

⁸⁶ Scarlet Extended SA, para. 50.

streaming sites, which also offer the possibility of downloading media. Streaming is different from downloading by virtue of the fact that no copy, permanent or transient, is created, rather the content is watched on the spot. The streaming website stores the media in a server, which is a clear violation of copyright (vis-a-vis reproduction, distribution and communication to the public), and even before the 2012 UPC Telekabel⁸⁷ case, discussed below, the streaming site was shut down by the Austrian police. The Supreme Court of Austria referred questions on whether an ISP, as an intermediary, can avoid penalties for not adhering to the injunction requested by IPR holders to block all access [emphasis added] to illegal subject-matter, i.e., copyrighted materials, on a streaming site if the ISP can show that it has taken reasonable measures⁸⁸.

The Court noted that, similarly to Scarlet Extended, a fair balance must be struck between the IPR, freedom to conduct business, and the freedom of information of internet users under Article 17(2), Article 16 and Article 11 of the CFREU respectively. The original injunction, which was not detailed as to the means that the ISP must employ to block the illegal streaming site, was held to be excessive, because the magnitude of the effort to block a certain website must correlate with "...the resources and abilities available to him...89", and as such, the ISP can "...avoid liability by proving that he has taken all reasonable measures 90." The Court then went on to caution any excessive intervention in internet users' right to information, and as such any measure taken must be "strictly targeted.91" What is more, the Court correctly noted that there may exist methods of circumventing blocking measures, which should not result in culpability on the side of the ISP, because a completely effective blocking mechanism does not yet exist, and end users, even without special technical knowledge, may acquire means of circumvention⁹².

3.5. Blocking access to torrent networks.

Finally, there is the question of torrent websites. This part of P2P file sharing notoriety is especially famous, due to the news coverage and overall scandal of the PirateBay saga. It will suffice to note that preceding the CJEU's 2017 ruling in the *PirateBay* case⁹³, the four operators of the PirateBay website were sentenced to prison back in 200994. To understand why the 2017 ruling is important, the technicalities of torrent websites should be mentioned. The problem is mostly based in the idea that torrents as a technology is not illegal. Indeed, they may be used to quickly disseminate lawful materials in universities, large corporations or any large computerbased population. Both Facebook and Twitter use the BitTorrent protocol to send out updates to their servers, avoiding the need to browser their clients' bandwidth, because it is fast and does

⁸⁷ Judgement of the Court, 27 March 2014, UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH, Case C- 314/12.

88 Id., para. 17(2).

⁸⁹ Id., para 52.

⁹⁰ Id., para 53.

⁹¹ Id., para 56.

⁹² Id., para 60.

⁹³ Judgement of the Court, 14 June 2017, "Stichting Brein v Ziggo BV, XS4ALL Internet BV", Case C- 610/15.

⁹⁴ The Local, "Pirate Bay guilty", 2009.

not take up too much resources. As explained above in the torrent section of the paper, this is due to the efficiency of P2P networks, especially by use of the BitTorrent protocol - a large file is chopped up into thousands of parts, which are downloaded as separate "pieces" to be glued together by the torrent software. The pieces need not be in a correct sequence, and any interference in internet connectivity is quickly repaired by the software later on. Yet, websites, such as the PirateBay, by no direct fault of their own, except for complicity, mostly provide end users with copyrighted materials. It bears repeating that it is the end users that upload copyrighted materials not the websites, but without the torrent files that these websites index, it is impossible to access the P2P subnetworks for each file.

Thus, it can be argued that the *de facto* reality of torrenting, i.e., its impact on the economy and the right of creators, is why it has to be stopped in a lawful society. Though the technology may not be harmful, its use most certainly is. And so, on 14 June 2017 the CJEU handed down a preliminary ruling on the legality of torrenting websites finally ending the discussion on torrents, or at least they hope it has.

3.5.1. Stichting Brein v Ziggo BV, XS4ALL Internet BV

The parties at the centre of the dispute are Stichting Brein, an institution representing the interests of copyright holders, and two ISPs, namely Ziggo and XS4ALL. Many, if not most, subscribers of the two ISPs use The PirateBay (TPB) website to access P2P networks associated with the files which TPB indexes and stores for later access by anyone (no subscription or creation of account necessary). Stichting Brein sought an injunction against the ISPs to block their users' access to the website. The Hoge Raad der Nederlanden (Supreme Court of the Netherlands) noted that its case law does not permit it to rule with certainty on whether TPB communicates protected works to the public, as prohibited by Article 3(1) of the InfoSoc Directive. More specifically, the Dutch court could not tackle the fragmentary aspect of torrent files, i.e., metadata instead of actual works are stored on the website. The Court struggled to answer: whether TPB can be said to communicate a protected work if (1) it consists of parts, not the whole work, because (2) TPB merely indexes the torrent files, and thus (3) allows its users to acquire the fragments by accessing the P2P networks. Thus, it requested a preliminary ruling from the CJEU on the interpretation of Article 3(1), to which the Court argued as follows:

- 1) Article 3(1) does not define "communication to the public", but according to established case law "the concept of 'communication to the public' involves two cumulative criteria, namely an 'act of communication' of a work and the communication of that work to a 'public',95";
- 2) On the concept of communication, the Court stated that in its view 'communication' covers "any transmission or retransmission of a work to the public by wire or wireless means, including broadcasting 96";

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⁹⁵ Judgement of the Court, 26 April 2017, Filmspeler, Case C - 527/15.

⁹⁶ Stichting Brein v Ziggo BV, XS4ALL Internet BV, para 30.

- 3) The concept of public must be viewed as "an indeterminate number of potential viewers and implies, moreover, a fairly large number of people⁹⁷";
- 4) The communication must be done by the use of "specific technical means⁹⁸";
- 5) Further, it is sufficient to regard TPB as committing an act of communication, because the work is made available to a public in such a way that the persons ...may access it, from wherever and whenever they individually choose... ⁹⁹";
- 6) And that TPB is fully aware of its users sharing protected works ¹⁰⁰.

Thus, it can be said that, as regards Article 3(1), TPB is communicating protected works to the public. The Court went on to note that TPB plays an essential role in this communication, because irrespective of the fact that it is the end users who upload protected works and continue "seeding" them, TPB maintains and manages their website by indexing and sorting the torrent files, without which such IPR infringement could not take place, or would prove to be more difficult¹⁰¹. The Court also stressed the importance of number of potential and existing users ("several dozens of millions") and the fact that they may access the files whenever and from wherever¹⁰².

This landmark judgment finally put to rest the ongoing discussion of torrent websites. The fact that they "communicate to the public" protected works by indexing the torrent files, which in themselves are not copyright protected but refer to protected files, maintaining and managing their website with full knowledge of their users' actions, was ruled to infringe upon the rights of creators.

With the methods of combating P2P file sharing within the three-party system (end user, ISP, website) having been analyzed outside of Latvia, though all of them affect it directly, it is important to note some additional complications in protecting IPR through injunctions, sanctions and punishments, namely the use of VPN, use of mirrors in cloning torrent websites and file sharing by use of Cloud storage, which will be discussed in section 4.

3.6. The disappearance of the free private copy.

With the introduction of technical means, such as audio cassettes, photography, video cameras, and VCRs, it was possible to make a copy, though a derivative one, of a work to be kept and enjoyed at leisure. This changed with the rise of digital technologies, which, as stated before, allow a person to create a perfect copy, indistinguishable from the original (i.e., with no data loss, which occurred with the popular technologies of the mid-20th century). Such copying is at the basis of the global economic impact on the creative industries.

⁹⁸ Id., para. 28.

⁹⁷ Id., para. 27.

⁹⁹ Id., para. 31.

¹⁰⁰ Id., para 34.

¹⁰¹ Id., paras. 36-38.

¹⁰² Id., para 42

To compensate copyright holders for the harm suffered from the making of such copies, levy systems were introduced. A levy is an amount paid by importers of any technology or means that allows end users to copy a work, which is then paid out to the copyright holders, i.e., fair compensation as stated in Article 5(2) of the InfoSoc Directive 103. The origin of the levy system is found in Germany in 1966, when "the exclusive reproduction right had been replaced by a right to equitable remuneration 104,, but since then the exception to private copying has been adapted in 26 out of the 28 EU MS, with the exceptions of UK and Ireland, though Bulgaria, Cyprus, Malta and Luxembourg have yet to introduce a working fair remuneration system¹⁰⁵. This exception was challenged by ACI Adam and Others in 2008, and after going through the court system of Netherlands, a preliminary ruling was requested by the Supreme Court of Netherlands on the question of how such levies are to be calculated. The point of the question was whether the calculation should also include copies made from unlawful sources, an aspect not discussed in the InfoSoc Directive. It is important, because copies from unlawful sources make up a large amount of the overall copying, and thus more harm is suffered by the copyright holders, who rely on such levy systems for fair compensation.

To summarize, the Court ruled that the concept of 'fair remuneration' should be understood as including any copying, regardless of the legality of its source, due to the popularity of digital piracy across the EU and the resulting harm incurred by copyright holders ¹⁰⁶. This ruling imposed a limitation on the exception of private copying, resulting in end users having to pay more for technology that permits copying of works - though the sellers of such technologies pay the levy upon import, this price is then passed on to buyers. The previously-legal copying has now been limited only to lawful sources by the Court's interpretation, i.e., the use of torrents and unlawful web downloading is penalized across the whole of society upon the acquisition of computers, phones, empty DVDs, CDs, etc.

After discussing the previous means used by local courts to deal with the growing popularity of illegal file sharing, some attention must be had for the end user in the context of freedom to information.

3.7 The neutral net and freedom to information - the frail balance between right and wrong.

The question of who and how would be empowered to bring an injunction against an ISP has not yet been resolved, and this is a worrying state. The Court in the UPC Telekabel case mentions reasserts the Austrian courts' assessment that the holders of copyright or a related right are not under the obligation to prove that the ISP subscribers have actually access protected materials made available by the websites that the rightholders are trying to get blocked.

¹⁰³ Quintais, João, Private Copying and Downloading from Unlawful Sources (October 23, 2014), IIC 2015, 46(1), p. 13. WIPO, "International Survey on Private Copying", 2012, de Thuiskopie, p. 4.

¹⁰⁵ CopiePrivee, "Private Copying in Europe".

¹⁰⁶ Judgement of the Court, 10 April 2014, ACI Adam, Case-435/12, para. 58.

This assessment is worrying because the end users perceive the Internet as an unregulated, or at least minimally regulated, information space. Any intervention and subsequent limitation of access to certain parts of the internet are seen as an infringement of their right to information, but the CJEU "allow states a wide margin of appreciation", and that this "copyright protection amounts to a legitimate interference with the rights of freedom of expression" as enshrined in Article 11 of the CFREU¹⁰⁷.

With the ever-increasing efforts to combat illegal P2P networks by forcing ISPs to introduce certain measures to combat their subscribers' access to unlawful sources, there is a growing fear for the future freedom of the Internet 108. The world so far has been used to Internet being an almost lawless country, where there are no governments and no injunctions against the gatekeepers of Internet, i.e., ISPs. Strongest efforts have always been aimed at serious crimes like child pornography, illegal drug markets, and hacker networks. Now the world is turning towards combating P2P networks due to their immense impact on the global economy. People disregard the need for fair remuneration of creators and performers for the work that they put in and have devolved into thinking that it won't hurt the creative industries if they download something "just once". The result is that billions of people with internet access, thinking that "just once" won't hurt much, are disrupting the status quo and forcing these industries to raise prices in response, which results in a never-ending cycle. There is as of yet no system in place which governs which websites and how, when caught sharing files from unlawful sources, either intentionally or inadvertently, would be put on the "blacklist" of websites to be blocked by an ISP.

As stated above in part 3.3., anyone offering services in the context of the E-Commerce Directive (referring to Directive 98/48/EC, which is now replaced by Directive 2015/1535/EU¹⁰⁹) has no general obligation to monitor the information transmitted or stored by them, and any injunctions against such service providers must be proportionate enough to not deprive them of their right to business, while at the same time respecting end user right to their information and freedom of expression. A tripartite balance seems nigh impossible to achieve, and yet it must if society is to avoid the vicious cycle of pirate activity and the reactive price growth. As the situation now stands, the pirates are winning, as in, there are multiple methods that can be used to continue downloading freely, and they shall be discussed in part 4, but the growing concerns about net neutrality are felt across the world and industries, as can be seen by the hundreds of websites that signed up to support protest in support of unregulated internet ¹¹⁰.

¹⁰⁷ Copyright: freedom of expression - copyright infringement - Kolmisoppi v Sweden (40397/12), E.H.R.L.R. 2013, 4, 425-427, retrieved from Westlaw.

¹⁰⁸ Tyler, anonymous profile, "July 12th: Net Neutrality Day of Action", 2017, BitTorrent Blog.

¹⁰⁹ Directive 2015/1535/EU, Art. 1.1(b): "service' means any Information Society service, that is to say, any service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services", OJ L 241.

110 The list can be seen on the battleforthenet webpage here: https://www.battleforthenet.com/july12/

3.8. Role of CJEU judgments, their binding nature and the possibility of repetition in the courts of other Member States.

In matters pertaining to EU law supranationalism takes first place. With the goals of "creating an ever-closer union¹¹¹". EU strives to harmonize laws in the areas that fall within its competence, i.e., have been transferred to it by MS. Copyright law, or certain aspects of it, in the form of the InfoSoc Directive is amongst such competences, the goals of which are to protect IPR and foster investment in creativity and innovation across the EU¹¹². In order for the Directive to be interpreted uniformly by all MS courts, sometimes a request for a preliminary ruling is given to the CJEU in order to ascertain the correct, in the mind of the CJEU, interpretation of a certain law, its Article, concept or word.

Starting with the Costa v. ENEL¹¹³ in 1964 (with roots in the 1963 judgement in Van Gend and Loos¹¹⁴), the primacy of EU law over national law has been maintained as the cornerstone of the Union system. It was also reaffirmed in the *Internationale Handelsgesellschaft*¹¹⁵ case of 1970 where EU law was ruled to take primacy even over constitutions of MS, thus cementing the hierarchy of laws within the EU. This principle of primacy, to put it in layman's terms, is the power of EU laws to override conflicting national laws¹¹⁶. The sole body that has been given the right to interpret EU law is the CJEU¹¹⁷, thus, its judgements, by the same likeness as constitutional court judgements in a sovereign state, are binding on all its subjects, i.e., Member States and individuals.

Once a judgment has been handed down, it becomes the responsibility of a national court to enforce it 118, and in order to maintain uniform interpretation of EU law across the Union, in case a request for a preliminary ruling is handed 119, the national court should, by virtue of the goals of

¹¹¹ TEU, the Treaty's preamble states that the Union is: "...RESOLVED to continue the process of creating an ever closer union among the peoples of Europe, in which decisions are taken as closely as possible to the citizen in accordance with the principle of subsidiarity..."

¹¹²InfoSoc Directive preamble (4): "A harmonised legal framework on copyright and related rights, through increased legal certainty and while providing for a high level of protection of intellectual property, will foster substantial investment in creativity and innovation, including network infrastructure, and lead in turn to growth and increased competitiveness of European industry, both in the area of content provision and information technology and more generally across a wide range of industrial and cultural sectors. This will safeguard employment and encourage new job creation."

¹¹³ Judgment of the Court of 15 July 1964, Flaminio Costa v E.N.E.L., Case 6-64.

¹¹⁴ Judgment of the Court of 5 February 1963, NV Algemene Transport- en Expeditie Onderneming van Gend & Loos v Netherlands Inland Revenue Administration, Case 26-62.

¹¹⁵Judgment of the Court of 17 December 1970, *Internationale Handelsgesellschaft mbH v Einfuhr*, Case 11-70. ¹¹⁶ Burkoveca, "EiropasSavienības tiesību sistēmasmijiedarbībaardalībvalstu tiesību sistēmām", JuristaVārds, 2010,

¹¹⁷ TEU, Art. 19(3): "The Court of Justice of the European Union shall, in accordance with the Treaties; (a) rule on actions brought by a Member State, an institution or a natural or legal person; (b) give preliminary rulings, at the request of courts or tribunals of the Member States, on the interpretation of Union law or the validity of acts adopted by the institutions; (c) rule in other cases provided for in the Treaties."

¹¹⁸ TFEU, Article 260: "If the Court of Justice of the European Union finds that a Member State has failed to fulfil an obligation under the Treaties, the State shall be required to take the necessary measures to comply with the judgment of the Court." ¹¹⁹Ibid, Art. 267

the Union as postulated in the founding treaties, follow the lead of the CJEU and rule accordingly. Thus, in case of a Dutch court requesting for a preliminary ruling in the field of copyright law, CJEU's status is a strong impetus for other MS courts to follow, which incidentally forms the crux of the problem for this paper – that of repeating the judgement in Latvia.

3.8.1. CJEU's judgements and their binding nature on the courts of Latvia

The binding force of CJEU's judgement was recognized, at least politically, by the intergovernmental conference adopting the Lisbon Treaty in 2009, as attached to the TFEU in Declaration 17 "Declaration concerning primacy" 120. The practical reality is that "EU law is what the [CJEU] decides it is by defining content of written EU law through interpretation, by finding new provisions through further law-making and by rendering acts of institutions, bodies, offices or agencies of the EU invalid 121", resulting in the judgements acquiring the same binding nature as provisions of EU law 122. This is an inherent interplay between the legislator and the judicial bodies, because an interpretation of a provision "reveals [the] content of the specific provision" and is not a newfound provision 123. And even though Latvia is a civil law system, whereupon only the acts of the sovereign are considered binding, EU case law, through the transfer of powers provided by the Treaties of the EU, can be considered as forming unwritten legal acts, whose source is the sovereign and not the legislator, i.e., general principles of law and customary law 124. It is also important to note that Latvian courts are not bound by CJEU case law itself, as would be the case in common law (judge-made) systems, but rather to the "important statements of the [CJEU]" that are binding on them 125.

3.8.2. Repetition of the PirateBay ruling in Latvian courts - Analysis

As said previously, Latvian courts are not bound by the *stare decisis* doctrine, in which the same decision is almost automatically applied to cases with similar factual backgrounds. Yet, it is written in Section 32(2)¹²⁶ of the Constitutional Court Law

"[t]he Constitutional Court judgement and the interpretation of the relevant legal norm provided therein shall be obligatory for all State and local government authorities (also courts) and officials, as well as natural and legal persons."

And, as stated in part 2.2 and 3.8.1, the constitutional court is also bound by the decisions of CJEU and ECtHR. Some lawyers might try to fight the factual similarity of a case in Latvia in favor of the ISPs, but they are likely not to succeed. The surprising percentage (46%) of the

 $^{^{120}}$ Consolidated Version of the Treaty on the Functioning of the European Union, Declaration concerning primacy, 2008 O.J. C 115/47

¹²¹ Supra at note 47, p. 490

¹²² Id.

¹²³ Id.

¹²⁴ Id.

¹²⁵ Td

¹²⁶ Constitutional Court Law of the Republic of Latvia, Section 32(2).

internet users who are considered pirates will form a significant part of local ISP subscribers, no matter how big their clientele is. This concept of "significant numbers" was an argument put forwards by Stichting Brein in the *PirateBay* case and can be easily applied to all ISPs in Latvia. There were almost no other background facts as important as the fact that so many subscribers used the Dutch ISP services to access protected materials, and thus Stichting Brein has a legitimate claim. And, as stated in the *UPC Telekabel* case, measures taken against intermediaries must be preventive, without the need for rightholders to prove actual damage suffered.

Section 5(6) of the Civil Procedure Law of Latvia states that "[i]n applying legal norms, a court shall take into account the case law." And Section 464.1 makes it clear that if case law has arisen for similar cases, the Supreme Court may refuse initiation of proceedings. Thus, an association representing authors is now empowered to go to the Latvian courts and plead their case for blocking torrent sites, because the factual background is the same and the court must take CJEU's interpretations into account when interpreting the copyright law of Latvia.

Part 4 Impact of the *The PirateBay* ruling and ways to circumvent it.

The *PirateBay* judgement set a precedent for all EU MS, reaffirming that torrent websites are, *de iure*, illegal, even though they themselves do not transmit copyrighted materials or store them, and as such an injunction from an interested party (copyright holder or representative) can force ISPs to block such websites. Such might be the case soon in Latvia if either AKKA/LAA (Copyright and communication consultancy agency/ Association of Latvian Authors) or LaIPA (Association of performers and producers of Latvia), or even a single author or performer was to go to court against the main Latvian ISPs, such as Lattelecom or Baltcom. Though no one should harbor hopes that blocking a website is a completely effective solution to stopping piracy, it does put a spoke in the wheel for pirates by making it more difficult to access torrent websites, because most torrent users do not worry themselves with immersive technical knowledge when it comes to torrents and the technology behind them. Most people facing difficult technical ways around a block will most likely give up on the effort, which is proved by the rise in popularity of legitimate streaming services, which are faster and easier to use.

What many end users and associations representing authors do not know, is that there are easy solutions to a website being blocked in a certain territory - that of VPNs and DNS server change for end users, and that of website mirrors and proxies for the torrent websites, as well as legitimate online storage services which can be used for subverting the block and continue P2P file sharing. What the court usually forces the ISPs to block is access to internet protocol addresses, which are unique to each website, but not difficult to substitute and the block of which relatively easy to circumvent. The methods of possible circumvention will be discussed below.

¹²⁷ Civil Procedure Law of Latvia, Article 5(6), retrieved from:

4.1. The use of VPN.

The use of a VPN allows the end user to further his/her digital presence to another private server (i.e., the end user himself is a server (the computer)) location elsewhere in the world, thus acquiring a different access point to the Internet¹²⁸. The practical result is twofold:

- 1) The end user acquires the IP address of the new server, which has a physical location elsewhere and bears a different digital presence (IP address), circumventing any efforts at discovery of the end user's real identity;
- 2) And because the newly acquired location is outside the jurisdiction and territorial powers of a national court, access to an illegal website is no longer barred.

The VPN system in itself is not illegal, indeed many corporations and universities assign usernames and passwords to their employees/students in order for them to access the institution's intranet (internal network) and acquire files present there or check class schedules, homework assignments, etc.

4.2. The use of mirrors and proxies.

Mirror websites, colloquially called just mirrors, are copies of a website¹²⁹. Even though the URLs (i.e., website name such as thepiratebay.org, proxyfl.info, piratepirate.eu) are markedly different, they all host the same content, allowing to redistribute the flow of requests and thus alleviate the strain on the individual servers hosting the websites. What the use of mirrors also does is avoid the blocking of specific URLs associated with a torrent or illegal streaming service. There is no limit how many mirrors can be created - as long as they host the same content, torrent users will find an up-to-date list of the names of torrent websites, because the governments are mired in bureaucratic sluggishness, whereas torrent site managers can act swiftly and keep multiplying the copies unremittingly.

Proxies, on the other hand, are a way for websites to remain anonymous. A proxy is an intermediary server of a different online identity through which requests are forwarded to the actual website¹³⁰. A proxy itself does not act as the website, thus only facilitating the process of torrenting, though, of course, this is also illegal, but it becomes more difficult for rightholders to keep track of who's who and where the information is flowing.

4.3. Changing DNS Servers.

A DNS server, usually operated by an ISP for the use of its customers, is a computer server that translates URLs (we address that uses words, e.g., www.google.com) into IP addresses (each

¹²⁸ Athow, D., "What is VPN?", TechRadar, 2017.

Beal, V., "Mirror Site", 2018, WeboPedia.

¹³⁰ Luotonen, A. and Altis, K., "World-Wide Web Proxies", 1994, Computer Networks and ISDN Systems, Vol. 27, 147-154, p.147.

website has an IP address that consists of numbers that computers use to communicate with each other, e.g., 66.220.144.0)¹³¹. The need for DNS servers is simple- it is easier to remember the colloquial name of a website, such as Facebook, than its IP address, which can be as short as four number, and as long as ten. If you enter the string of numbers associated with a web page, you will still be directed to that website, but it using a websites hostname is usually easier for humans - unlike computers, humans do not communicate in reciting numbers that represent ideas.

Usually, when an ISP is ordered to block a certain website, it blocks the website on its DNS server by blocking access to the IP address. To use a more approachable example, the ISP's DNS server is like a phone book, and if the ISP blocks a website, its phone number is removed. Thus, to avoid such a simplistic block, pirates may change their DNS servers and access it indirectly by using a different "phone book". For example, Google offers its own DNS servers, which can be used freely, but if google has also blocked the IP address, then it is as simple as switching to yet another DNS server.

4.4. Cloud storage

Though not exactly a method of circumventing governmental efforts at stopping torrents per se, another popular method of sharing files is the use of cloud storage, such as DropBox, Failiem.lv, IDrive, SugarSync, etc., whereupon a person may store a legally acquired media or software file, and by the use of hyperlinks, post the publish the file for download in various websites, blogs, comment sections, discussion boards, etc. Cloud file storage is an essential part in modern day communication, even this paper was produced by the use of GoogleDocs, which uses GoogleDrive to synchronize the updated version across all of the author's devices, the document is no longer based in a computer's memory, but stored online. What is more, it is possible to allow others access to this document, which, speculatively, might include hyperlinks to illegally acquired media files stored elsewhere.

All of the previously mentioned information is to show that there are many methods for clandestine file sharing, and to stop each and every one of them, though a noble cause, is likely to result in the creation of ever more creative ways of continuing P2P file sharing, and potentially creating methods of keeping one's identity completely anonymous - a prospect feared by institutions combating much more severe crimes committed online, e.g., child pornography, drug cartels, human trafficking, etc., all of which use the internet's darker corners to perpetuate the system. Also, any ISP interference, i.e., blocking of certain sites will probably result in a public backlash due to fear of censorship of the Internet, forcing the people using file sharing networks and various other means to hide their real identities, further complicating copyright enforcement and culpability.

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¹³¹ Seifert, C., et al., "Identification of Malicious Web Pages Through Analysis of Underlying DNS and Web Server Relationships", 2008, IEEE.

Conclusions

The *PirateBay* case of 2017 has introduced an EU-wide solution to combat P2P file sharing networks using the BitTorrent protocol. A crucial part of these networks are the websites indexing, compiling, sorting and managing the torrent files associated to songs, movies, software, etc. The CJEU ruled on the issue of whether these torrent websites are violating EU copyright law as laid down in the InfoSoc Directive of 2001 in the form of "communication to the public". The Court found that as active intermediaries these websites allow for continuation of an immensely effective system of copyright violation, because, although the websites themselves do not possess, or indeed share the copyrighted files, they hold and offer to anyone at any time the keys, i.e., the torrent files, to innumerable P2P networks associated with these files. And because most of the servers that host these websites are located outside local jurisdictions and are inaccessible to local law enforcement, the only effective recourse is to force local ISPs, two of which are parties to the *PirateBay* case, to block their subscribers' access to these websites, cutting the flow at a crucial part of the illegal process. The possibility of repeating a similar ruling forcing Latvian ISPs to block torrent websites is high, because, in accordance with Latvian legislation, doctrine and academic view, as well as EU founding treaties and the political will expressed within them, CJEU's interpretations of provisions as found in Directives, Regulations, etc., are binding on all Member States, and a correct approach, pointing to the similitude of factual background ought to result in the effective enforcement of an injunction against ISPs by associations and agencies representing rightholders, thus answering the research question in the positive - due to the economic and political need, the perceived freedom of expression and right to information must and indeed can be tamed in order to enforce the rights of creators and related right holders.

The goals of this paper were to find out the causes for this phenomenon of blatant copyright violation committed by millions of people worldwide, and how it is possible that Latvia takes the first place in the global piracy report of 2016. The causes that could explain the low protection of online copyrights (i.e., ineffective protection as proven by the statistics shown my MUSO) might have been lack of a clear legislative framework, but that is not the case - copyrights are protected in all instances of the law (civil, administrative and criminal codes of Latvia) and the law reflects all the international and EU norms. The Latvian state is empowered to combat online piracy but the biggest obstacle is the lack of political will, which results in not enough finances being diverted to supporting the state police - the only current combatants against copyright infringement. This could be resolved by private law firms cashing in on the representation of copyright holders like they do in Germany, but this market segment seems completely ignored maybe due to the fact that no one has tried creating a streamlined method(from noticing copyright infringement in torrent software to a court order forcing ISPs to reveal the real identity behind an IP address, to litigation for the recovery of financial loss and damages) of sanctioning end users through the civil procedure.

The future seems to lie in empowering local copyright agencies to create an injunction against popular file sharing websites, forcing ISPs to block them from their subscribers' access. This method may well result in lowering online piracy rates, but outside knowing the few well-known purely torrent websites, there are many places and methods an end user can access torrent files, either through hyperlinks published anywhere or the use of VPNs, different DNS servers, lists of proxies and mirrors.

This current situation is rooted in the frail balance being fought over by the tripartite interaction of copyright holders, ISPs and end users - each fighting for their own truth and rights. Questions of balancing rights, such as right to property, freedom of expression, freedom of business are at the forefront in finding a solution that would not be unfair to any of the parties. Yet, as the losses from online piracy grow, it seems that it will be the end users who will bear most of the limitations to their previously untamed freedom. But this should not be surprising to anyone - in the end, 46% of the online community in Latvia are pirates and piracy is "bad".

Appendix

Annex I Laws and their provisions as mentioned in the paper

Law of Latvia

Law	Substance
Law Copyright Law	Section 15. Economic Rights of an Author (1) With respect to the use of his or her own work, an author, except the author of a computer program or a database, has following exclusive rights: 1) to communicate the work to the public; 2) to publish the work; 3) to publicly perform the work; 4) to distribute the work; 5) to broadcast the work; 6) to retransmit the work; 7) to make the work available to the public by wire or by other means, so that it is accessible in an individually selected location and at an individually selected time; 8) to lease, rent or to publicly lend originals or copies of a work, except for three-dimensional architectural works and works of applied art; 9) directly or indirectly, temporarily or permanently reproduce the work; 10) to translate a work; 11) to arrange, to adapt for stage or screen, or to otherwise transform a work. (2) With respect to the use of a computer program, the author of a computer program has the following exclusive rights: 1) to distribute the computer program; 2) to make the computer program available to the public by wire or by other means, so that it is accessible in an individually selected location and at an individually selected time; 3) to lease, rent or to publicly lend the computer program; 4) to temporarily or permanently reproduce the computer program (insofar as the loading, demonstration, use, transmission or storage of the computer program requires its reproduction, if permission for such action has been granted in writing by the rightholder); 5) to translate, adapt and in any other way transform the computer program and reproduce
	the results obtained thereby (insofar as it is not contrary to the rights of the person who transforms the computer program). (3) With respect to the use of a database, the author of a database has the following exclusive rights to permit or prohibit: 1) the communication to the public or demonstration of the database; 2) the distribution of the database; 3) to make the database available to the public by wire or by other means, so that it is accessible in an individually selected location and at an individually selected time; 4) the temporary or permanent reproduction of the database; 5) the translation, adaptation or transformation in any other way of the database, as well as the reproduction, distribution, communication to the public, demonstration or display of the results of such activities. (4) The author has the right to use his or her work in any manner, to permit or prohibit its use, receive remuneration for permission to use his or her work and for the use of the work except in cases provided for by law.
	Section 34. Blank Tape Levy (1) Without the permission of the author, a natural person shall be permitted to reproduce (including in a digital format) in one copy works that have been included in lawfully acquired films or phonograms or in other form of expression that is to be protected, as well as visual works for personal use without direct or indirect commercial purpose. Third persons shall not be involved in the production of such copy. The author is entitled to receive a fair compensation (blank tape levy) for the production of such copy.

- (2) The blank tape levy for the reproduction for personal use shall be paid by the manufacturers of equipment and blank recording media to be used for such reproduction and by persons who import them in Latvia.
- (3) The blank tape levy shall not be paid if the equipment and blank recording media referred to in Paragraph two of this Section is imported for professional use by broadcasting organisations or the equipment and blank recording media are imported wholesale for reproduction of works for commercial purposes, as well as where natural persons import such equipment and blank recording media for non-commercial purposes.
- (4) If the equipment and blank recording media referred to in Paragraph two of this Section are exported unused from Latvia, persons who have paid the blank tape levy have the right to receive it back.
- (5) The seller of the equipment and blank recording media referred to in Paragraph two of this Section, on the basis of a request from a collective management organisation, has a duty to prove that the blank tape levy for the abovementioned equipment and blank recording media has been paid.
- (6) If a seller cannot prove that the blank tape levy has been paid, the seller shall pay such levy. In such case, the seller is entitled to bring a subrogation action against the manufacturer or the person who imported the referred to equipment and blank recording media into Latvia.
- (7) The amount of the blank tape levy, procedures for collection, repayment and payment of the levy, as well as proportional distribution among authors, performers and phonogram and film producers shall be determined by the Cabinet.
- (8) The provisions of this Section shall not apply to computer programs and data bases.

Section 47. Rightholders and Related Rights Objects

- (1) Related rights are the rights of performers, phonogram producers, film producers and of broadcasting organisations.
- (2) The related rights objects are performances, and their fixations, phonograms, films and broadcasts.
- (3) The rightholders specified in this Section are performers, phonogram producers, film producers, and broadcasting organisations or their successors in title and heirs.
- (4) Cable operators who only retransmit the broadcasts of other broadcasting organisations are not rightholders.

(..)

- (10) In relation to the use of a related rights object, the provisions of Sections 40-45 of this Law shall be applied.
- (11) Rightholders shall exercise their rights directly, through an authorised person, or through collective management organisations.

Criminal Law

Section 148. Infringement of Copyright and Neighbouring Rights

- (1) For a person who commits infringement of copyright or neighbouring right, if such infringement has caused substantial harm to rights and interests protected by law of a person, the applicable punishment is the deprivation of liberty for a period of up to two years or temporary deprivation of liberty, or community service, or a fine.
- (2) For a person who commits the criminal offence provided for in Paragraph one of this Section, if it has been committed by a group of persons according to a prior agreement, the applicable punishment is the deprivation of liberty for a period of up to four years or temporary deprivation of liberty, or community service, or a fine.
- (3) For a person who commits infringement of copyright or neighbouring right if it is committed in large scale or by an organised group, or by compelling, by means of violence, threats or blackmail, the renouncing of authorship, or commits compelling of joint authorship, if it is committed by means of violence, threats or blackmail, the applicable punishment is deprivation of liberty for a period up to six years, with deprivation of the right to engage in specific employment for a period up to five years and with or without probationary supervision for a period up to three years.

Administrative Violations Code

Section 155.8 Unlawful Acts with Objects of Copyright and Neighbouring Rights

In the case of violation of the copyright or neighbouring rights -

a fine shall be imposed on natural persons up to the amount of EUR 700, but for legal persons - up to EUR 7000, with confiscation of the objects and their carriers.

European Union Law

Document	Law	
Charter of Fundamental Rights of the European Union (CFREU)	Article 17. Right to Property () 2. Intellectual property shall be protected	
Directive 2001/29 (InfoSoc Directive)	Article 3. Right of communication to the public of works and right of making available to the public other subject-matter 1. Member States shall provide authors with the exclusive right to authorise or prohibit 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 them from a place and at a time individually chosen by them. ()	
	Article 5 Exceptions and limitations () 2. Member States may provide for exceptions or limitations to the reproduction right provided for in Article 2 in the following cases: () (b) 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;	
Directive 2004/48 (Enforcement Directive)	Article 3 Canaral obligation	
Directive 2000/31 (E-commerce Directive)	Article 15 No general obligation to monitor 1. Member States shall not impose a general obligation on providers, when providing the services covered by Articles 12, 13 and 14, to monitor the information which they transmit or store, nor a general obligation actively to seek facts or circumstances indicating illegal activity. ()	
Directive 2015/1535/EU	Article 1 1. For the purposes of this Directive, the following definitions apply: (b) 'service' means any Information Society service, that is to say, any service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services.	

International Law

Organisation	Treaty	Relevant Law
World Intellectual Property Organisation (WIPO)	Berne Convention	Article 11bis.Broadcasting and Related Rights (1) Authors of literary and artistic works shall enjoy the exclusive right of authorizing: (i) the broadcasting of their works or the communication thereof to the public by any other means of wireless diffusion of signs, sounds or images;
	WIPO Copyright Treaty (WCT)	Article 8 Right of Communication to the Public Without prejudice to the provisions of Articles 11(1)(ii), 11bis(1)(i) and (ii), 11ter(1)(ii), 14(1)(ii) and 14bis(1) of the Berne Convention, 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.
World Trade Organisation	The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement)	Article 1 Nature and Scope of Obligations () 2. For the purposes of this Agreement, the term "intellectual property" refers to all categories of intellectual property that are the subject of Sections 1 through 7 of Part II.3. Members shall accord the treatment provided for in this Agreement to the nationals of other Members. In respect of the relevant intellectual property right, the nationals of other Members shall be understood as those natural or legal persons that would meet the criteria for eligibility for protection provided for in the Paris Convention (1967), the Berne Convention (1971), the Rome Convention and the Treaty on Intellectual Property in Respect of Integrated Circuits, were all Members of the WTO members of those conventions.

Bibliography:

Primary sources

Legislation

Berne Convention for the Protection of Literary and Artistic Works, available at: http://www.wipo.int/wipolex/en/details.jsp?id=12214

Civil Procedure Law of Latvia, Article 5(6), retrieved from: https://likumi.lv/ta/en/en/id/50500-civil-procedure-law

Constitutional Court Law of the Republic of Latvia, Section 32(2), retrieved from: https://likumi.lv/ta/en/en/id/63354-constitutional-court-law

Constitution of the Republic of Latvia, retrieved from: http://www.saeima.lv/en/legislation/constitution

Copyright Law of the Republic of Latvia, available at: https://likumi.lv/doc.php?id=5138

Corrigendum to Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights (OJ L 157, 30.4.2004), retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32004L0048R%2801%29

Criminal Law of the Republic of Latvia, available at: https://likumi.lv/doc.php?id=88966

Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce'), retrieved from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32000L0031

Directive 2001/29/EC of the European Parliament and of the Council on the harmonisation of certain aspects of copyright and related rights in the information society, OJ L 167, 22.6.2001, p. 10–19, available at: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32001L0029

Directive 2015/1535/EU, Art. 1.1(b): "service' means any Information Society service, that is to say, any service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services", OJ L 241, retrieved from: https://eurlex.europa.eu/legal-content/en/TXT/?uri=CELEX:32015L1535

Electronic Communications Law of the Republic of Latvia, available at: https://likumi.lv/doc.php?id=96611

European Union, "Charter of Fundamental Rights of the European Union", retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A12012P%2FTXT

German Copyright Law, Article 101a, retrieved from: https://germanlawarchive.iuscomp.org/?p=855#101a

Latvian Administrative Violations Code, available at: https://likumi.lv/doc.php?id=89648

TRIPS agreement, available at: https://www.wto.org/english/docs_e/legal_e/27-trips.pdf

United States Code, Title 17, "Copyrights", Chapter 1, retrieved from: https://www.law.cornell.edu/uscode/text/17/chapter-1

WIPO Copyright Treaty, available at: http://www.wipo.int/wipolex/en/details.jsp?id=12740

WIPO, "Agreed Statements concerning the WIPO Copyright Treaty", 1996, retrieved from: http://www.wipo.int/treaties/en/text.jsp?file_id=295456

Case law

Anonymized Judgement by the Zemgale District of Riga Court of 11 October 2013, retrieved from: https://manas.tiesas.lv/eTiesasMvc/nolemumi/pdf/132305.pdf

Judgement of the CJEU (Fourth Chamber) of 10 April 2014, ACI Adam BV and Others v Stichting de Thuiskopie, Stichting Onderhandelingen Thuiskopievergoeding, Case C- 435/12, available

http://curia.europa.eu/juris/document/document.jsf?text=&docid=150786&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=194259

Judgement of the CJEU, 27 March 2014, *UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH*, Case C- 314/12, retrieved from: http://curia.europa.eu/juris/document/document.jsf?text=&docid=149924&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=64365

Judgement of the CJEU, 12 July 2011, L'Oréal and Others, *Case C - 324/09*, para. 138, retrieved from:

http://curia.europa.eu/juris/document/document.jsf?text=&docid=107261&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=186670

Judgment of the CJEU (Second Chamber) of 26 April 2017, *Stichting Brein v Jack Frederik Wullems, acting under the name of Filmspeler*, Case C-527/15, available at: http://curia.europa.eu/juris/liste.jsf?num=C-527/15

Judgment of the CJEU (Second Chamber) of 14 June 2017, *Stichting Brein v Ziggo BV and XS4All Internet BV*, Case No. C-610/15, available at: http://curia.europa.eu/juris/document/document.jsf?text=&docid=191707&pageIndex=0&doclange=N&mode=lst&dir=&occ=first&part=1&cid=1123050

Judgement by the Constitutional Court of the Republic of Latvia, 2 May 2012, *Case No 2011-17-03*, para. 12.2., retrieved from: http://www.satv.tiesa.gov.lv/wp-content/uploads/2011/08/2011-17-03 Spriedums ENG.pdf#search=

Judgment of the ECHR on the merits delivered by the Grand Chamber, *Ashby Donald and others v. France*, 36769/08, 2013, retrieved from: <a href="https://hudoc.echr.coe.int/eng#{"itemid":["001-115845"]}

United States Court of Appeals for the Ninth Circuit, *A&M Records, Inc. v. Napster, Inc.*, 2001, retrieved from: https://www.nylitigationfirm.com/239-f-3d-1004-9th-cir-2001/

Secondary sources

Akamai, "State of the Internet. Q1 2017 report.", 2017, p.34, retrieved from: https://www.akamai.com/us/en/multimedia/documents/state-of-the-internet/q1-2017-state-of-the-internet-connectivity-report.pdf

Athow, D., "What is VPN?", TechRadar, 2017, retrieved from:

https://www.techradar.com/news/what-is-a-vpn

Beal, V., "Mirror Site", 2018, WeboPedia, retrieved from:

https://www.webopedia.com/TERM/M/mirror_site.html

BitTorrent, "Index of BitTorrent Enhancement Proposals", 2008, retrieved from: http://www.bittorrent.org/beps/bep_0000.html

Chenon, R., "File Sharing infringements in Germany", 2016, retrieved from: https://blog.raychenon.com/2016/03/21/file-sharing-violations-in-germany/

CopiePrivee, "Private Copying in Europe", 2018, retrieved from:

http://www.copieprivee.org/en/la-copie-privee-cest-quoi/copie-privee-en-europe/

Cory, N., "How Website Blocking Is Curbing Digital Piracy Without "Breaking the Internet", 2016, ITIF, retrieved from: http://www2.itif.org/2016-website-blocking.pdf

Duah, Ebenezer, *Internet Service Providers' Monitoring Obligations: Recent Developments*, 2012, Masaryk University Journal of Law and Technology, 207-222, available at: <a href="http://heinonline.org/HOL/PDFsearchable?handle=hein.journals/mujlt6&collection=journals§ion=18&id=&print=section§ioncount=1&ext=.pdf&nocover="http://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="http://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="http://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="https://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="https://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="https://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="https://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="https://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="https://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="https://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="https://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="https://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="https://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="https://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="https://heinonline.org/hol/pdf.aprint=section§ioncount=1&ext=.pdf&nocover="https://heinonline.org/hol/pdf.aprint=section§ion.aprint=section§ion.aprint=section§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion§ion&sec

Eurostat. (2016). Information society statistics - households and individuals - Statistics Explained. In Europe in figures - Eurostat yearbook. Eurostat. Retrieved from http://ec.europa.eu/eurostat/statistics-explained/index.php/Internet access and use statistics-households and individuals (Most recent data for 2017 extracted in March 2018, data table available

http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tin00134&plugin=1)

Eurostat, "Price level index for electricity & gas, furniture, household appliances and consumer electronics", 2016, retrieved from: <a href="http://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Price level index for electricity %26 gas, furniture, household appliances and consumer electronics, 2016, EU-28%3D100DEC2.png

Gill, P., "How Torrent Downloading Works", 2018, Lifewire, retrieved from: https://www.lifewire.com/how-torrent-downloading-works-2483513

International Chamber of Commerce, *The Economic Impacts of Counterfeiting and Piracy*, 2016, retrieved from: https://iccwbo.org/publication/economic-impacts-counterfeiting-piracy-report-prepared-bascap-inta/

InternetLiveStats, "Internet Users in the U.S.A. (2016)", retrieved from: http://www.internetlivestats.com/internet-users/us/

ITU, "*Percentage of Individuals Using the Internet*", 2018, retrieved from: https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx

Kluga, M., "*Policijai trūkst kapacitātes cīņā ar interneta pirātiem*", Public broadcasting of Latvia, retrieved from: https://www.lsm.lv/raksts/zinas/latvija/policijai-trukst-kapacitates-cina-ar-interneta-piratiem.a195179/

Lepage, A., "Overview of exceptions and limitations to copyright in the digital environment", 2003, UNESCO, retrieved from:

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwiv2sDp5vraAhXrCJoKHVfID9oQFggoMAA&url=http%3A%2F%2Funesdoc.unesco.org%2Fimages%2F0013%2F001396%2F139696E.pdf&usg=AOvVaw1ABHbexZJduePQy9a2yBV9

Luotonen, A. and Altis, K., "World-Wide Web Proxies", 1994, Computer Networks and ISDN Systems, Vol. 27, 147-154, p.147, retrieved from:

http://courses.cs.vt.edu/~cs4244/spring.09/documents/Proxies.pdf

Manner et al., *The Pirate Bay ruling - when the fun and games end*, Ent. L.R. 2009, 20(6), 197-205, 197, retrieved from:

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwjz18PdtYzbAhWJzaQKHR6SB0UQFggoMAA&url=https%3A%2F%2Fwww.roschier.com%2Fsites%2Fdefault%2Ffiles%2Fthe-pirate-bay-ruling.pdf&usg=AOvVaw0RPcT9PnYY-FWfVfTB91ka

Mikelsone, Gundega, "The binding force of the case law of the Court of Justice of the European Union", MykolasRomeris University, 2013, available at: https://repository.mruni.eu/handle/007/10706

Ministry of Culture of the Republic of Latvia, "Biedrība "Par legālu saturu!" uzsāk pretpirātisma sociālo kampaņu", retrieved from: https://www.km.gov.lv/lv/ministrija/jaunumi/biedriba-par-legalu-saturu-uzsak-pretpiratisma-socialo-kampanu-1691

MUSO, "Global Film, TV Insight Report 2017", 2017, retrieved from: https://www.muso.com/magazine/muso-releases-2017-global-film-tv-insight-report/

MUSO, "Global Piracy Report 2016", (2017) retrieved from: https://torrentfreak.com/europe-has-the-highest-online-piracy-rates-by-far-160801/

MUSO, "Global Piracy Report 2017", (2018) retrieved from: https://www.muso.com/wp-content/uploads/2017/04/MUSO_2017_Global_Sample_Market_Insights_report.pdf

O'brien, D., "Korean Lawmakers and Human Rights Experts Challenge Three Strikes Law", 2013, EFF, retrived from: https://www.eff.org/deeplinks/2013/03/korea-stands-against-three-strikes

Opinion of Advocate General Cruz Villalon, *ACI Adam BV and Others v Stichting de Thuiskopie*, *Stichting OnderhandelingenThuiskopievergoeding*, Case C- 435/12, available at: http://curia.europa.eu/juris/document/document.jsf?text=&docid=146201&pageIndex=0&doclang=EN&mode=1st&dir=&occ=first&part=1&cid=194259

Opinion of Advocate General Campos Sanchez-Bordona, *Stichting Brein v Jack Frederik Wullems*, *acting under the name of Filmspeler*, Case C- 527/15, available at: http://curia.europa.eu/juris/document/document.jsf?text=&docid=186069&pageIndex=0&doclange=N&mode=1st&dir=&occ=first&part=1&cid=193249

Opinion of Advocate General Szpunar, *Stichting Brein v Ziggo BV, XS4ALL Internet BV*, Case C- 610/15, available at: http://curia.europa.eu/juris/document/document.jsf?text=&docid=187646&pageIndex=0&doclang=N&mode=lst&dir=&occ=first&part=1&cid=1123050

Penny, Jonathan W, Technology and Judicial Reason: Digital Copyright, Secondary Liability, and the Problem of Perspective, (2010), 22 I.P.J. 251.

Quintais, João, *Private Copying and Downloading from Unlawful Sources* (October 23, 2014), IIC 2015, 46(1), 66-92, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2513794

Seifert, C., et al., "Identification of Malicious Web Pages ThroughAnalysis of Underlying DNS and Web ServerRelationships", 2008, IEEE, retrieved from: https://ieeexplore.ieee.org/document/4664306/citations

Sirinelli, P and Bensamoun, A., "Copyright Throughout the World", retrieved from Westlaw.

Statista, *Average internet connection speed in the United States from 2007 to 2017 (in Mbps)*, accessed March 2018, available at: https://www.statista.com/statistics/616210/average-internet-connection-speed-in-the-us/

Statista, *Worldwide internet user penetration from 2014 to 2021*, 2018, retrieved from: https://www.statista.com/statistics/325706/global-internet-user-penetration/

Statista, "Global IP data traffic from 2016 to 2021 (in petabytes per month)", retrieved from: https://www.statista.com/statistics/499431/global-ip-data-traffic-forecast/

The Local, "Pirate Bay guilty", 2009, retrieved from: https://www.thelocal.se/20090417/18908

Torrentnote, "List of 2017 Latvian Torrent Websites" and their activity status, 2018, retrieved from: https://torrentnote.lv/latvijas-torrenti

Tyler, anonymous profile, "*July 12th: Net Neutrality Day of Action*", 2017, BitTorrent Blog. http://blog.bittorrent.com/2017/07/11/july-12th-net-neutrality-day-of-action/

University of British Columbia, "*Purchasing Power Parity*", 2016, retrieved from: http://fx.sauder.ubc.ca/PPP.html

Watson, S., "How Kazaa Works", retrieved from: https://computer.howstuffworks.com/kazaa3.html

Weiss, Charles A., Available to All, Produced by Few: The Economic and Cultural Impact of Europe's Digital Single Market Strategy within the Audiovisual Industry Notes, 2016, Columbia Business Law Review, 877-923, available at: <a href="http://heinonline.org/HOL/PDFsearchable?handle=hein.journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016&collection=journals/colb2016

Wiljminga et al., "*International Survey on Private Copying*", 2016, retrieved from: http://www.wipo.int/edocs/pubdocs/en/wipo_pub_1037_2017.pdf

WIPO, "International Survey on Private Copying", 2012, de Thuiskopie, p. 4, retrieved from: http://www.wipo.int/edocs/pubdocs/en/copyright/1037/wipo_pub_1037_2013.pdf

WTO, "Frequently asked questions about TRIPS in the WTO", retrieved from: https://www.wto.org/english/tratop_e/trips_e/tripfq_e.htm