

Advisory Committee on Enforcement

Ninth Session

Geneva, March 3 to 5, 2014

MAPPING OF NEW BUSINESS MODELS FOR THE DISTRIBUTION OF COPYRIGHTED CONTENTS

*prepared by the European Observatory on Infringements of Intellectual Property Rights**

I. INTRODUCTION

1. EU Regulation 386/2012 entrusted the Office for Harmonization in the Internal Market (Trade Marks and Designs) ('the Office') with tasks aimed at facilitating and supporting the activities of national authorities, the private sector and the Union institutions in the fight against infringements of the intellectual property rights covered by Directive 2004/48/EC. Art. 2 (Tasks and Activities), paragraph 2(g), of the above Regulation 386/2012 establishes that the Office shall "*monitor the development of new competitive business models which enlarge the legal offer of cultural and creative content, and encourage the exchange of information and raise consumer awareness in this respect*".

2. The European Observatory on the Infringements of Intellectual Property Rights is a network of public and private sector stakeholders. It promotes greater collaboration and exchanges on issues surrounding the infringements and promotion of intellectual property rights. This network includes a number of specific working groups, one of which is dedicated to questions of "IP in the Digital World". This working group has created a subgroup of experts dealing with online copyright infringements and new business models in relation to legal offers of copyright content.

* The views expressed in this document are those of the author and not necessarily those of the Secretariat or of the Member States of WIPO.

3. This paper is a synthesis of a report that has been drafted by the Observatory staff in cooperation with the above subgroup. The aim is to illustrate different business models conceived by the industry to offer, through online technologies, various types of copyright content.

4. The study has been carried out following a qualitative analysis, sometimes complemented by figures in the different copyright sectors when these were available. In any case, the conclusions of the study are not based on quantitative data. Most of the content of the report has been provided by representatives of industry associations and federations operating at European level. It was completed by information extracted from other sources such as EU and national institutions, international organizations and internet websites.

5. With regards to audiovisual content, it is important to mention the work carried out by the European Audiovisual Observatory based at the Council of Europe in Strasbourg (France). This Observatory provides information on the various audiovisual markets in Europe and their financing. It also analyses and reports on the legal issues affecting the different sectors of the audiovisual industry.¹

II. NEW BUSINESS MODELS FOR COPYRIGHT CONTENT

A. RECORDED MUSIC

6. As music services continue to evolve, improve and expand, more and more services offer a combination of the traditional models described in the present chapter. These services may include downloads, social elements, cloud storage and streaming all in one. Digital music is fuelling innovation. Retailers upgrade their services and constantly add new features and functionalities that ensure that licensed services offer an overall better user experience. In 2012 there were 2.3 billion single track downloads worldwide, an increase of 8% and 207 million digital albums sold, up to 17% on 2011.²

1. Subscription services

7. Subscription services offer a premium service to customers for a monthly fee which covers their entire catalogue on an “all you can eat” basis. They can offer PC only based listening (often also through a free/ad supported tier of the service – see paragraph 13) as well as mobile listening and caching allowing sharing playlists with other people. Many subscription services also come bundled with either internet or mobile phone subscription, offering seamless use. Subscription services are the fastest growth area in digital music, with subscriber numbers up 44% in 2012 and revenues up 62%.

2. Download

8. Download services provide a variety of options to consumers offering digital recorded music which can include individual tracks, albums, special premium content, and music videos for purchase via computer, mobile phone or tablet. Once a purchased file is downloaded, it is usually possible to transfer it to any music listening device. Some services also are specifically designed to work directly with partnered devices, such as a set-top box connected to any television, or a *Sony PlayStation 3*.

¹ <http://www.obs.coe.int/web/obs-portal/home> .

² IFPI Digital Music Report 2013.

3. Cloud

9. Cloud music services allow users to purchase and often automatically store music collections in the cloud, for access at any time. Other services allow the user to upload an entire collection, matching tracks to a catalogue of millions, and then allowing the user to listen to them at any time on a wide variety of devices, including computers, MP3 players, smartphones, set-top boxes and video game consoles. *iTunes*, *Google* and *Amazon* all offer cloud storage facilities via their music services.

4. Mobile

10. Consumers want more and more freedom in their music consumption. Being on the move should not hamper their capacity to listen to music. Therefore the offer has been adapted. Most mobile services are now available for all types of devices. They provide streaming, cached content (*i.e.* temporarily downloaded to a phone so that it is possible to listen to the tracks even when offline), tracks, albums, videos and ringtones (for use on mobile phones).

11. Streaming services allow users to choose and listen to music as offered by the service. The offer covers all types of music and most consumer needs will be covered. The caching of music on the other hand allows to look through all playlists and load up favourites. The available catalogues cover almost the entire repertoires.

12. As to downloaded purchased tracks on mobile phones they can also be transferred to other devices. This category includes mobile applications or 'apps' that work in conjunction with other complementary online services on an internet-connected PC.

5. Ad supported models

13. Many streaming services offer a free advertising-supported model where consumers sign up to a service and benefit from most of its core functions but have to listen to a certain number of advertisements. Other services focus exclusively on this ad-supported model, offering licensed music and music videos for free. Many users of ad supported streaming models also subscribe premium versions which offer additional functions and ad-free services.

6. Online/internet radio

14. Digital technology is helping deliver a next generation radio experience. Internet radio services, such as *Last.fm*, *Pandora*, *iHeartRadio* and *Slacker* create automatic, customised playlists for listeners from a single reference point – an artist, genre, decade or theme. The ability to skip to the next song adds to the customisation, while many services also rely on professional curators. Very popular in the US, these services are creating revenues that did not previously exist and are expanding into additional markets. In the US, a study of consumers by the *NPD³ Group* found that listening to free online radio is most popular among young adults (18-25).

B. AUDIOVISUAL (FILMS AND COMMERCIAL TV)

15. The market for audiovisual media services in Europe is currently experiencing an important development as new technologies enable businesses to offer content to consumers in a multitude of ways. The consumer spending on digital video and TV Video on Demand (VOD)

³ National Purchase Diary (NPD) is a global market research company.

has grown by 49.8% (€ 1.6 billion) compared to 2011 while the total consumer spending on physical video (DVD, Blu-ray) has declined by 7.5%⁴.

16. In recent years, Europe has witnessed strong growth in the number of non-linear TV services available (*i.e.* services that are not based on pre-established and fixed programs). Originally VOD services were limited to the TV platforms that have an embedded return path (cable and IPTV⁵).

17. Nonlinear services have boomed with the development of Internet video and the increase in broadband speed. The most recent comprehensive survey of nonlinear offers available in the EU dates from May 2013. At that time there were 3197 on-demand audiovisual services, including 819 TV catch-up services⁶. Businesses are also experimenting with different models for distributing content, be it transactional, rental, subscription, free and/or ad-supported, and it remains to be seen which models will be successful in the long term. Consumers are enjoying greater freedom in how they access and watch content. They can view TV programmes and films on multiple devices, such as televisions, tablets, computers and smartphones (“multiscreen” viewing). They can also choose between scheduled programming or on-demand services, to be viewed at a time of their own choosing. Whereas some of these new services are provided through the open Internet (so-called “Over the Top” (OTT) services), others are provided solely within networks managed by cable or IPTV providers (hereafter “managed network video services”). Many businesses will offer a combination of these services, for example by allowing consumers to watch content either at scheduled viewing times or at a time of their own choosing, regardless of the network they are using.

1. Linear services (programmed content)

18. Linear services are commonly offered together with on-demand services such as catch-up TV and content on demand. They may be available for free, be ad-supported, or on a subscription basis (either independently or as part of a Pay TV subscription). One-off, linear services are more common for time-sensitive broadcasting such as sporting events or premium content programming (*e.g.* *Sky Sports day pass*).

a) *Managed network video services:*

19. Many cable and IPTV companies, such as *Telia*, *Movistar* and *Numericable*, offer consumers the possibility to view scheduled broadcast content on numerous devices, such as traditional television, smartphones, computers and tablets. Access to these services may be limited to the provider’s own network (*e.g.* fixed or mobile broadband connection, WI-FI⁷ hotspots, *etc.*), or offered as an OTT video service.

b) *OTT video services:*

20. They offer live TV to consumers over the open Internet and often on a multiscreen basis (smart TV, computer, tablet, smartphone, *etc.*) and are often part of a pay-tv subscription (*e.g.* *Mediaset Premium Play*, *Sky Go*, *Canal+ Multi-écrans*, *Viasat*). Many free to air broadcasters also offer their programming live online. For some broadcasters simulcasting is limited to certain content, such as news programmes, while others simulcast their channels 24/7 (*e.g.* *Mediengruppe RTL Deutschland*, *N-TV*, *Mediaset’s TGCOM24*).

⁴ International Video Federation, Europe Key Data 2013.

⁵ Internet Protocol Television.

⁶ European Audio visual Observatory MAVISE database, <http://mavise.obs.coe.int/>.

⁷ Wireless Fidelity.

2. Nonlinear services (content on demand)

a) *Managed Networks*

Rental–transactional (TVOD):

21. Many cable and IPTV providers allow consumers to rent films and audiovisual programmes from their catalogue to be viewed within a specified time period (e.g. within 72 hours). This content may be made available on a multiscreen basis (e.g. *Virgin Media, Telenet, UPC*). The provider may also offer this service as an OTT service (see below).

Rental – subscription (SVOD):

22. As part of their cable or IPTV subscription, consumers may also be offered a catalogue of films and audiovisual programmes that can be viewed on demand, possibly on a multiscreen basis. These services often include recent content, such as US television series the day after their original broadcast in the US, and long before their premiere on TV (e.g. *M6 and RTL-TV Series Pass*).

23. This may also be offered as an OTT service (see below).

Catch-up TV:

24. Cable and IPTV operators may give consumers the possibility to watch recently broadcast programming, including films, via their televisions or other devices. This may also be offered as an OTT service.

b) *OTT Services*

25. These services are accessible over the ‘open’ Internet and may be viewable on a variety of Internet connected devices (SmartTV, home media streamer, tablet, smartphone, PC, etc.).

Retail/permanent download:

26. For these services, consumers are able to download content and keep it on their devices to be viewed at any time of their choosing with no time limitation. This offer may be combined with cloud services, enabling the consumer to stream the same content to their devices. (e.g. ProSiebenSat1’s *Maxdome.de*).

Cloud services:

27. For these services, a copy of the content file is stored on the content provider’s server, with consumers able to stream the content to their devices. Unlike rental, the content is not made available on a time-limited basis, but is available repeatedly and at any time of the consumer’s choosing. Cloud services are often combined with transactional purchases, such as permanent downloads (e.g. *iTunes, Wuaki.tv*) or sales of physical media (e.g. *Ultraviolet*⁸).

⁸ *UltraViolet* is a free, cloud-based digital rights collection that gives its users the possibility to buy a film or TV show from a participating retailer, automatically adding to the users’ *UltraViolet Collection* with the options to stream it over the Internet and/or download it for offline viewing to a variety of connected devices (e.g. mobile device, computer, television, game console, etc.).

Rental – transactional (TVOD):

28. Businesses may offer a catalogue of content which consumers can download or stream, to be viewed within a time limited period (e.g. *Blinkbox, vod.pl*).

Rental – subscription (SVOD):

29. A content provider may offer a catalogue of content for consumers to stream to their device. Subscription may vary between offering a limited number of films and/or audiovisual programmes per week/month to “all you can eat” packages with unlimited viewings (e.g. *Viaplay, Watchever, CanalPlay Infintiy, Netflix, Lovefilm*).

Catch up TV:

30. Practically all commercial broadcasters offer consumers the opportunity to download or stream recently broadcast content to their devices (e.g. *ITV Player, Iwatch, RTL XL, TVN Player, etc.*).

Online first offers:

31. Many commercial broadcasters now offer the possibility to watch episodes of US television series the day after their original broadcast in the US, and long before their premiere on TV (e.g. *ProSiebenSat1. on MyVideo*).

C. SPORT EVENTS' BROADCASTS

32. There is no website or broadcasters offering all sports. This is due to the live consumption of sports content and to the fact that the coverage of the same sport might be different from country to country. The broadcasting of sport events often utilizes the same models adopted for audiovisual content such as OTT services.

33. Basically there are two different models divided in accordance with the popularity of the competitions: those that are very popular (such as UEFA Champions League, Premier League, Bundesliga and Olympic Games) for which there is one exclusive broadcaster (sometimes several exclusive broadcasters) per country and those competitions which are less popular and use the internet to increase their visibility and which do not use geo-blocking⁹ for licenses purposes.

1. TV broadcasting (pay per view, subscription)

34. As for films and commercial television, sport events are broadcast on TV channels through a pay per view scheme, *i.e.* buying access to a specific single event, or through a subscription model which allows customers to view a series of events contemplated by the subscribed contract. TV channels offering this kind of models are: *Canal Plus, Sky* and others. This business model is mainly used for popular events such as football matches of various leagues, world championships of football and Formula 1, ATP tournaments of tennis, *etc.*

⁹ Geo-blocking is implemented by Internet Service Providers (ISP's). It is based on the IP address of the user that tries to access a specific website. Such access can be denied for licensing or legal reasons. The restricted websites are normally contained in a “black” or “block” list maintained by ISP's.

2. Web based (free/pay per view)

35. Sport events are also transmitted online through streaming. For all types of events, there are official websites transmitting free or pay per view streaming. Apart from TV channels that will present the same offer of TV broadcasting through online streaming, entire sport events or their highlights will also be streamed through the official websites owned by the relevant organizations and associations such as: *www.uefa.com*, *www.fifa.com*, *www.daviscup.com*, *www.f1.com*. Moreover a certain amount of free streaming of live sport events (especially highlights) is also available on websites such as *Youtube*, *Dailymotion* and similar services. In general web based streaming is a business models that is especially used for less popular sport events although popular events are also slowly moving towards this form of offer.

D. PRESS CONTENT

36. Publishers of newspapers and news media have innovated quickly to provide consumers with professional press content in the digital environment. Newspaper websites regularly rank among the most nationally visited sites throughout Europe. Online readership has been steadily and significantly increasing in all Member States each year since 2005. In fact, in 2004, only 17% of Europeans (EU-25 countries) had used the Internet for reading or downloading news; this number has more than doubled to 45% in 2012 (EU-27 countries).¹⁰

1. Free newspaper websites

37. On newspaper websites, readers are offered access to professional text-based content, in addition to photos, videos, interactive features and online archives. Many newspaper encourage readers to comment on articles, blog and interact with journalists and other interested parties on online *fora*. This has promoted a dynamic, real-time and mutually beneficial exchange between editorial departments and their readership.

2. Subscription services: a) full access via registration; b) metered model; c) total pay-wall

38. Access to newspaper websites can be allowed through these three types of models:

- a) Access to a newspaper or a magazine via online registration;
- b) A metered model, in which publishers allow readers to access their sites and its information to a certain level while requiring registration and payment if the reader wants to have full access to all the available services and information of the site; and
- c) A total “paywall”, where no content can be accessed without payment.¹¹

3. Text services to mobile devices (news alerts, clippings, daily newspaper selection)

39. While Europe still falls behind the US (39.5%) and Japan (57.6%) of mobile users accessing news and information from their devices, it has shown the greatest growth in mobile-based news access in recent years. In fact the number of daily mobile users of news and information increased by 65% from 2009 to 2010, according to *ComScore*.¹²

¹⁰ Eurostat, Individuals using the Internet for reading/downloading online newspapers/news magazines. <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tin00097>

¹¹ The Economist | Special Report: Bulletins from the Future.

¹² ComScore | 2010 Mobile Year in Review.

4. Apps for tablets and digital kiosks

40. The recent rise of tablets has provided a new platform for newspaper publishers to reach their audiences. Many European consumers are enthusiastic about the prospects of reading news from tablets. There are approximately 29 million users of the *Apple iOS* platform on *iPads*, *iPhones*, and *iPod Touches*, and approximately 14 million users of the *Google Android* platform in the EU-5.

5. Paid downloads of newspapers or single articles

41. *ComScore* reports that, in 2010, with 67% of all Internet users reading news online, news/information is the sixth most visited category of websites. This number has risen by 6.1% from 2010.¹³ An example of innovative new strategies used to harness these technologies is a new *iOS* application called *ePresse.fr* launched in France in June 2011. The application combines content from seven French newspapers and three news magazines, and allows the avid news reader to download all their content, in addition to the ten previous editions of each newspaper or magazine, in one click.

E. BOOKS

42. Digital technologies have been employed in book publishing for a long time, but only when they allowed offering the end user a satisfying reading experience did a real e-book market start emerging. This happened in the past 5 years, which have seen the rapid development of an e-book market across Europe. The market is driven by the higher sophistication of e-books (and other e-reading devices) and the increasing availability of titles, penetration of the internet and uptake of technological devices by consumers. The market is still at an early stage of development except for the UK, where digital sales accounted for 12% of the book market in 2012. In the rest of the EU the share is around 2-3% (Germany, France, Spain, Italy) and probably lower elsewhere. Nonetheless, growth rates have been impressive and the large majority of publishers have engaged in this new market, which opens up a series of opportunities as readers access e-books on several devices (PCs, tablets, e-readers, mobile phones) and in different formats.

1. eBooks to download

a) *Purchase*

43. All in all, an estimated 2.5 million e-book titles are available to European consumers, with at least one e-book storefront in each EU country¹⁴. The most common model allows customers to buy e-books from one of many retail platforms available.

b) *Subscription*

44. In a market that is still young, various experiments are taking place, including subscription services that allow access to collections of e-books upon a monthly fee; notable examples include *cyberlibris.com*, *youboox.fr* and *izneo.com* (specialised in comics), and also specific cases like *bardowl.com* (an audiobook subscription app). The bookstore at *Google Play* can also be considered peculiar in that it is a cloud-based service; regardless of the purchase mode books are accessed on the cloud. The subscription model is also the basic model in the domain of academic and professional publishing (scientific, technical, medical, humanities, etc.).

¹³ comScore | Europe Digital Year in Review 2010.

¹⁴ Federation of European Publishers (FEP).

2. eBooks in streaming

45. On a global scale, STM¹⁵ publishers offer transactional or “pay-per-view” access to content, as well as rental models that allow individuals to view content for up to 24-hours, such as *Deepdyve*, where thousands of journal articles are available for rent - www.deepdyve.com/browse/journals. Furthermore, there are nonetheless many platforms offering such materials (mainly journals, but also e-books) to libraries but often also to individual customers.

F. VISUAL ARTS

46. Visual arts include painting, sculpture, photography, *etc.*, as opposed to music, drama, and literature.¹⁶ Visual arts are nowadays also disseminated through online services, mainly websites and other platforms such as newsgroups. Although there have not been particular evolutions in relation to new business models in the field of visual arts, there are several websites offering this type of copyright content.

1. Online sales of images (image databases)

47. Databases containing artistic images are offering such content through specific websites.

2. Online dissemination of images

48. Other websites or internet platforms such as communities and social networks are also disseminating images. Sometimes such dissemination is not remunerative for authors as images are disseminated without paying them.

3. Online auctions (using images of works)

49. In relation to physical artworks the main digital business models are represented by specialized auction websites.

G. BUSINESS SOFTWARE

50. Today, software is distributed through a variety of channels in order to suit end users' needs, habits and preferences. The online distribution of software is fundamentally changing the face of the industry, as software delivery shifts from a traditional store-bought disk, to software applications downloaded from the Internet and installed on premise, to a per-user application¹⁷ on demand model through cloud computing. The proliferation of online software delivery models reflects the constant efforts of software vendors to evolve their business models in order to meet customers' expectations, technical possibilities and the legal environment.

¹⁵ Science, Technology and Medicine, STM is an acronym used to identify this type of specialized publications mainly dedicated to practitioners

¹⁶ Definition provided by Collins English dictionary.

¹⁷ The per-user application refers to the newest model of use of software: rather than having the software installed and deployed on a machine, the cloud allows users to access their software through a browser (technically from any device) and using a user-specific login and password

1. Downloadable Software

51. Software packages can be downloaded over the Internet from software vendors' own websites, as well as through legitimate online resellers and online market platforms (e.g. *Amazon.com*), making it simple and easy for users to acquire new software products and applications. Downloadable software became popular during the pre-cloud era of computing, providing users with a more efficient means of acquiring software compared to a traditional store-bought "package". Similar to other types of "packaged" software, the terms of use for downloadable software are determined by the license agreement which denotes how many computers a software program can be downloaded onto and the features included with that software program. In many cases, vendors allow users to download a trial of a software package prior to licensing it for use.

2. Software-as-a-Service/Cloud Computing

52. Software-as-a-Service (SaaS) is a subscription based model in which users access specific software programs and applications through their web browser rather than installing the software on their PCs.

53. SaaS has the potential to significantly reduce costs by allowing users to focus their spending only on the products and applications they need, when they need them. Proprietary SaaS offers are typically based on a subscription-fee model, a freemium-model (free access to limited functionalities), or a free advertisement-supported model. In a recent judgment¹⁸ the CJEU has decided that the online purchaser of software may resell 'used' copies of the downloads to others. This decision could have the consequence that more and more companies will offer SaaS instead of downloading services.

54. Another option is moving towards cloud-based business models. Most major software vendors are introducing cloud-based offerings, such as *IBM SmartCloud*, *Microsoft Office 365*, *Autodesk 360*. In May 2013, *Adobe* announced it would deliver all new Creative Suite applications via a subscription model only through its *Creative Cloud* offering.

H. INTERACTIVE SOFTWARE (VIDEO GAMES)

55. The video gaming industry has in the last years been able to develop existing and more traditional models such as console games into more sophisticated graphic designs and making them interactive with other players through equipping the above consoles with online technologies. Moreover online games, mainly stored in the cloud and accessible through broadband connection, have become increasingly popular.

1. Packaged or boxed

56. Video games are still mainly sold as traditional boxed or packaged products, either in brick and mortar stores or via online retailers like *Amazon*. Although the market is clearly and steadily transitioning from physical media to pure digital distribution, physical game discs still bring in the bulk of revenue, and the upcoming launch of *Sony's PlayStation 4* and *Microsoft's Xbox One* could spur a recovery of the physical market by refuelling interest in console gaming even if these two systems are really focused on driving online business models rather than being used as stand-alone entertainment stations. The sheer size of some major console games

¹⁸ C-128/11, *UsedSoft GmbH v Oracle International Corp.*, Judgment of the Court (Grand Chamber) of 3 July 2012.

can make digital distribution more difficult today on account of their storage and bandwidth demands.

2. Online

57. Over the past several years, online games have become one of the fastest growing segments of the video game sector, spurred by rising broadband penetration, the inclusion of robust online capabilities in the current generation of consoles, and the morphing of the MMOG¹⁹ genre into social games and casual online games. Legitimate downloads of all types of games are widely provided today by game publishers, console and phone manufacturers, and retailers. Many games that are bought on disc or cartridge today can be played against others using a PC or games console with Internet access. The industry is now characterised by the very large numbers of players who are able to simultaneously engage with each other and to play online. The micro-transactions²⁰ associated with MMOGs are major drivers of online gaming revenue growth.

3. Mobile or Apps

58. As increasing numbers of consumers turn to smartphones and tablets for entertainment, mobile devices are expected to be the fastest-growing games sector in the next five years. There are estimated to be over 1 billion smartphones and over 200 million tablets in use worldwide today²¹. Smartphones and tablets, aided by intuitive-touch interfaces, are fast becoming the devices of choice for casual game players. Millions of people worldwide have discovered games through their smartphones, opening up possibilities for developers to create new experiences.

59. The business model for mobile games is moving from the pay to download to the freemium model²², where games are downloaded for free, with micro transactions and advertising providing the necessary revenue.

III. CONCLUDING REMARKS

60. The digital offer of copyright content, through different business models, has constantly increased in the last years (see above examples in the different areas). It is important to specify that, especially for some sectors (*i.e.* films, commercial television, books and sport events), the availability of legal offers is strictly linked to the geographic region because of the inevitable differences in terms of language, regional and local culture and taste. The increasing demand for authorised copyright content has also facilitated the flourishing of several online services promoting different types of business models in terms of content dissemination (*e.g.* download vs. streaming) and payment (*e.g.* subscriptions, donations, credits, *etc.*). In general there is a perception that, even where legal offers are available, there is still the need to raise awareness about their existence. This might be explained by the fact that illegal channels have had more time to spread among digital users and have, as a matter of fact, become very popular. Therefore a possible shift from illegal to legal consumption of copyright content probably needs to be supported by more information and better communication about the existence of the latter. From analysing the current situation, it appears that such offers have increasingly become available for all types of content.

¹⁹ Massively Multiplayer Online Game.

²⁰ A micro-transaction or micropayment is a low amount of money (normally below € 8 or US\$ 10) paid by the user to access some parts of a website or, in this case, to further progress in the online gaming activity.

²¹ Interactive Software Federation of Europe (ISFE).

²² A model based on free access with limited functionalities.

Findings of the study

- The **expanding use of mobile technologies**, especially through tablets, smartphones and mobile phones, is strongly linked to the consumption of copyright content.
- The above market growth has been complemented by an **increasing offer of dedicated applications or applets** facilitating the downloading or streaming of all types of copyright content.
- The **development of faster WI-FI technologies and mobile broadband connections** enables users to consume copyright content in a more shared and interactive way (*i.e.* moving content from one device to another without the need of a desktop computer with a fixed internet connection).
- The popularity of **online social networks has also become instrumental** to promote, share and incentive the use of authorised offers of copyright content, particularly among younger generations of online technologies consumers.
- **Cloud computing** offering access to private libraries/collections is an essential element for new business models developed by industry. This is probably linked to the fact that mobile phones and tablets (with limited storage capacities) have become increasingly popular among consumers.
- The trend in consuming authorised copyright content is similar to the one noticed for infringed content whereas **streaming is progressively replacing the downloading** of audiovisual and music files.

[End of document]