



Assessing Copyright and Related Rights Systems: Unauthorized Use of Copyrighted Works in Digital Form. Report on Piloting in Finland.

This report is the result of the first pilot study implementing Methodology Card 21 – *Unauthorized Use of Copyrighted Works in Digital Form,* one of the 37 indicators constituting a methodology framework for assessing the operation of national copyright and related rights systems. The methodology framework has been developed at the Foundation for cultural policy research (Cupore) in Finland as part of a project financed by the Finnish Ministry of Education and Culture. The pilot study was conducted by the core project team (Tiina Kautio and Nathalie Lefever) between February and December 2015 and its results were first published in December 2015 on the website of Cupore.

A handbook presenting the methodology framework is available on the website of Cupore at www.cupore.fi.

Cupore webpublications 39:35

Kulttuuripoliittisen tutkimuksen edistämissäätiö (Cupore) Foundation for Cultural Policy Research (Cupore) © Authors and Foundation for Cultural Policy Research Cover illustration: Oy Graaf Ab

ISBN 978-952-7200-08-7 ISSN 1796-9263

May 2016

Executive summary

This document presents data collected in application of a methodology framework to assess the operation of copyright and related rights systems. More precisely, the information and analysis below correspond to Methodology Card 21 presented in the methodology handbook, titled "Unauthorized Use of Copyrighted Works in Digital Form". The goal of this report is to provide an overview of the extent of unauthorized use of copyrighted works in digital form and the reasons for engaging in copyright infringement online among Finnish citizens.

In Finland, figures on the level of unauthorized use in the general population have been collected as part of the copyright barometer surveys by Lyhty since 2008 and the studies on self-reported juvenile delinquency by the National Research Institute of Legal Policy in 2008 and 2012. According to the copyright barometer of Lyhty, the percentage of households where unauthorized content had been downloaded in the past year was 16 % in 2008, 2009 and 2010, 21 % in 2011, and decreased the following years until reaching 12 % in 2014 and 2015. Younger respondents are more likely to engage in infringing activities: in the Lyhty study, the share of younger respondents (15 to 24 year old) who admitted downloading unauthorized content was between 45 % and 25 % in the period 2008 to 2015, while in the juvenile delinquency study, 69 % of young people (15 to 16 years old) in 2008 and 71% in 2012 admitted downloading unauthorized content in the past year.

As a comparison, some data that could provide an indication on the legal use of copyrighted digital works in Finland and the business models used in the digital environment in Finland was collected. It seems to indicate that generally speaking, copyrighted products and services are widely available through legal markets and the markets are sufficiently developed to compete with the unauthorized use. In the past few years when the prevalence of unauthorized use seemed to decrease in the general population, the market shares of digital sales in some copyright industries have increased. However, when compared to information on the level of unauthorized use in physical form (see the pilot report applying Methodology Card 20), unauthorized use in digital form seems to be more common in Finland and to have wider effects on the markets of legal products and services.

In order to understand the reasons behind unauthorized use of copyrighted works, the possible motives of copyright infringing activities highlighted in previous studies made in Finland were reviewed. Among the key factors were the availability of works on the legal markets, consumers' willingness to pay, moral considerations (for example concerning the distribution of revenues) and the influence of the social environment. On the other hand, awareness of the law was not an issue and legal deterrents seemed ineffective.

Other findings on specific aspects of the level of unauthorized use have been collected as part of this research. Such studies focusing on specific industries or on financial aspects of copyright infringement online offer useful data to monitor the evolution of unauthorized use in Finland. This report also offers proposals for questions to be included in future surveys directed at the public at large.

It seems that, at a general level, unauthorized use and exchange of copyrighted content online is generally widespread in Finland, much more so than unauthorized exchange of unauthorized use in physical form. However, the volume of unauthorized use seems to have diminished in the past few years, while at the same time digital legal markets have grown. Past surveys concerning the motivations for infringing activities seem to indicate that the availability and quality of the legal offer will encourage consumers to turn to legal options. Copyright infringement online does not seem to be caused by a lack of information and education on copyright issues. Future research might be necessary to study the impact of illegal exchange of copyrighted files on the digital markets, as well as to monitor the evolution of unauthorized exchanges, legal markets and consumers' attitudes in a fast-changing digital environment.

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Introduction

A. CONTEXT OF THE PILOT STUDY

A methodology framework for assessing the operation of national copyright and related rights systems has been developed at the Foundation for cultural policy research (Cupore) in Finland. It is a collection of tools for achieving a systematic assessment of the functioning, performance and balanced operation of national copyright and related rights systems.

In the methodology, the assessment is determined through a framework consisting of so-called description sheets and methodology cards. The description sheets constitute guidelines to produce a comprehensive presentation and description of a country's copyright and related rights system and its operating environment. The methodology cards propose the collection of specific sets of data, either quantitative, descriptive or qualitative, that will be used as indicators of the functioning, performance and balanced operation of the system. Description sheets and methodology cards are accompanied by detailed information on the data to be collected, as well as analysis guidelines that will help connect them to each other.

The methodology framework is meant to be continuously improved through application feedbacks. For more information, see the Cupore website, www.cupore.fi/copyright.php.

This report presents data collected in application of Methodology Card 21 of the methodology framework, titled "Unauthorized Use of Copyrighted Works in Digital Form". It is the result of the first pilot study applying this indicator in Finland.

This study was conducted by the core project team (Tiina Kautio and Nathalie Lefever) between February and December 2015.

B. Presentation of the indicator

The indicator implemented here is part of the third pillar of the methodology framework, "Operational balance of the copyright system", and its fourth area, "Infringement, Opinions and Public Acceptance". It is a methodology card which defines methods for studying unauthorized use of copyrighted works in digital form, in order to support the analysis of the operation of the national copyright and related rights system.

As the volume of physical pirate copies can be the most relevant indicator of the level of unauthorized use of copyrighted works in some countries¹, the unauthorized use in digital form can be another crucial indicator especially in countries where the level of technological development is high². Methodology Card 21 aims at evaluating the volume of unauthorized use of digital works through information on the population acquiring and using unlawful content.

¹ The level of unauthorized use in physical form in Finland was studied in the context of a pilot research based on Methodology card 20. The study focused on estimating the amount of unauthorized physical copies in the Finnish markets. The information was based on the statistics of the Customs, providing data on the number of confiscated products and the number of exposed copyright infringements, as well as information from Lyhty ry on the level of 'physical piracy' (tallennepiratism) in Finland between 2008 and 2012. The report of the pilot study is available on the Cupore website: http://www.cupore.fi/MC20.php.

² The level of the availability of information and communications technologies in the country is covered in Description sheet 3 – *Technological development*.

As comparative information, data on the level of end-use of copyrighted content online, on the size of the digital markets and on the most common digital business models is collected³. Comparison of the levels of authorized and unauthorized use of copyrighted works online will give information on the overall impacts of unauthorized use on the legal markets. Moreover, even though file-sharing through the Internet provides the means for the exchange of large amounts of copyrighted material without intermediaries, it also creates new markets for other kinds of businesses, such as online distribution platforms.

In order to achieve a comprehensive analysis of the data, the different reasons for engaging in copyright infringement also need to be studied, for example through a survey with detailed as well as open-ended questions. The legitimacy of copyright, i.e. the sense of fairness of copyright perceived by the public is likely to affect levels of non-compliance. The level of acceptance of copyright rules and of the copyright system in general is the topic of Methodology card 22 – *Analysis of stakeholders' opinions on the copyright system*.

The fourth parameter proposes to collect information on the economic aspects of copyright infringement online. Such information could include estimates on the number of websites and hosting sites facilitating copyright infringement and analysis on their most common sources of revenue and payment methods. This parameter is designed to shed light on the activities of the intermediaries facilitating copyright infringement. However, due to the complexity of the phenomenon, all the stakeholders that might be involved in copyright infringement are not directly covered in the Methodology card. For example, it does not address the liability of Internet service providers.

In the methodology card, a survey directed to the public at large is proposed as a primary method for collecting the data described above. This pilot study is however based on information gathered through a desktop study based on previous surveys among end-users as well as on objective data on the levels of authorized and unauthorized use. In order to complement the data collected as a desktop study, suggestions for topics to be addressed in a survey directed to the public at large are presented in a separate section.

The interpretation of the results of this study is supported by the data collected in accordance with several other methodology cards and description sheets presented in the methodology. In particular, the results of this methodology card have been compared to certain elements described In Pillar II of the framework, such as enforcement by public and private actors and the sanctions and remedies for copyright infringement (Description sheets 8 and 9). In particular, Methodology card 7 discusses penalties for copyright infringement and the number of court cases, which will provide an indication of the deterrent effect of copyright enforcement. Moreover, the level of online infringement can be influenced by the complexity of the copyright rules and users' awareness of what is allowed and what is not. The results are likely to be affected by the levels of copyright-related information activities and education in the country (see Description sheet 13 – Copyright-related information activities and tis information on anti-piracy campaigns, Methodology card 10 – Public awareness of the rights and Description sheet 14 – Copyright-related education for the public in general).

This study is based on the following topics defined in the methodology card:

- the extent of unauthorized use of copyrighted works in digital form,

³ For comparative information on the size of the markets for copyrighted products and services in physical form, the prices of cultural works and the most common business models, see Description sheet 4 – Markets for copyrighted products and services and Methodology card 2 – The volume of domestic production f copyrighted products and services.

⁴ Among other possible motivations for engaging in infringing behavior online, the public legitimacy of copyright has been questioned as the technological development has blurred the interfaces of different value-creation processes that earlier used to involve only certain stakeholder groups. Access to copyrighted works for follow-on creation is the topic of Methodology card 17.

⁵ The results of this methodology card are for instance connected to all the other topics of Pillar III of the methodology (incentives, access and licensing markets).

- the size of the digital markets (comparative information), and
- the reasons for engaging in copyright infringement (the possible motivations behind copyright infringement online).

A methodology card presenting the indicator can be found in Appendix A of this report.

C. METHODS

The information collected for this indicator is a combination of objective and subjective data. The method chosen in this pilot report is a desktop study reviewing the most useful and recent survey research already available in Finland concerning the level of unauthorized and authorized use of digital copyrighted works, as well as on the reasons for engaging in copyright infringement online. Other types of studies, including research at the international level and data collected in application of other indicators defined in the methodology handbook, have been used when considered applicable. Desktop study was also the method chosen for describing the digital business models most often used in Finland.

The data is complemented with a separate section mapping topics that could be the subject of future surveys. For that purpose, a proposal for a survey questionnaire is presented in Appendix D of this report.

A list of national and international information sources used for this report as well as a list of interviewees and commentators can be found in the Appendices.

Results

This chapter presents an overview of studies made in Finland on the extent of unauthorized use of copyrighted works in digital form. In addition, information on the digital markets and the reasons for engaging in copyright infringement are presented in order to support the analysis.

SECTION 1. THE EXTENT OF UNAUTHORIZED USE OF COPYRIGHTED WORKS IN DIGITAL FORM

This section presents an overview of the most relevant Finnish studies on the prevalence of unauthorized use of copyrighted content in digital form. Figures on the level of online unauthorized use in the general population have been collected as part of the "Copyright Barometer" surveys conducted by Lyhty⁶, a joint project of creative sector artists, employees, and entrepreneurs in Finland. The proportion of young Finnish people sharing protected works online has been the subject of studies on self-reported juvenile delinquency by the National Research Institute of Legal Policy. This section also introduces some international findings shedding light on the prevalence of unauthorized file-sharing globally.

A. COPYRIGHT BAROMETER SURVEYS BY LYHTY

Lyhty (Luovan työn tekijät ja yrittäjät), a co-operation project of the Finnish creative industries, has published yearly "copyright barometer" surveys (*Tekijänoikeusbarometri*) on copyright and unauthorized use since 2004. The surveys have been conducted annually by Taloustutkimus. The surveys have included questions on the volume of online piracy (nettipiratismi), the piracy of physical products (tallennepiratismi) and the opinions concerning unauthorized use. The following data presents an overview of their results related to the levels of online piracy concerning the period of 2008-2014.

The surveys of 2008 and 2009 were conducted as telephone interviews. According to the results of the barometer in both years, unauthorized content had been downloaded in 16 % of the Finnish households (either by the respondent or a family member). The figure was 34 % among the young respondents (15 to 24 year olds). These results however differ from the rest time series data: the questions were not limited to downloads made during the previous year.

Since 2010 the information for the surveys has been collected through face-to-face interviews. The study of 2010 had a larger group of respondents (n=3007) and the set of questions differed from the questions of the other years. Therefore, the results are not directly comparable with the rest of the data in the time series. According to the results of that year, unauthorized content had been downloaded in 16 % of the households and in 45 % of the households of young respondents aged 15 to 24 years. The study included also questions on the unauthorized downloading of different kinds of works. Of those respondents who had downloaded illegal content, 82 % had downloaded music, 57 % movies, 27 % games and 28 % computer programs.

The results of the 2011 barometer showed that unauthorized content had been downloaded in 21 % of Finnish households and in 47 % of the households of young (15 to 24 year old) respondents. However, the barometer of 2012 showed a downward trend in the level of piracy: unauthorized content had been downloaded in 15 % of Finnish households and in 32 % of the households of young (15 to 24 year old) respondents. The figures for 2013 were 13 % for all households and 33 % for the households of young respondents.

⁶ Luovan työn tekijät ja yrittäjät

⁷ The Copyright barometer surveys by Lyhty are available online at www.kulttuuri.net/gallupit (in Finnish only). Visited on 30.1.2015.

Figures concerning the level of unauthorized use continued to drop the next year: according to the 2014 barometer, unauthorized content had been downloaded in 12 % of the Finnish households and in 25 % of the households of young (15 to 24 year old) respondents. However, in 2015, the number of respondents who admitted downloading unauthorized content remained stable (with a slight increase to 29% in the case of respondents between 15 and 24 years).

Table 1. Downloading of unauthorized files by the Finnish 15 to 79 year old population: Copyright barometer (Conducted by Taloustutkimus and commissioned by Lyhty)		
	r has a member of your family do or computer game in the Intern	
	% of all respondents who answered positively	% of the 15 to 24 year old respondents who answered positively
2008	16	34
2009	16	34
2010 9	16	45
2011	21	47
2012	15	32
2013	13	33
2014	12	25
2015	12	29

The Barometers of 2014 and 2015 included a separate question concerning the use of illegal streaming services. Respondents were asked whether they or a member of their family had "watched a movie, listened to music or played a computer game provided on the Internet through illegal services" 10. The answer was positive for 16 % of respondents in 2014 and 14 % in 2015. Furthermore, in 2015, altogether 35 % of 15 to 24 year old respondents admitted to illegal streaming. Streaming seems therefore to be the most common form of unauthorized use. 11

⁸ Original texts in Finnish: 2008 and 2009: "imuroinut internetiin luvatta laitettua musiikkia, elokuvan tai tietokonepelin"; 2010: see below; 2011-2014: "ladannut internetiin luvatta laitettua musiikkia, elokuvan tai tietokonepelin viimeisen yhden vuoden aikana".

The data from years 2008 and 2009 was collected through phone interviews. Moreover, the questions didn't concentrate on the downloading that took place in the previous year. Since 2010, the data was collected through face-to-face interviews. This should be taken into account when analyzing the time-series data.

The margin of error of the studies has been, on average, +/- 3.2 percentage points. The number of respondents was around 1000 each year. However, in 2010 the number of respondents was 3007. The surveys are available online at http://www.kulttuuri.net/gallupit. Visited on 15.5.2015.

⁹ In 2010, a broader set of questions on piracy was asked. The question on unauthorized downloading was formulated in a different way: "I would now ask you to evaluate, on average, how many unauthorized files such as music, games, movies, TV series or computer programs, are downloaded from the Internet in your household each month" (original question in Finnish: "Pyytäisin teitä nyt arvioimaan, kuinka monta Internetiin ilman lupaa laitettua tiedostoa, kuten musiikkia, pelejä, elokuvia, tv-sarjoja tai tietokoneohjelmia kotitaloudessanne ladataan keskimäärin kuukauden aikana."). Therefore, the results are not directly comparable with the other results presented in this table.

¹⁰ Original text in Finnish: "Itse tai perheenjäseneni ovat katselleet, kuunnelleet tai pelanneet internetin laittomissa palveluissa luvatta tarjolla olevaa musiikkia, elokuvaa tai videopeliä".

¹¹ Source: Copyright Barometer 2015, main findings available at http://www.lyhty.info/gallupit/?itemid=338481&a=viewItem. Visited on 1.12.2015.

B. STUDIES ON SELF-REPORTED JUVENILE DELINQUENCY BY THE NATIONAL RESEARCH INSTITUTE OF LEGAL POLICY

The National Research Institute of Legal Policy has conducted studies on self-reported juvenile delinquency in Finland. ¹² The series of nationally representative self-report surveys are made among the Finnish 15 to 16 year old adolescents. The first sweep was conducted in 1995, and questions on the unauthorized use of copyrighted works online were included for the first time in 2008.

Based on data from the 2008 sweep (n=5 826), it was found that 74 % of the Finnish 9th grade students in the sample had downloaded illegal files on the Internet (from websites or peer-to-peer networks). Of those adolescents who had downloaded illegal files during the last 12 months (69 % of the respondents in total), 29 % downloaded such files daily or almost daily, 30 % 1-2 times a week, and 22 % 1-2 times a month. The types of content downloaded were typically mp3-files (music) with 96 % prevalence, followed by movies and TV-series (46 %), games (24 %) and other software (20 %). The level of illegal downloading was slightly higher among boys (73 % had downloaded files in the last 12 months) than among girls (65 % had downloaded files in the last 12 months). The frequent users of peer-to-peer networks were, however, mostly boys.

The 2008 sweep also included questions on the awareness of the law and the attitudes towards downloading. The majority (75 %) of those respondents who had engaged in unauthorized downloading knew that it was against the law. 47 % of the sample considered "uploading a copyrighted file to the Internet, so that everyone could download it" as morally questionable, while 26 % felt this was the right thing to do. Overall, it was found that only a small proportion of peer-to-peer users are delinquent outside the virtual world. This can be explained by the prevalence of unauthorized use among the Finnish 15 to 16 year olds. However, based on the replies of those respondents who downloaded often, active peer-to-peer downloading was found to correlate very strongly with other forms of delinquency.¹³

In a more recent study report published in 2012, unauthorized downloading among Finnish adolescents was studied further. Based on this survey (n=4 855), 79 % of the Finnish 9th grade students in the sample had downloaded illegal files. Furthermore, 71 % of the Finnish 9th grade students had downloaded illegal files during the last 12 months; among these respondents, 19 % downloaded files daily or almost daily and 24 % 1-2 times a week. The level of unauthorized downloading (downloaded files in the last 12 months) was 73 % for boys and 69 % for girls.¹⁴

¹² See the website of the National Research Institute of Legal Policy (in Finnish) at http://www.optula.om.fi/fi/index/tutkimusalueet/kriminologinenyksikko/nuorisorikollisuuskyselyt.html. Visited on 3.12.2015. The National Research Institute of Legal Policy was replaced with the Institute of Criminology and Legal Policy at the University of Helsinki on 1.1.2015.

¹³ Source: Venla Salmi (ed.), Self-reported juvenile delinquency in Finland 1995–2008: Summary, National Research Institute of Legal Policy, Research Report No. 246 (2009), available at http://www.optula.om.fi/material/attachments/optula/julkaisut/tutkimuksia-sarja/cqNgvn4QJ/summary_nuorten_rikoskayt.pdf, p. 211-213. Visited on 13.5.2015.

¹⁴ Sources: Venla Salmi, Nuorten rikoskäyttäytyminen ja uhrikokemukset 2012, OPTL:n tutkimustiedonantoja 113 (2012), available at http://www.optula.om.fi/fi/index/julkaisut/tutkimustiedonantoja-sarja/nuortenrikoskayttaytyminenjauhrikokemukset2012.html, and Venla Salmi, Katsaus nuorten rikoskäyttäytymiseen ja uhrikokemuksiin 2012. OPTL:n verkkokatsauksia 27/2012 (2012), available at http://www.optula.om.fi/fi/index/julkaisut/verkkokatsauksia-sarja/katsausnuortenrikoskayttaytymiseenjauhrikokemuksiin2012.html. Visited on 13.5.2015.

	orized downloading by Finnish 9th udies on self-reported juvenile del Research Institute of Lega	inquency in Finland (The National
	"Had downloaded illegal files" (in their lifetime), % ¹⁵	"Had downloaded illegal files" during the last 12 months, % ¹⁶
2008 (n=5 826)	74	69
2012 (n=4 855)	79	71

C. OTHER FINDINGS ON THE LEVEL OF UNAUTHORIZED USE

Only a limited amount of information is available concerning the levels of online unauthorized file-sharing for different types of copyrighted works. Concerning musical works, the International Federation of the Phonographic Industry (IFPI) has published statistical information on the level of unauthorized use in the music industry in its 2015 Digital Music Report: "Based on data from comScore and Nielsen, IFPI estimates that 20 per cent of fixed-line internet users worldwide regularly access services offering copyright infringing music. Digital piracy is constantly evolving and takes many forms including distribution of unauthorized music through platforms such as Tumblr and Twitter, unlicensed cyberlockers, BitTorrent file-sharing and stream ripping. IFPI estimates that in 2014 there were four billion music downloads via BitTorrent alone, the vast majority of which are infringing, and this does not take into account other channels such as cyberlockers, linking sites and social networks."¹⁷

Some data is also available on the level of infringing file-sharing concerning protected software. According to the BSA Global Software study (2014), the rate at which PC software was installed without proper licensing in Finland was 24 % in 2013. The figure has remained constant during the last decade, the rate remaining at 25 % in 2007, 2009 and 2011. The average rate of unlicensed software installations in Western Europe was 29% in 2013, slightly decreasing from the rate of 32 % in 2011. On the other hand, the global rate of unlicensed software installations was 43 % in 2013.¹⁸

Instead of focusing on the share of users infringing copyright or on specific types of works, NetNames (formerly known as Envisional) has conducted studies on the bandwidth usage across the Internet and the degree to which that usage infringes copyright.¹⁹ The study conducted for the 2013 report focused on three regions that comprise 82.6% of all Internet users and 95.1% of all bandwidth consumed: North America, Europe, and Asia-Pacific. The analysis is based on all Internet ecosystems commonly used to obtain infringing material (such as bittorrent, video streaming, cyberlockers, and other file sharing networks). According to the findings, 25.9 % of the Internet users in all three regions aged 15 or above explicitly sought infringing content during January 2013. In 2012, the infringing bandwidth use was

Original questions: 2008: "Oletko koskaan elämäsi aikana luvattomasti ladannut internetistä tai vertaisverkosta (esim. Bittorrent, Kazaa, DC++, eMule, Limewire) musiikkia, elokuvia, TV-ohjelmia, pelejä tai ohjelmia?"; 2012: "Oletko koskaan elämäsi aikana luvattomasti ladannut internetistä tai vertaisverkosta musiikkia, elokuvia, TV-ohjelmia, pelejä tai ohjelmia?"

¹⁶ Original questions: 2008: "Oletko tehnyt niin viimeksi kuluneen 12 kuukauden aikana, siis viime vuoden huhtikuun jälkeen?"; 2012: "Oletko tehnyt niin viimeisen 12 kuukauden aikana eli viime vuoden helmikuun jälkeen?"

¹⁷ IFPI Digital Music Report 2015, available at http://www.ifpi.org/downloads/Digital-Music-Report-2015.pdf, page 38. Visited on 12.5.2015.

¹⁸ Source: The Compliance Gap: BSA Global Software survey (2014): http://globalstudy.bsa.org/2013/index.html. Visited on 12.5.2015.

¹⁹ The studies were commissioned by NBC Universal and are available at http://documents.envisional.com/docs/Envisional-Internet_Usage-Jan2011.pdf (Envisional: Internet bandwidth usage estimation, 2011) and https://copyrightalliance.org/sites/default/files/2013-netnames-piracy.pdf (NetNames Piracy Analysis: Sizing the piracy universe, 2013). Visited on 12.5.2015.

estimated to represent 26.8 % of the total bandwidth used by the European Internet users (residential and commercial) and 23.8 % of the total bandwidth used by all Internet users in the three regions studied. It was also estimated that almost every piracy-focused site, portals and cyberlockers included in the analysis were run for profit, the major revenue source being advertising.²⁰

SECTION 2. COMPARATIVE INFORMATION CONCERNING THE DIGITAL MARKETS

For the purposes of interpreting the data on the level of unauthorized use, comparison is made to the size of the lawful markets.

A. BUSINESS MODELS IN THE DIGITAL ENVIRONMENT

The typical means of digital distribution are:

- Downloading: acquiring unlimited or limited use of a work in digital form (such as an mp3 file) from a single source by creating a permanent copy of the work for personal use.
- Streaming: content delivery method over the Internet which allows users to consult the material online without making a long-term copy of the file.²¹
- Peer-to-peer distribution: decentralized and distributed architecture that splits up the files to be transmitted into smaller pieces and asks all devices that are part of the network to take part in sending the data forward. This type of distribution is usually associated with unauthorized filesharing among users, but might also offer streaming distribution channels when redesigned to allow for a continuous control on the material distributed.

The use of different digital business models depends on the type of work and the industry. In general, the following digital business models are currently used in Finland²²:

Individual purchases (also called as Electronic Sell-Through and Download-to-own): acquiring and downloading a digital copy of an individual work against a fee. This type of business model is available in Finland for the purchase of various kinds of works, including music²³, movies (although rental is much more common)²⁴ or books²⁵. When purchased, a copy of the work is downloaded for personal use and available offline. However, some of these works are protected

²⁰ Source: David Price, NetNames Piracy Analysis: Sizing the piracy universe (2013), available at https://copyrightalliance.org/sites/default/files/2013-netnames-piracy.pdf, p. 3, 7 and 88. Visited on 12.5.2015.

²¹ The streaming process might result in temporary copies of the material consulted on the user's computer screen and on the Internet "cache" of the computer's hard drive; however, according to the Court of Justice of the European Union (decision of 5 June 2014 in case C-360/13), as long as these copies "satisfy the conditions that those copies must be temporary, that they must be transient or incidental in nature and that they must constitute an integral and essential part of a technological process", there is no infringement of European copyright law.

²² All the websites listed below were visited on 15.5.2015.

²³ At least 10 platforms offer legal downloads of music pieces against a fee in Finland (List compiled by IFPI on the website http://www.pro-music.org/): 7Digital (http://www.7digital.com/), City Market Store (http://www.cm-store.fi/), DigiAnttila (http://digianttila.com/), Emusic (http://www.emusic.com/), Google Play (https://play.google.com/store/music), iTunes (http://www.itunes.com/), Mixradio (http://music.nokia.com/fi/fi), musa24.fi (http://www.musa24.fi/), NRJ Kauppa (http://kauppa.nrj.fi/), XBOX Music (http://www.xbox.com/).

²⁴ Example of platform offering digital copies of movies for sale online in Finland: iTunes, Xbox Video (http://www.xbox.com/fi-FI/video#fbid=KjEcvjV975a)

²⁵ Examples of platforms offering ebooks for sale in Finland: Suomalainen Kirjakauppa (http://www.suomalainen.com), Ellibs (http://www.ellibs.com/), AdLibris (http://www.adlibris.com), Elisa Kirja (https://kirja.elisa.fi/), etc. Several editors also offer their own ebooks for sale on their website.

- by Digital Rights Management systems limiting their use even after they are purchased; for example, they might not be copied, transferred, etc.
- Subscription services: getting unlimited or limited access to content on the basis of a continuous subscription fee. Subscription services are commonly used in the field of online newspapers and magazines, music²⁶ and audiovisual content²⁷. The access is usually granted through streaming and does not include downloading a long-term physical copy, although temporary copies might be included in the service in order to allow for offline access to the content.
- E-rental: getting access to specific content for a limited time period against payment (for example Video on Demand (VOD) services). The content is usually available through streaming for a few days against a one-time fee, similarly to the rental of a hard copy. This type of business model is very popular for movies and other types of audio-visual content²⁸.
- Free on Demand (FOD): services offering access to content on demand for free, funded by other means than payments from consumers such as advertising revenue. This type of services are used most often to provide access to newspapers and magazines, as well as to musical²⁹ and audiovisual content³⁰. Besides FOD services, content can also be offered for free by the right holders themselves, directly available from their website or other platform.
- E-lending: distributing digital content, sometimes for a limited period of time, as part of a general lending service (for example certain services of public libraries). Several Finnish libraries offer access to digital books and/or magazines to their users: the access is often limited to a certain period of time or to certain types of uses (reading, transferring, printing, copying, etc.) through Digital Rights Management tools. Audiovisual material is also sometimes available through this means³¹.
- Catch up services: getting access to content for a limited time period after a live broadcast, usually by the audience of, or the subscribers to the original content. This type of services is particularly common among TV broadcasters in order to offer access to their content online for some time after the original broadcast³².
- Pre-review services: getting access to content before its public broadcast against a fee. This type of business model seems to be rare in Finland³³.

²⁶ Examples of platforms offering subscription services to access music online (List compiled by IFPI on the website http://www.pro-music.org/): Deezer (http://www.deezer.com/), Emusic (http://www.emusic.com/), Google Play (https://play.google.com/store/music), Mixradio (http://music.nokia.com/fi/fi), Napster (http://fi.napster.com/start), Rara.com (http://www.rara.com/), Rdio (http://www.rdio.com/), Spotify (http://www.spotify.com/), XBOX Music (http://www.xbox.com/).

²⁷ Examples of platforms offering subscription services to access movies and/or other types of audiovisual content online: Netflix (http://www.netflix.com), Viaplay (http://viaplay.fi), HBO Nordics (https://fi.hbonordic.com), Filmnet (http://www.filmnet.fi/), Ruutu (http://www.ruutu.fi/).

²⁸ Examples of platforms offering digital copies of movies for rental: Discshop (http://www.discshop.fi/digital), Elisa Viihde (https://elisaviihde.fi/vuokraamo/), CDon.com (http://cdon.fi), iTunes Finland, Viaplay (http://viaplay.fi/vuokraamo), Makuuni (http://www.makuuni24h.fi/), Film2home (https://www.film2home.se/fi.aspx).

²⁹ Examples of advertising supported services providing access to music for free (through streaming, some of them with associated video): Deezer (http://www.deezer.com/), Muzu.tv (http://www.muzu.tv/fi), Spotify (http://www.spotify.com/), Vidzone (http://www.vidzone.tv/), YouTube (http://www.youtube.com/).

³⁰ Examples of platforms providing free movies on demand: Youtube (www.youtube.com), Popcornflix (http://www.popcornflix.com/),

³¹ For example, the Helsinki Metropolitan Area Libraries network (https://www.helmet.fi/en-US) offers access to digital music and movies through third-party online platforms.

³² A list of catch-up TV services available in Finland is presented in the "On-demand audivisual services available in the country" section of page on Finland in MAVISE – Database on TV and on-demand audiovisual services and companies in Europe: http://mavise.obs.coe.int/country?id=13

³³ For example, MTV Katsomo (http://www.katsomo.fi/) offers the Finnish TV series Salatut elämät as a pre-review subject to a charge.

- Bundling: the content being sold together with other products or content such as a device needed for experiencing the content³⁴ or a package including various types of contents and means of access³⁵.

Digital business models are rather different in the software industry, as a result of the technical specificities of the protected works. According to a survey concerning the software industry and published annually by Aalto University School of Science³⁶, the two main types of digital distribution of software in Finland are Application Service Provisioning and Software as a Service. Application Service Provisioning (ASP), also known as "cloud computing", is a business activity consisting in hosting and providing computer-based services to customers over a network; in other words, the software is not provided physically to the client but customers rent the use of the application and access it over the Internet or via a private line connection. Software offered using an ASP model is also sometimes called Software as a Service (SaaS). The revenues of the software industry resulting from this business model represent a percentage varying between 11 and 14 during the period 2007-2011³⁷.³⁸

B. SIZE OF THE DIGITAL MARKETS FOR COPYRIGHTED CONTENT

In order to be able to interpret the data on the unauthorized use of digital copyrighted works presented above, this section offers information on the size of the legal markets for comparison. No precise data was found on the frequency of online purchase of copyrighted content by Finnish citizens, and this could be a topic of future studies (see Section 4). However, some previous studies offer indications on the size of the legal digital markets for copyrighted works in Finland.

An annual survey commissioned by the Private Copying Levy Advisory Committee³⁹ provides information on the legal use of copyrighted digital works in Finland. The objective of the surveys is to determine the amount of private copying in Finland. Only legal private copying, as defined by the Copyright Act, is included in the figures: this covers private copying of music and videos from original sources but not licensed material bought online, therefore providing only an indication on the size of the legal markets.⁴⁰ The 2014 survey was conducted as part of the Omnibus consumer survey of Taloustutkimus, through face-to-face interviews with 3056 consumers aged between 15 and 79 years. Based on its results, altogether 1.6 million Finns copy music, movies and TV-programs for private use. The total amount of private copying was estimated to be approximately 458-525 million music and video files. The findings also included data on the use of different services online: based on the results, almost 1.4

³⁴ For example, the music service Mixradio (http://www.mixrad.io) is available for free only to users of Lumia and Nokia products.

³⁵ For example, MTV Total (http://www.mtvtotal.fi/) is a package including, for a single subscription fee, access to a selection of TV channels and libraries of video-on-demand.

³⁶ "The Software Industry Survey"; See Mikko Rönkkö & Juhana Peltonen, *Software Industry Survey 2012*, Aalto University School of Science, June 6 (2012), p. 18 (http://www.softwareindustrysurvey.fi/ReportFinland2012.pdf).

³⁷ For more information, see the pilot report on Methodology card 4 – *Development of digital business models and income based on digital distribution*, available on the Cupore website: http://www.cupore.fi/MC4.php

³⁸ Moreover, according to the results of a survey conducted in 2011 among COSS (The Finnish Centre for Open Source Solutions) member companies, the most common business models among the respondents were services (53 percent), subscription services (18 percent), SaaS (12 percent), open core, integration to software (6 percent), dual licensing (6 percent), and subcontracting within other business models category (6 percent). The pilot study was conducted by Mikko Karaiste as part of the piloting of Methodology card 4 – Development of digital business models and income based on digital distribution. The pilot report is available on the Cupore website: http://www.cupore.fi/MC4.php.

³⁹ The Private Copying Levy Advisory Committee is an unofficial body comprised of stakeholders of the private copying levy, established by Teosto (the Finnish Composers' Copyright Society), the organization that was approved by the Ministry of Education and Culture to administer the collection and overall distribution of the proceeds of the levy.

⁴⁰ The survey covers private copying of music and videos from original sources, including copying from friends and family members. Licensed material bought online, material downloaded from illegal sources, automatic back-up copying, self-made music and videos, as well as the copying of music or video material for professional use fall outside of the scope.

million Finns use either Spotify or some other similar streaming service, 1.3 million Finns use Internet cloud storage services, over 900 000 Finns use a monthly charged subscription VOD service, 95 % of Finns watch live TV broadcasts and 60 % of Finns watch Internet TV broadcasts.

The size of the digital markets for copyrighted products and services has also been evaluated as part of the pilot report on Methodology Card 4 – Development of digital business models and income based on digital distribution. The data collected does not directly provide information on the size of the markets but evaluates the proportion of digital distribution in different copyright-related industries. In the field of digital music, sales figures concerning IFPI Finland members⁴² indicate that the market share of digital sales concerning Finnish music recordings has evolved from 4.6 % in 2007 to 27.4 % in 2012⁴³. Concerning books and literature, according to the Finnish Book Publishers Associations (FBPA)⁴⁴, the value of digital sales of the association's members has increased from 2.6 % (of the total sales) in 2007 to 5.7 % in 2012. In the field of press, according to the Finnish Newspapers Association, the share of digital sales in the net sales of newspapers (circulation and advertising) of their members⁴⁵ in 2012 was just over 4 % (net sales were 1.081 billion)⁴⁶. Concerning software, a survey published annually by Aalto University School of Science estimates the share of the two main types of digital distribution of softwares, ASP and SaaS, to vary between 11 and 14 % of the total distribution during the period 2007-2011. In the field of audiovisual products and services, the Finnish Mass Media Statistics estimated the share of web services in the total revenue of the television industry at 2.1 % in 2010. No information was found online concerning the proportion of revenue based on digital distribution in the game industry, but digital distribution has been at the core of its important development in the recent years.⁴⁷

Section 3. The reasons for engaging in copyright infringement

The reasons behind unauthorized use of copyrighted works need to be understood in order to interpret the figures presented in the previous sections. This section outlines possible motives and causes of copyright infringing activities highlighted in previous studies. In addition, survey questions are suggested for the purposes of performing a comprehensive inquiry on the question.

A. AVAILABILITY OF WORKS

The availability of works from the legal markets has its effects on the attractiveness of unauthorized use. When search costs of legal products are high or copyrighted materials are not available by legal means, the attractiveness of selecting an unauthorized copy is likely to grow.

⁴¹ Source: Taloustutkimus Oy, *Private copying in Finland 2014*, available on the website of Teosto/Hyvitysmaksuyksikkö http://www.hyvitysmaksu.fi/Teosto/hymysivut.nsf/0/65795BB7B2D9F6D1C2257D7700367054?opendocument. Visited on 12.5.2015.

⁴² IFPI members represent 95% of the total Finnish music market.

⁴³ Comparison with data provided by Statistics Finland concerning the years 2007 to 2010 seems to indicate that these proportions might be slightly underestimated.

⁴⁴ The FBPA represents about 80% of commercially published titles and over 90% of book sales in Finland.

⁴⁵ The Finnish Newspapers Association has 142 members. The member organizations consist of newspaper and city newspaper publishers, groups of companies, distribution companies, news and photo agencies, marketing companies and printing works. The association's members publish 184 newspapers and 56 city newspapers. Source: http://www.sanomalehdet.fi/sanomalehtien_liitto/in_english. Visited on 26.2.2014.

⁴⁶ Source: Suomen Lehdistö 6–7/2012, by The Finnish Newspapers Association.

⁴⁷ See for example Neogames, *The game industry of Finland: Report 2014*, (2015), p. 11 available at http://www.neogames.fi/wp-content/uploads/2015/02/Neogames_report2014_web.1.pdf. Visited on 22.5.2015.

The perceived difference between the catalogues of works available legally and illegally has been shown to influence the consumption of pirated materials. In a 2007 Finnish study concerning online piracy, over 80 % of the participants thought that there are works available in P2P (Peer-to-Peer) file sharing sites that are not available in digital download stores⁴⁸. More than 80 % of the respondents were also aware that they can watch shows from file sharing networks before they are broadcasted on Finnish TV. These beliefs were shown to strongly incentivize the consumption of pirated materials, and according to some analysts, "this finding is indicative that file sharers observe a significant disparity in the catalogs of works available legally and illegally and in the case of movies, a substantial delay between worldwide cinematic and home release"⁴⁹.

In addition, the perceived quality of pirated materials compared to legal alternatives has also been cited as a factor influencing users' attitudes towards copyright infringement. It has long been considered that file sharing is often used for the exchange of content of lower quality than available for purchase, and that illegal downloads are sometimes dangerously infected by malware⁵⁰. Surveys suggest that "consumers with a more negative outlook on illegal content and a more positive view of legal download services are significantly less likely to pirate large quantities of music and movie files.⁵¹" However, in the case of Finland, this factor might not be crucial: already in 2007, only about 20 % of the respondents at least "somewhat" agreed to the statement that the files downloaded from P2P file sharing sites often are of poor quality⁵². Since then, the availability of broader bandwidth and larger computer memory have increased the possibility of illegally sharing high quality content.

Finally, another factor concerning the availability of legal and illegal copyrighted material is the difficulty in locating and accessing legal content online. A study entitled *Do Search Engines Influence Media Piracy?* published in 2014 by Carnegie Mellon University in the US revealed that "the presence of pirate or legal links in search results strongly influences the behavior of both the general and college-aged populations: users are more likely to choose a legal option to acquire the movie when legal sites are promoted, and users are more likely to choose a pirate option when piracy links are promoted". The results were quite striking: 94 per cent of Internet users presented with search results that mostly linked to licensed services purchased a film, while only 57 per cent did so when presented with results that mostly linked to infringing services.⁵³ Moreover, according to another international consumer study

⁴⁸ The study was conducted in August 2007 by Herkko Hietanen, Anniina Huttunen and Heikki Kokkinen from the Helsinki Institute of Information Technology (HIIT) through an online survey advertised on media websites and in technology and business magazines. Its purpose was to find out P2P (peer-to-peer) users attitudes toward copyright and P2P services. The advertisement process partly led to a selection of the respondents to users of file sharing services: 87% of the participants had used P2P file sharing sites and three quarters of the respondents had downloaded unauthorized music or videos. Although the self-selecting and self-admission nature of the survey limit its statistical representativeness, and the technical situation as well as the availability of legal and illegal material has changed since 2007, this study provides useful insights into the motivations of online illegal file sharing. See H. Hietanen, A. Huttunen & H. Kokkinen, "Criminal Friends of Entertainment: Analysing Results from Recent Peer-to-Peer Surveys", 5:1 SCRIPTed 31 (2008), p. 43, available at http://www.law.ed.ac.uk/ahrc/script-ed/vol5-1/hietanen.asp. Visited on 27.4.2016.

⁴⁹ Joe Cox & Alan Collins, *Sailing in the same ship? Differences in factors motivating piracy of music and movie content*, Journal of Behavioral and Experimental Economics, Volume 50, June 2014, page 72. The article analyses the findings of the 2007 study by Hietanen, Huttunen and Kokkinen (2008), see above.

⁵⁰ See for instance: Parameswaran M., Susarla A. & Whinston, A.B., *P2P networking: an information sharing alternative*, Computer (Volume 34, Issue 7), 2001, p. 34. Even when the files themselves are not infected, the websites that make them accessible might be a source of danger. A recent study on 622 websites available in Europe and offering access to unauthorized copyrighted content found that "just under one-third of the total number of "adverts" viewed in this study were in the trick button/malware category, where a click on the "advert" could potentially infect the user's computer with malware and bots, potentially perpetrating fraud and possibly compromising user data." Source: Incopro (2015), p.3.

⁵¹ J. Cox & A. Collins (2014), page 72.

⁵² H. Hietanen, A. Huttunen & H. Kokkinen (2008), p. 44.

⁵³ Sivan, Liron and Smith, Michael D. & Telang, Rahul, Do Search Engines Influence Media Piracy? Evidence from a Randomized Field Study (September 12, 2014). Available at SSRN: http://ssrn.com/abstract=2495591 or http://dx.doi.org/10.2139/ssrn.2495591

carried out by IPSOS in January 2015 and commissioned by IFPI, "53 per cent of those surveyed agreed that licensed services should appear above pirate sites in search engine results" ⁵⁴.

It seems therefore that the development of easily accessible legal online services offering attractive catalogues of works in a timely manner would have the power to limit the exchange of unauthorized content. As legal markets are being developed to meet the new business environment and consumer demands, unauthorized use is likely to become less appealing.

B. WILLINGNESS TO PAY

Probably the most obvious reason for engaging in online piracy is the possibility to access copyrighted material for free. It has been found that "perceived monetary and time savings strongly incentivize the consumption of larger volumes of pirated materials.⁵⁵" As a result, the development of consumer prices and the pricing models of companies is one essential element to study in order to understand the reasons behind copyright infringement.

Certain business decisions seem to have lowered the attractiveness of legal goods and services as compared to unauthorized copies. Consumers have not always been willing to pay for goods and services with restrictions on the use (for example allowing to make a certain amount of private copies only or restricting the use to merely certain formats or kinds of devices by the means of technological measures). The 2007 Finnish study found that respondents who had not used web stores considered "technical protection measures" as the main reason for this, with price coming second⁵⁶. Another interesting finding was that at least a part of consumers were willing to open their wallets, even in the P2P environment: almost 80% of the respondents were interested in, and almost 50% of the respondents would be willing to pay monthly for, a service that enabled unlimited music and video file-sharing and downloading (but not with digital restrictions on the use of the files). Researchers therefore concluded that "The zero price was only one reason among others as nearly half of the respondents were willing to pay monthly for a service that enabled unlimited music and video file sharing and downloading."⁵⁷

C. AWARENESS OF THE LAW AND EFFECTIVENESS OF LEGAL DETERRENTS

Based on the results of studies previously made in Finland, it seems that in general it is known that downloading copyrighted digital content online can be illegal. For example, a 2015 study found that more than nine out of ten Finns (94 %) know that unauthorized dissemination of music or movies is illegal.⁵⁸ Obviously Finnish citizens engaging in unauthorized file-sharing are aware of the laws they

⁵⁴ Results published in the IFPI Digital Music Report 2015, pages 38-39, available at http://www.ifpi.org/downloads/Digital-Music-Report-2015.pdf. The consumer study was carried out across 13 of the world's leading music markets (Australia, Brazil, Canada, France, Germany, Great Britain, Italy, Japan, Mexico, South Korea, Spain, Sweden, United States).

⁵⁵ J. Cox & A. Collins (2014), page 72.

⁵⁶ H. Hietanen, A. Huttunen & H. Kokkinen (2008), p. 45.

⁵⁷ H. Hietanen, A. Huttunen & H. Kokkinen (2008), p. 48.

⁵⁸ Source: Tekijänoikeusbarometri 2015: striimaus yleisin piratismin muoto, available (in Finnish) at http://www.lyhty.info/index.php?mid=396&itemid=338481&a=viewItem (visited on 28.9.2015). This finding confirms earlier studies: according to a 2008 Finnish study, the majority (75 %) of young peer-to-peer downloaders knew that it was against the law (source: Venla Salmi (ed.), Self-Reported Juvenile Deliquency in Finland 1995-2008 (Summary), National Research Institute of Legal Policy, Research Report n°246, Helsinki, 2009; available at http://www.optula.om.fi/material/attachments/optula/julkaisut/tutkimuksia-sarja/cqNgvn4QJ/summary_nuorten_rikoskayt.pdf - visited on 28.4.2015); another study in 2007 directed mainly at people engaging in online piracy found that, although some fine points of the rules were not generally known, "the respondents understood typically what is illegal according to copyright law. Almost 90% of the respondents answered that it is illegal to download unauthorised music from P2P file sharing sites. (...) Evidently the file sharers are not breaking the law because they are unaware of it." (Source: H Hietanen, A Huttunen & H Kokkinen (2008), p. 39)

break. The level of awareness and knowledge on copyright issues is discussed also in the pilot reports applying Description sheets 13 - 15 and Methodology cards 10 - 12.59

One of the reasons the respondents nevertheless engage in illegal behavior is that they generally consider the risk of getting caught minuscule. "When asked how the risk of getting caught at illegal file sharing compares to other risks the closest comparison was to winning a lottery jackpot." The entertainment industry's efforts in enforcing their rights did not seem to have much effect on the respondents' behavior:

in a 2007 survey, "only about 10 % of the P2P users answered that the new copyright law had at least somewhat decreased their P2P usage." 61

D. MORAL CONSIDERATIONS

Another rationale behind the use of unauthorized copies of works seems to be the lack of transparency in the markets: consumers are not aware of the distribution of revenue between authors and other parties in value networks. 62 63 These ideological considerations on the external effects of piracy have been found to have a direct effect on the willingness to engage in illegal practices: survey results "show a significant increase in the probability of downloading larger quantities of files where consumers express a belief that positive external benefits arise from file sharing (e.g. the practice helps artists to bypass records labels). Conversely, a belief that file sharing imposes external costs (e.g. harms artists and/or producers) associates negatively and significantly with piracy activity." 64 In 2009, a study on the values and attitudes of the Finnish youth found that 37 % of the 15 to 29 year old respondents agreed that pirate websites freely distributing music are doing the right thing when fighting against big record companies. 65

In 2009 the Youth Barometer's theme was arts and culture, and the study included several questions concerning attitudes towards copyright and unauthorized use of works65. It was based on 1,900 telephone interviews which provided information on young people's participation in artistic and cultural activities as well as experiences of and attitudes towards arts and culture.

The attitudes of the Finnish youth concerning culture and society were studied through three statements to be accepted or refused by respondents: "it is wrong to share music protected by copyright online for free", "It should be possible to share all music online for free", and "The pirate websites freely distributing music are doing the right thing when fighting against big record companies" (original statements in Finnish: "On väärin jakaa tekijänoikeuslain alaista musiikkia netissä ilmaiseksi", "Netissä pitäisi voida vapaasti jakaa kaikkea musiikkia ilmaiseksi" and "Musiikkia vapaasti jakavat piraattisivustot tekevät oikein taistellessaan suuria levyyhtiöitä vastaan")

Source: Sami Myllyniemi, Taidekohtia: *Nuorisobarometri 2009*. Nuorisotutkimusverkosto/Nuorisotutkimusseura, julkaisuja 97; Nuorisoasiain neuvottelukunta, julkaisuja 41 (2009), p. 68 and 77, available at

⁵⁹ In Finland, there is a wide range of actors providing information to the public on copyright-related issues in Finland. Actors such as the Finnish Ministry of Education and Culture, The Copyright Information and Anti-piracy Centre, the six collective management organizations, IPR University Center, and Lyhty (a joint project of creative sector artists, employees, and entrepreneurs in Finland) provide copyright-related information to the public.

⁶⁰ H. Hietanen, A. Huttunen & H. Kokkinen (2008), p. 39.

⁶¹ Idem.

⁶² The pilot study on Methodology card 19 focused on the terms for transfer and licensing of rights in the Finnish book publishing industry. The document is available on the Cupore website: http://www.cupore.fi/documents/230115_Publication_PilotreportMC19_Termsfortransferandlicensingofrights.pdf. Visited on 30.1.2015.

⁶³ In Finland, a Government Bill (HE 181/2014) to guarantee the artists fair compensation for the use of their works was presented to the Parliament on 10th of October 2014. The Finnish Parliament approved the Government Bill on amending the Copyright Act on 10th of March 2015. See https://www.eduskunta.fi/FI/Vaski/sivut/trip.aspx?triptype=ValtiopaivaAsiat&docid=he+181/2014. Visited on 15.5.2015.

⁶⁴ J. Cox & A. Collins (2014), page 72.

⁶⁵ Since 1994, the Youth Barometer (Nuorisobarometri) has annually measured the values and attitudes of 15 to 29 year olds living in Finland. Each year's barometer has, in addition to regular themes, a changing topical theme.

http://www.minedu.fi/export/sites/default/OPM/Nuoriso/nuorisoasiain_neuvottelukunta/julkaisut/barometrit/liitteet/Nuoriso barometri_2009.pdf. Visited on 11.5.2015.

Nevertheless, even when studies found that a large part of respondents engage in unauthorized use of copyrighted material, a significant percentage of them still considered the use of illegal file sharing sites as morally questionable. Uploading copyrighted files to make them available to the public is considered more reprehensible than unauthorized downloading or streaming. Finns however tend to consider copyright infringement less condemnable than other crimes with the same maximum penalty in Finland., in the lines for instance of under-age alcohol drinking. This moral ambivalence of copyright infringers has been confirmed internationally: research by Ipsos across 13 countries revealed that 52 per cent of respondents agreed (either strongly or a little) that downloading or streaming without the copyright owners' permission was theft.

However, attitudes towards unauthorized content sharing seem to evolve in Finland: in 2013, downloading of copyrighted material was considered acceptable by 31 % of young people, while in 2009, it was considered acceptable by 42 % of them⁷¹.

E. EXTERNAL AND SOCIAL INFLUENCES

The social environment, the general acceptance towards piracy in the population as well as the education and deterrence campaigns carried out in the media have been shown to bear an influence on individual attitudes towards piracy. Studies revealed that "greater exposure to media campaigns and news related to illegal file sharing is found to negatively associate with levels of piracy, indicating that these measures may serve as an effective constraint on behavior. Knowledge of others who also share files illegally within social or work environments is found to associate positively with piracy, suggesting that the activity represents a social norm for many users, which in turn influences consumption behavior." General campaigning for the awareness of copyright law, however, seems to carry an insignificant impact among a cohort of respondents including 80 % of self-alleged infringers. A limited qualitative study focusing on young Finnish infringers confirmed that claims of normalcy (the notion that piracy being common and thus intuitively not that wrong) seem to be the most common justification of unauthorized downloading of music.

⁶⁶ In 2008, in a study (H. Hietanen, A. Huttunen & H. Kokkinen (2008), p. 39) where 80% of participants admitted downloading unauthorized contents on a regular basis, nearly half of the users saw the use of illegal file sharing sites as morally questionable. However, even higher numbers have been found in a more general 2013 survey: only 6% of the total population and 31% of young people declared that they considered online piracy acceptable. Source: Lyhty ry, *Tekijänoikeusbarometri 2013: kansalaiset tuomitsevat verkkopiratismin ja kannattavat ulkomaisten piraattipalvelujen blokkausta*, available (in Finnish) at http://www.kulttuuri.net/gallupit/?a=viewItem&itemid=338150. Visited on 27.4.2015.

⁶⁷ Source: Tekijänoikeusbarometri 2013. This 2013 "copyright barometer" survey found that only 4% of the total population and 10% of young people (15-24 years old) consider that sharing music or movies illegally on the Internet is acceptable. Downloading illegal material was considered acceptable by 12% of the total population and 23% of young people, and watching videos uploaded on YouTube without permission was considered acceptable by 29% of the total population and 61% of young people. It is also interesting to note that in another study (H. Hietanen, A. Huttunen & H. Kokkinen (2008), p. 38), "only 12% of the respondents thought that the administrator of a file sharing site should be primarily responsible and 52% thought that initial up-loader or the person who is allowing others to download the content should be primarily responsible for illegal file sharing".

⁶⁸ H. Hietanen, A. Huttunen & H. Kokkinen (2008), p. 37.

⁶⁹ See Venla Salmi (ed.), Self-Reported Juvenile Deliquency in Finland 1995-2008 (Summary), National Research Institute of Legal Policy, Research Report n°246, Helsinki, 2009; available at http://www.optula.om.fi/material/attachments/optula/julkaisut/tutkimuksia-sarja/cqNgvn4QJ/summary_nuorten_rikoskayt.pdf. Visited on 28.4.2015.

⁷⁰ Results published in the IFPI Digital Music Report 2015, pages 38-39. This has also been confirmed in Finland; see Tekijänoikeusbarometri 2013.

⁷¹ Source: Tekijänoikeusbarometri 2013 (see above).

⁷² J. Cox & A. Collins (2014), page 72.

⁷³ H. Hietanen, A. Huttunen & H. Kokkinen (2008), p. 40.

⁷⁴ Janne Riekkinen & Lauri Frank, Music Piracy Neutralization and the Youth of the 2010's, 27th Bled eConference – eEcosystems, June 1-5, 2014; Bled, Slovenia; available at https://domino.fov.uni-mb.si/proceedings.nsf/0/d466e1853d4b845ec1257cf5002d0389/\$FILE/05_Riekkinen_Frank.pdf (visited on 8.5.2015)

Age and gender seem to have an influence on copyright infringing activities: "females and older respondents demonstrate a reduced likelihood of having downloaded large quantities of materials" 75. The gender gap however seems to be much more limited among younger users 76; it could be hypothesized that these factors reflect differences in the technical knowledge necessary to easily find and share copyrighted material online.

Income also seems to have an influence: "demand for illegal downloads peaks among the middle of the income range. This is presumably because paid consumption of legal material does not present a significant opportunity cost for those on a very high income, while those with very low incomes may be constrained by a lack of available technology (internet access, transfer speed and storage capacity) and expertise." This could be considered as a confirmation that a lack of funds available for purchasing legal content are an important motivation for online copyright infringement.

Section 4. Information on financial aspects of copyright infringement online: the revenue sources of infringing websites

A recent study by Incopro, commissioned by the Motion Picture Association (MPA), focused on the revenue sources for websites making available copyright content without consent in the EU.⁷⁷ The study analyzed the revenue sources of the most popular websites accessible to users in key territories in the European Union (Germany, Spain, France, Italy and the United Kingdom) that either infringe copyright or facilitate infringement of copyright (whether knowingly or not) by making unauthorized copies of films and television programs available to the public.

The study concluded that the prevalence of these websites proposing unauthorized content can be partly explained by their capacity to generate revenue, mainly through advertising: 570 out of the total 622 websites (91.6%) examined in the study had at least one source of revenue. Advertising was found to be the predominant revenue source for the top 250 unauthorized websites: 88.4 % (550 sites) carrying advertising. In addition, the possibilities of using different payment methods were studied. It was found that 22.8 % of the websites (altogether 142 sites) offered at least one form of payment method. Payment methods were found to be prevalent especially in hosting sites. Overall, 8.4 % of the websites (52 sites) neither carried advertising nor accepted payments.

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⁷⁵ J. Cox & A. Collins (2014), page 71.

⁷⁶ A 2008 youth deliquency study among 15 to 16 year old adolescents found that 73 % of boys and 65 % of girls had downloaded files in the last 12 month. See Venla Salmi (ed.), Self-Reported Juvenile Deliquency in Finland 1995-2008 (2009)

Moreover, in the Youth Barometer study conducted in 2009 (see Myllyniemi (2009), p.76), no large differences can be seen in the replies of men and women or in the replies of different age groups: altogether, 54 % of the young respondents agreed (either totally agreed or somewhat agreed; the scale used included the options totally agree, somewhat agree, somewhat disagree, totally disagree, don't know) that it is wrong to share music protected by copyright online for free and 45 % agreed that it should be possible to share all music online for free. The latter figure was 44% for women and 47 % for men, 46 % for 15 to 19 year old respondents, 48% for 20 to 24 year old respondents, and 43 % for 25 to 29 year old respondents.

⁷⁷ Incopro (2015)

Section 5. Suggestions for questions in a survey directed to public at large78

In order to get a comprehensive set of subjective information on the issues at hand, the information collected here through desktop research could be complemented with survey data.

Regular surveys are necessary in order to update data concerning copyright infringement online; in a field where technological aspects, the organization of the markets, the supply and demand of products and services as well as the attitudes of consumers are rapidly changing, it is important to monitor the development regularly in order to draft efficient policies.

New surveys will also be useful to provide data on some aspects that have not been thoroughly surveyed yet or recently. For example, previous studies on motivations for unauthorized downloading and uploading of copyrighted material presented above offer interesting insights into the points of view of infringers. However, recent surveys have mainly focused on the extent of unauthorized file sharing and the profiles of infringers, less on their motivations. Considering that the technical aspects of online copyright infringements as well as the types and contents of legal offers for copyrighted material in digital form change rapidly, new surveys focusing on the reasons for unauthorized file sharing would provide very useful updated information on the subject. This data could help orienting strategies for copyright enforcement and support the development of legal services and business models that respond to the demands of users.

A proposal for a questionnaire directed to public at large is presented in Appendix D of this report. The questions are based on a separate toolkit of questionnaires, and they concern unauthorized and authorized use of copyrighted material in digital form by end-users.

The questionnaire outlined in Appendix D covers the following issues:

- The awareness of the legality of different acts: the knowledge of copyright infringers concerning the differences between legal and illegal activities, in order to determine whether their behavior is grounded in a correct understanding of the law (see question 6)⁷⁹
- The use, downloading and uploading of different types of unauthorized copyrighted content (see questions 11 and 12)
- The different sources for acquiring unauthorized copyrighted content online (see question 13)
- Opinions and attitudes toward the purchase of digital copyrighted products online: the channels
 of acquiring or enjoying legal copyrighted products online; the share of those copyrighted
 products acquired online that the respondent has paid for; and the opinions on the availability
 of legal cultural products and services online (see questions 7 10)
- Information on the motivations for unauthorized use of copyrighted content (see questions 14-16)
- Information on the opinions on infringing activities: do end-users consider them widespread, morally reprehensible, etc. (see questions 14 and 17)

 $^{^{78}}$ See also the full proposal for a questionnaire in Appendix D.

⁷⁹ This question is also discussed in the pilot report concerning Methodology card 10 – Public awareness of the rights.

Conclusions

A. ANALYSIS AND SUMMARY OF THE RESULTS

■ THE EXTENT OF UNAUTHORIZED USE OF COPYRIGHTED WORKS IN DIGITAL FORM

In Finland, figures on the level of unauthorized use in the general population have been collected as part of the copyright barometer surveys by Lyhty since 2008. Through telephone or face-to-face interviews, this survey evaluated that the percentage of households where unauthorized content had been downloaded in the past year averaged 16 % in 2008, 2009 and 2010, 21 % in 2011, and decreased the following years until reaching 12 % in 2014 and 2015. The share of younger respondents (15 to 24 year old) who admitted downloading unauthorized content was larger but followed more or less the same trend: 34 % in 2008 and 2009, with a peak of 45 % in 2010 and 47 % in 2011, followed by a decrease up to 25 % in 2014 (with a slight increase to 29 % in 2015). This series of surveys seems to demonstrate that sharing of unauthorized content online has been on the decline for the last few years. Streaming seems to currently be the most common form of unauthorized use (in 2015, 14 % of respondents and 35 % of 15 to 24 year old respondents admitted to illegal streaming).

Another source of data on the topic is the studies on self-reported juvenile delinquency by the National Research Institute of Legal Policy. Only in 2008 and 2012 were questions concerning unauthorized downloading asked to the Finnish 15 to 16 year old adolescents. In 2008, 74 % of them admitted downloading illegal files in the past, 69 % in the last 12 months, and 29 % daily or almost daily; most of the content downloaded were music files. 75% of respondents knew unauthorized downloading was against the law, but only 47 % of them considered that making unauthorized files available online was morally questionable. In 2012, the level of unauthorized downloading among Finnish adolescents was found to be slightly higher: 79 % of respondents had downloaded unauthorized files in the past and 71 % in the last 12 months. These figures are significantly higher than the figures in the Lyhty study, even those concerning the 15 to 24 year old respondents. One explanation could be that downloading unauthorized content is significantly more common among 15 to 16 year olds than in the rest of the population, and among them the recent decrease in downloading had not been noticeable by 2012.

Studies on the level of unauthorized use have also been conducted by industry organizations. The International Federation of the Phonographic Industry (IFPI) has published statistical information on the level of unauthorized use in the music industry in 2014 and estimates that, at an international level, 20 % of fixed-line Internet users worldwide regularly access services offering copyright infringing music. The BSA Global Software study estimates that in 2014, 24 % of PC software in Finland was installed without a license, a rate that has remained constant over the last decade and which is lower than the rate in Western Europe (29 % in 2013) and globally (43 % in 2013). Other studies have examined the global amount of unauthorized exchange of copyrighted content by focusing on technical aspects: NetNames has studied the bandwidth consumed in copyright infringing exchanges, estimating it at 26.8 % of total bandwidth used in 2012 by European Internet users.

■ THE SIZE OF THE DIGITAL MARKETS FOR COPYRIGHTED PRODUCTS AND SERVICES

As a comparison, no precise data on the size of the digital markets for copyrighted products and services is publicly available, but some data that could provide an indication on the legal use of copyrighted digital works in Finland has been found in recent research. A consumer survey conducted for the Private Copying Levy Advisory Committee found that, in 2014, altogether 1.6 million Finns copied music for private use, which equals around 29% of the Finnish population⁸⁰. 1.4 million Finns (around 26 % of the

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⁸⁰ The Finnish population at the end of November 2014 was 5,472,421. Source: Official Statistics of Finland (OSF): Preliminary population statistics [e-publication]. ISSN=2243-3627. November 2014. Helsinki: Statistics Finland [referred: 2.6.2015]. Access method: http://www.stat.fi/til/vamuu/2014/11/vamuu_2014_11_2014-12-18_tie_001_en.html. Visited on 2.6.2015.

general population) use either Spotify or some other similar music streaming service, 1.3 million Finns (around 24 %) use Internet cloud storage services, over 900 000 Finns (around 16 %) watch live TV broadcasts and 60 % of Finns watch Internet TV broadcasts. These figures, as well as the wide range of business models used in the digital environment in Finland, seem to indicate that generally speaking, legal markets for copyrighted products are sufficiently developed to compete with the unauthorized use. Another sign is the fact that, in the past few years when the prevalence of unauthorized use seemed to decrease in the general population, the market shares of digital sales in some copyright industries have increased, most notably in the field of music, one of the types of works most subject to unauthorized exchange: the share of digital sales of music recordings increased from 4.6 % in 2007 to 27.4 % in 2012. However, when compared to information on the level of unauthorized use in physical form (see the pilot report applying Methodology Card 20), unauthorized use in digital form seems to be more common in Finland and to have wider effects on the markets of legal products and services.

■ THE REASONS FOR ENGAGING IN COPYRIGHT INFRINGEMENT

In order to understand the reasons behind unauthorized use of copyrighted works, the possible motives for and causes of copyright infringing activities highlighted in previous studies made in Finland have been reviewed. The availability of works on the legal markets seems to be a key factor influencing the consumption of pirated materials: consumers turn to unauthorized markets when the works they are looking for are not easily available legally, when illegal files are considered of good quality, or when illegal material is more easily located than legal offers. Consumers' willingness to pay is also an issue: besides the obvious advantage of accessing copyrighted material for free, consumers might turn to illegal offers in order to avoid technical restrictions such as Digital Right Management systems.

On the other hand, Finnish citizens are well aware of the laws they break when they turn to unauthorized content; they do not however consider their infringing activities as very serious offences and they evaluate the risk of getting caught as very small, so that legal deterrents don't seem to be effective in influencing consumers' behavior. As a matter of fact, as found in the pilot report on Methodology Card 7 – Application of sanctions and remedies for copyright infringement, "in terms of criminal enforcement of copyright and related rights, there are not many court cases annually. Most criminal infringements are punished by a fine via penal order proceedings; all of those cases concern copyright violation under Section 56a of the Copyright Act. As for copyright offences (Chapter 49, Section 1 of the Criminal Code), most cases end up punished with fines. There have been only a few cases resulting in suspended imprisonment penalties during the last years, and none of them have resulted in unconditional imprisonment. The use of other types of copyright-related criminal sanctions seems virtually non-existent."

Moral considerations seem to be more effective; consumers will be more likely to engage in infringing activities when they consider these activities justifiable from the point of view of the distribution of revenues. They also consider uploading copyrighted files as more reprehensible than downloading or streaming, although less condemnable than other crimes with the same maximum penalty in Finland. The level of social acceptance of infringing activities also seems to have an impact on the level of unauthorized use. Finally, males and younger citizens as well as Finns among the middle of the income range are more likely to infringe copyright online. These findings seem to indicate that copyright infringement online can be negatively influenced by an accessible, wide-ranging, well-priced and unrestricted legal offer, as well as by better information on the distribution of revenue between authors and other parties in value networks; on the other hand, legal deterrents seem to only have a small influence on consumers' choices.

⁸¹ The maximum penalty for a copyright offence is 2 years in prison, whereas the maximum penalty for the other copyright-related crimes under the Criminal Code is one year in prison. The maximum penalty for all the other crimes is 1–120 day-fines. Other available penalties include e.g. community service, which may be imposed as a substitute for an imprisonment penalty under certain

conditions, and forfeiture (menettämisseuraamus) under Chapter 10 of the Criminal Code. (See pilot report on Description sheet 9 – Sanctions and remedies for copyright infringement for more details.)

INFORMATION ON THE REVENUE SOURCES OF INFRINGING WEBSITES

An Incopro study analyzed the revenue sources for the most popular infringing websites accessible to users in key territories in the European Union, finding that a very large majority of them had at least one source of revenue (mainly advertising) and that 22.8 % of the websites (especially hosting sites) offered at least one payment method. The study also indicates that it is possible to identify the websites supporting copyright infringement online most commonly used in a country. Similar methods for studying this topic could also be applied in further research on financial aspects of copyright infringement in Finland.

SUGGESTIONS FOR QUESTIONS IN A SURVEY DIRECTED TO THE PUBLIC AT LARGE

The findings of this report were based on a desktop study gathering the data found as a result of past surveys and other sources of relevant information. However, not all necessary information was found, and some of the necessary data was not collected recently. In order to regularly monitor the levels and factors influencing unauthorized exchange of copyrighted files online, new surveys will be useful in the future. For this purpose, a proposal for a questionnaire directed at the public at large has been drafted; it includes questions concerning the awareness of the legal questions concerning the exchange of copyrighted material, the level of use of unauthorized content, the different sources for acquiring legal and illegal copyrighted content online, the opinions and attitudes towards the purchase of digital products online, the motivations for unauthorized use, and other opinions concerning infringing activities.

GENERAL ANALYSIS

It seems that, at a general level, unauthorized use and exchange of copyrighted content online is generally widespread in Finland, much more so than unauthorized exchange of unauthorized use in physical form. This is partly explained by the fact that Finns can easily access the Internet: according to data published by the Official Statistics of Finland, 86 % of the Finnish population aged between 16 and 89 used the Internet in 2014. 51 % of them had followed social network services and 22 % had saved files on so-called cloud servers in the past three months. 82 However, the volume of unauthorized exchange seems to have diminished in the past few years, while at the same time digital legal markets have grown and the offer has evolved, with a wide range of digital business models available.

The data collected as part of this report does not offer conclusions concerning the influence of the legal offer on the levels of unauthorized exchanges, but past surveys concerning the motivations for infringing activities seem to indicate that the availability and quality of the legal offer will encourage consumers to turn to legal options. On the other hand, legal deterrents seem to have been ineffective; the penalties for copyright infringement, although already severe when compared to the seriousness of the crime in the opinion of average citizens, do not seem to prevent them from engaging in infringing activities, possibly because actual enforcement actions have remained very limited.⁸³ Copyright infringement online does not seem to be caused by a lack of information and education on copyright issues, as Finnish infringers seem to be well aware of the unlawfulness of their actions.

⁸² Source: Official Statistics of Finland (OSF): Use of information and communications technology by individuals [e-publication]. ISSN=2341-8710. 2014. Helsinki: Statistics Finland [referred: 12.5.2015]. Access method: http://www.tilastokeskus.fi/til/sutivi/2014/sutivi_2014_2014-11-06_tie_001_en.html. Visited on 12.5.2015.

⁸³ The sanctions and remedies for copyright infringement are discussed in the pilot reports applying Description sheet 8 – Enforcement by public and private actors (http://www.cupore.fi/DS8.php), Description sheet 9 – Sanctions and remedies for copyright infringement (http://www.cupore.fi/DS9.php) and Methodology card 7 – Application of sanctions and remedies for copyright infringement (http://www.cupore.fi/MC7.php).

B. METHODOLOGICAL FINDINGS

LIMITATIONS

This research was conducted as a desktop study based on available data sources. For some topics, no data from the most recent years was available, a significant issue in the digital field where consumers' behaviour and market development evolve at a fast pace. In addition, the studies did not always cover all the technical means currently available for unauthorized use; some of them were focused on downloading of files only.

Moreover, in some cases no direct data was available and the interpretation had to be based on indirect sources of information. Whenever possible, data specific to Finland was used, but in some cases, the analysis included some general trends found in international surveys and studies.

■ GUIDELINES FOR FUTURE RESEARCH

Future research might be necessary to study the impact of illegal exchange of copyrighted files on the digital markets, as well as to monitor the evolution of unauthorized use, legal markets and consumers' attitudes in a fast-changing digital environment.

Future research would also profit from not only using data collected as part of relevant studies conducted in Finland (such as those presented in this report), but also on surveys conducted specifically for the purpose of answering the questions presented in the methodology card. The survey questionnaire presented in this report was drafted in that aim, but it has not yet been tested and should be adapted to the needs of future studies. To some extent, it is also interesting to search for studies made at an international level. They sometimes cover results collected at the national level and their results can be used in the analysis of national context.

In the case of Finland, the workload for collecting data and drafting this report could be evaluated at seven weeks of full-time work, taking into account that a large amount of information on the topic was already available.

Appendices

A. METHODOLOGY CARD

Methodology card as presented in the Methodology Handbook, draft version 1.12.2015.

Aspect: Infringement, opinions and public acceptance	Methodology card 21. Unauthorized use of copyrighted works in digital form				
Key question	-	How widespread is the unauthorized use of copyrighted content in digital form? What are end-users' opinions on copyright infringement?			
Type of data	objective data, subjective	data			
Description	of legally acquired conter	unauthorized use of works in digital form, as compared to the use t, analysis of the reasons for engaging in infringing activities, and spects of copyright infringement online			
Parameters to measure	on subjective views 2. Size of the digital me copyrighted content 3. The reasons for engent motivations behind - Do people find copyrighted availability, price at a linformation on fina	 on subjective views of end-users, and/or estimates on the levels of unauthorized use Size of the digital markets: estimates on the level of authorized end-use of copyrighted content online (comparative information) The reasons for engaging in copyright infringement: data on the possible motivations behind copyright infringement online. Topics to be considered include: Do people find copyright infringement wrong or shameful? How much are those consumers that use illegal content influenced by the availability, price and characteristics of legal products and services? 			
Guidelines for data collection	The information can be collected by the means of a survey or interviews, or alternatively through desktop studies utilizing existing statistical or other information. The data should be collected among the public at large and can be categorized by relevant statistical divisions, such as age and gender. The study can focus on selected industries or subject matter. The data concerning the use of copyrighted content should relate to a period allowing meaningful analysis, for example: 1, 5 or 10 years. Exemplary questionnaires for surveys and interviews are presented in a separate toolkit.				
Definitions	use vid	Intent stored in digital (as opposed to analog) form. The term is d here as a reference to a digital "end product", such as digital eo, digital audio, or digital art, without a specific connection to a gle physical support.			
Limitations of the indicator	- The unauthorized use and distribution of copyrighted works on the Internet is based on constantly evolving technologies that all have to be taken into account.				

B. INFORMATION SOURCES

International:

- Envisional, Internet bandwidth usage estimation (2011), available at http://documents.envisional.com/docs/Envisional-Internet_Usage-Jan2011.pdf

- IFPI Digital Music Report 2015, available at http://www.ifpi.org/downloads/Digital-Music-Report-2015.pdf
- Incopro, The revenue sources for websites making available copyright content without consent in the EU (March 2015), available at http://www.incopro.co.uk/wp-content/uploads/2015/05/Revenue-Sources-for-Copyright-Infringing-Sites-in-EU-March-2015.pdf
- Parameswaran M., Susarla A. & Whinston, A.B., *P2P networking: an information sharing alternative*, Computer, Volume 34, Issue 7 (2001)
- Price D., *NetNames Piracy Analysis: Sizing the piracy universe* (2013), available at https://copyrightalliance.org/sites/default/files/2013-netnames-piracy.pdf
- Riekkinen J. & Frank L., *Music Piracy Neutralization and the Youth of the 2010's*, 27th Bled eConference eEcosystems, June 1-5, 2014; available at https://domino.fov.uni-mb.si/proceedings.nsf/0/d466e1853d4b845ec1257cf5002d0389/\$FILE/05_Riekkinen_Frank.pdf
- Sivan L., Smith M. D. & Telang R., Do Search Engines Influence Media Piracy? Evidence from a Randomized Field Study (September 12, 2014), available at SSRN: http://ssrn.com/abstract=2495591 or http://dx.doi.org/10.2139/ssrn.2495591
- The Compliance Gap: BSA Global Software survey (2014), available at http://globalstudy.bsa.org/2013/index.html

Finland:

- Cox J. & Collins A., Sailing in the same ship? Differences in factors motivating piracy of music and movie content, Journal of Behavioral and Experimental Economics, Volume 50 (2014)
- Hietanen H., Huttunen A. & Kokkinen H., *Criminal Friends of Entertainment: Analysing Results from Recent Peer-to-Peer Surveys*, 5:1 SCRIPTed 31 (2008), available at http://www.law.ed.ac.uk/ahrc/script-ed/vol5-1/hietanen.asp
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- Myllyniemi S., Taidekohtia: Nuorisobarometri 2009, Nuorisotutkimusverkosto/Nuorisotutkimusseura, julkaisuja 97; Nuorisoasiain neuvottelukunta, julkaisuja 41 (2009), available at http://www.minedu.fi/export/sites/default/OPM/Nuoriso/nuorisoasiain_neuvottelukunta/julkais ut/barometrit/liitteet/Nuorisobarometri_2009.pdf.
- Neogames, *The game industry of Finland: Report 2014* (2015) available at http://www.neogames.fi/wp-content/uploads/2015/02/Neogames_report2014_web.1.pdf
- Official Statistics of Finland (OSF): *Preliminary population statistics* [e-publication]. ISSN=2243-3627. November 2014. Helsinki: Statistics Finland [referred: 2.6.2015]. Access method: http://www.stat.fi/til/vamuu/2014/11/vamuu_2014_11_2014-12-18_tie_001_en.html.
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 ISSN=2341-8710. 2014. Helsinki: Statistics Finland [referred: 12.5.2015].
 Access method: http://www.tilastokeskus.fi/til/sutivi/2014/sutivi_2014_2014-11-06_tie_001_en.html.

- Rönkkö M. & Peltonen J., *Software Industry Survey 2012*, Aalto University School of Science, June 6 (2012), available at http://www.softwareindustrysurvey.fi/ReportFinland2012.pdf
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C. CONSULTED PARTIES	
Lauri Kaira, Project leader at Lyhty (emails in November 2013 and on 19.8.2015)	
D. QUESTIONNAIRE (PROPOSAL)	

The following questionnaire is based on a set of exemplary questions for surveys, interviews and focus group studies specified in a separate toolkit of questionnaires.

QUESTIONNAIRE FOR THE PUBLIC AT LARGE

	BACKGROUND INFORMATION	
1.	Please select your age group 15 - 24 years 25 - 34 years 35 - 44 years 45 - 54 years 55 - 64 years 65 years or more	_
2.	Please select your gender Male Female	

		define the size of your annual taxable gross income e question: Please define the annual taxable gross income of your household
7/1		income group 1
		income group 2
		income group 3
		income group 4
		ction for the researcher: The income groups need to be defined for each country separately. uestion to be asked can be chosen from the two alternatives.
4.	Please	define your occupation
		Full-time employee
		Part-time employee
		Entrepreneur or self-employed person
		Student or at school
		Pensioner/retiree
		Unemployed Other
	Ь	Other
5.	Please	define the level education you attained
		Primary school
		Secondary school
		Professional-level education
		University degree
		Post-graduate degree
		eparately.
	Тн	AWARENESS AND KNOWLEDGE OF THE PUBLIC AT LARGE ⁸⁴
6.	Which	of the following statements do you believe are true:
		Copyright law allows you to make a copy of the CDs you own for personal use
		Copyright law allows you to distribute copies of any music pieces online
		Copyright law allows you to play music pieces for your guests during a party organized in your home
		You may photocopy a few pages of books borrowed from a library for any kind of use
		Teachers are allowed by law to distribute any number of paper copies of the school material
		found in published books
		A text which is published on the internet is not protected by copyright anymore
		A piece of music distributed for free by its author can legally be copied and resold by anyone
		A piece of music is not covered by copyright anymore 50 years after it was created
		Copyright law allows you to record a public performance of theatre with a video recorder if
		you bought a theatre ticket

⁸⁴ This issue is also discussed in the pilot report concerning Methodology card 10 – *Public awareness of the rights*.

		Copyright law allows you to watch any T	V show on	line as long	g as you do	n't downlo	ad it on
		your own hard drive If you wish to resell the work of more than one creator, you need the permission of every					
	_	author.					
		As long as a picture is available for free of your website if you name the original cro		rnet, you a	re allowed	by law to	use it on
		Copyright law allows you to copy extract		naner articl	es made h	v a iournali	ist in an
		article of your own if you name the origin	-	-	es made s	y a journal	ist iii aii
		A text or image is protected by copyrigh	t only whe	n accompa	nied with	a © -sign	
		You have the right to publish a parody o	f a book w	ithout aski	ng the orig	inal author	r's
		permission					
		When you create a work, copyright law a	-	-	-	ntary give ι	ıp on your
		monetary rights and make your works a	vailable to	anyone for	free		
7. Ha	Aution hould	THORIZED AND UNAUTHORIZED USE OF COPYRIGHTOU ever bought or otherwise legally used the products online? Yes No (In this case, please go directly to quantum pound)	e too long answers. ITED WORKS (including	to keep resp	and dowr	ocus until th	gital
		ten have you bought or otherwise legally thted products online?	used (incl	uding strea	ming and	downloadii	ng) digital
				l			
		ow often have you bought or used this pe of <u>legal</u> content online:	Weekly	Monthly	At least once during the last year	At least once but not during the last year	Never
	_	usic					
	_	ms					
		dio and TV programs oks					
		ntent for other printed media (articles,					
		otographs, etc.)					
	-	imes					
	Co	mputer programs, software					
9. Wh		do you buy or use legal copyrighted prod Through commercial music, video, e-boo On the website of the creator, producer On streaming services (such as Spotify, L On websites offering products available author gives the permission to use and s	oks, etc., pi , publisher ast.fm, etc on Creative	roviders (su , or other o c.) e Common	uch as iTur opyright h s or simila	nes, Amazo older r licenses (v	n, etc.) when the

☐ Through online renta☐ On websites that offe☐ Other (please explain	er free demo ve	ersions or sh				
 10. What do you think of the availability of legal cultural products and services online? ☐ Enough products are available at an affordable price or for free ☐ Enough products are available but the price is often too high ☐ Not enough products are available legally online 						
11. Have you ever used, downloa ☐ Yes ☐ No (In this case, this			oyrighted pi	roducts?		
12. How often have you used, do products?	wnloaded or u	ploaded the	following ty	pes of ille	gal copyri	ghted
How often have you used, downloa uploaded the following illegal subjections.		Weekly	Monthly	At least once during the last year	At least once bu not during the last year	t
Music						
Films						
Radio and TV programs						
Books						
Content for other printed media (a photographs, etc.)	articles,					
Games						
Computer programs, software						
13. Where do you acquire or use illegal content online? (several choices are possible) Where do you acquire or use illegal content online? (several choices are possible) Peer-to-peer (P2P)- websites and services on blogs, websites and forums forums social networks etc.						
Music Films			<u> </u>			
Radio and TV programs						
Books			+			
Content for other printed media						
(articles, photographs, etc.)						
Games Computer programs, software						
If you replied "other", please o	<u> </u>					

(please	Prices of the products of availability Legal products con The means of payr Illegal products co Searching for products con You consider that income between the You find nothing we Everybody else are	ne with limitations the ment for legal produce me in a format that is ucts that could be bothe price you would put artist and other place of coptions.	ar motivation): arkets at you do not agree ts are not suitable for you ought later bay does not reach t ayers in the value ch oyrighted products s	with or you ou he right persor nain is unfair) hould be free (ns (the division of of charge) products online
of illeg □	al use? Yes: I have found s	offer of legal copyrig ervices that made me services were those	e reduce my illegal u		nish your amount
16. Among	these options, choose High quality conte Respect towards to A low price A convincing demo Content made ava A fixed fee for unli Sufficient remuner A remuneration parties products are The absence of technology of their reason, what is the prevent unauthori of their reason, what is the prevent unauthorion of the prevent u	ne author or perform o version ilable by the creator l mited access to a larg ration paid to the aut artly or entirely distril difficult to access chnological protection zed copying and exch t?	er himself ge amount of conter hor outed to a good caus n measures (technol ange of copyrighted	nt se ogical tools wit I content in dig	th the purpose to ital form)
	ery rare	eve illegal use, downlo	oading and uploadin 3	g copyrighted 4	Very widespread 5
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